

State Route 269 Bridge Project

Fresno County, California

06-FRE-269 (PM 10.4-12.5)

06-0002-0595

SCH# 2015021089

**Initial Study with Mitigated Negative Declaration/
Environmental Assessment with Finding of No Significant Impact**



Prepared by the
State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

August 2015



General Information About This Document

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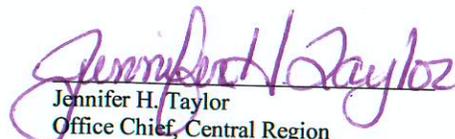
Raise the profile of State Route 269 and construct three bridges just north of the City of Huron from Palmer Avenue to State Route 198 in Fresno County.

**INITIAL STUDY
with Mitigated Negative Declaration/
ENVIRONMENTAL ASSESSMENT**

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

THE STATE OF CALIFORNIA
Department of Transportation

8/3/15
Date of Approval


Jennifer H. Taylor
Office Chief, Central Region
Environmental Southern San Joaquin Valley
California Department of Transportation
CEQA and NEPA Lead Agency

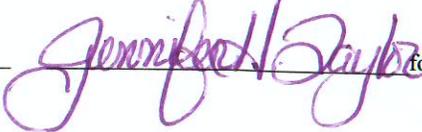
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FINDING OF NO SIGNIFICANT IMPACT (FONSI)
for
State Route 269 Bridge Project

The California Department of Transportation (Caltrans) has determined that the Build Alternative will have no significant impact on the human environment. This FONSI is based on the attached Environmental Assessment (EA) and incorporated technical studies which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached EA and incorporated technical studies.

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

8/3/15
Date _____  for Caltrans District Director

Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) will raise the profile of State Route 269 and construct three new bridges to prevent flooding of the highway. The project is located between West Palmer Avenue and State Route 198, just north of the City of Huron.

Determination

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

The project would have no effect on air quality, geology and soils, land use, growth, environmental justice, mineral resources, noise, population and housing, public services, community impacts, and paleontology.

The project would have less than significant effects on transportation and traffic aesthetics, agriculture, hydrology, water quality, cultural resources, utilities and emergency services.

In addition, the project would have no significant adverse effect on biological resources or hazards and hazardous materials because the following mitigation measures would reduce potential effects to insignificance:

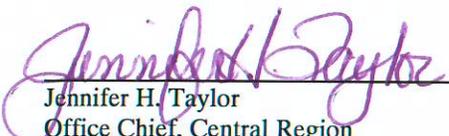
Biological Resources

Mitigation for the project will include the following measures:

- Biological impacts would be mitigated by compliance with all permit provisions.
- Preconstruction surveys will be completed for sensitive plant and animal species.
- Salvage of topsoil for replanting and/or transplanting of native vegetation and sensitive plants.
- In areas where saltbrush scrub or cottonwood riparian habitat would be temporarily affected by construction, reseeded and/or revegetated the areas where the vegetation was removed would occur
- One or more of the following options could compensate for the permanent loss of waters if Arroyo Pasajero Creek is determined to be jurisdictional:
 - In-lieu fee payments to compensate for impacts to jurisdictional waters.
 - Dedication of mitigation lands for impacts to jurisdictional waters.
 - Development of an alternative mitigation plan for impacts to jurisdictional waters.

Hazardous Wastes/Materials

- Special provisions will be included in the construction contract addressing the potential hazardous materials/hazardous waste issues for lead and asbestos to ensure proper handling, disposal, and worker public safety.
- Asbestos levels exceeded the regulatory threshold of 1.0%. Soil from Palmer Avenue to Marmon Avenue will be encapsulated within the project area by placing six inches of clean soil or paving over it, or the soil would be excavated to a depth of 1 foot and hauled off as a hazardous waste.


 Jennifer H. Taylor
 Office Chief, Central Region
 Environmental Southern San Joaquin Valley
 California Department of Transportation

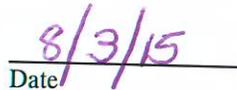

 Date

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Chapter 1 Project

1.1 Introduction

The California Department of Transportation (Caltrans) is the lead agency under the National Environmental Policy Act (NEPA). Caltrans is the lead agency under the California Environmental Quality Act (CEQA). State Route 269 north of the City of Huron is subject to flooding every year from the Arroyo Pasajero Creek. When the highway floods, motorists must detour around the closed section of highway for a distance of approximately 23.5 miles. Caltrans will address the flooding by raising the existing highway up to approximately 15 feet above the existing roadway and constructing three bridges. A new bridge will be built over the Arroyo Pasajero Creek at post mile 11.23. This new structure will accommodate a 100-year flood and be approximately 11.5 feet above the existing ground. A second new bridge will be built about 580 feet south of the Arroyo Pasajero Creek at post mile 11.11. The existing bridge at post mile 12.23 will be replaced with a new bridge to allow 3 feet of additional clearance. A temporary detour road will be constructed west of the existing highway to accommodate traffic during construction. See Figures 1-1 and 1-2 and Appendix I “Project Photos and Mapping.”

State Route 269 is a conventional two-lane undivided highway that runs from State Route 33 in Kings County to State Route 145 in Fresno County. The project sits just north of the City of Huron between Palmer Avenue and State Route 198. State Route 269 is a major corridor in the middle of a productive agricultural region and also provides access to the City of Huron.

The estimated cost of the project is \$18.9 million. The capital costs for the project are funded using Measure C funds from the Fresno County Transportation Authority. Support costs are funded through the State Highway Operations and Protection Program. This project is included in the Council of Fresno County Governments (COFCG) 2013 Federal Transportation Improvement Program (FTIP) and the 2014 Regional Transportation Plan as a financially constrained project.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is to prevent the closure of State Route 269 due to flooding north of the City of Huron.

1.2.2 Need

The flooding of State Route 269 during winter storms creates hazardous conditions resulting in the closure of the highway and restricting travel in and out of Huron. Flooding has caused the highway to be closed an average of 29 days a year since 1978.

Figure 1-1 Project Vicinity Map

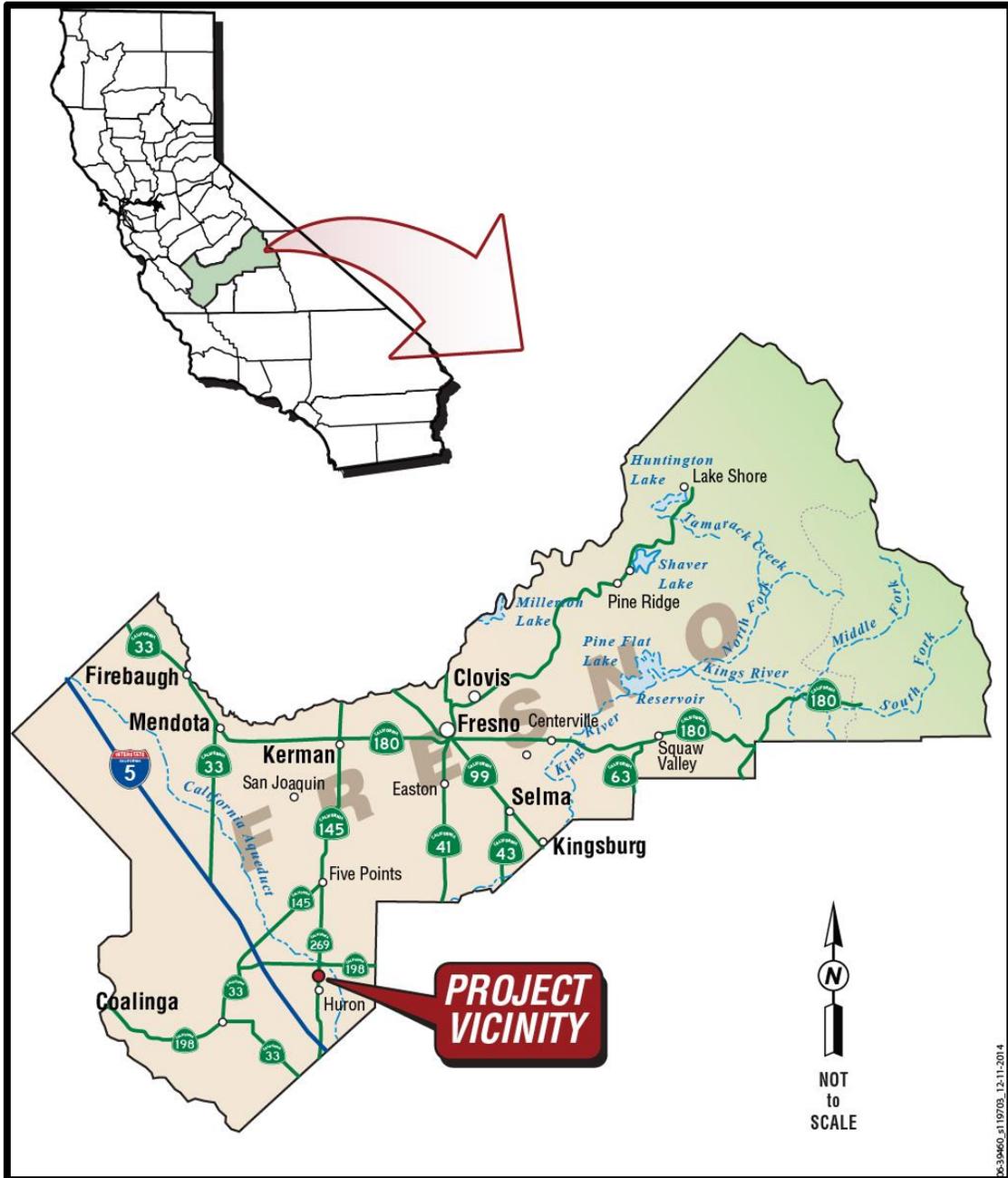
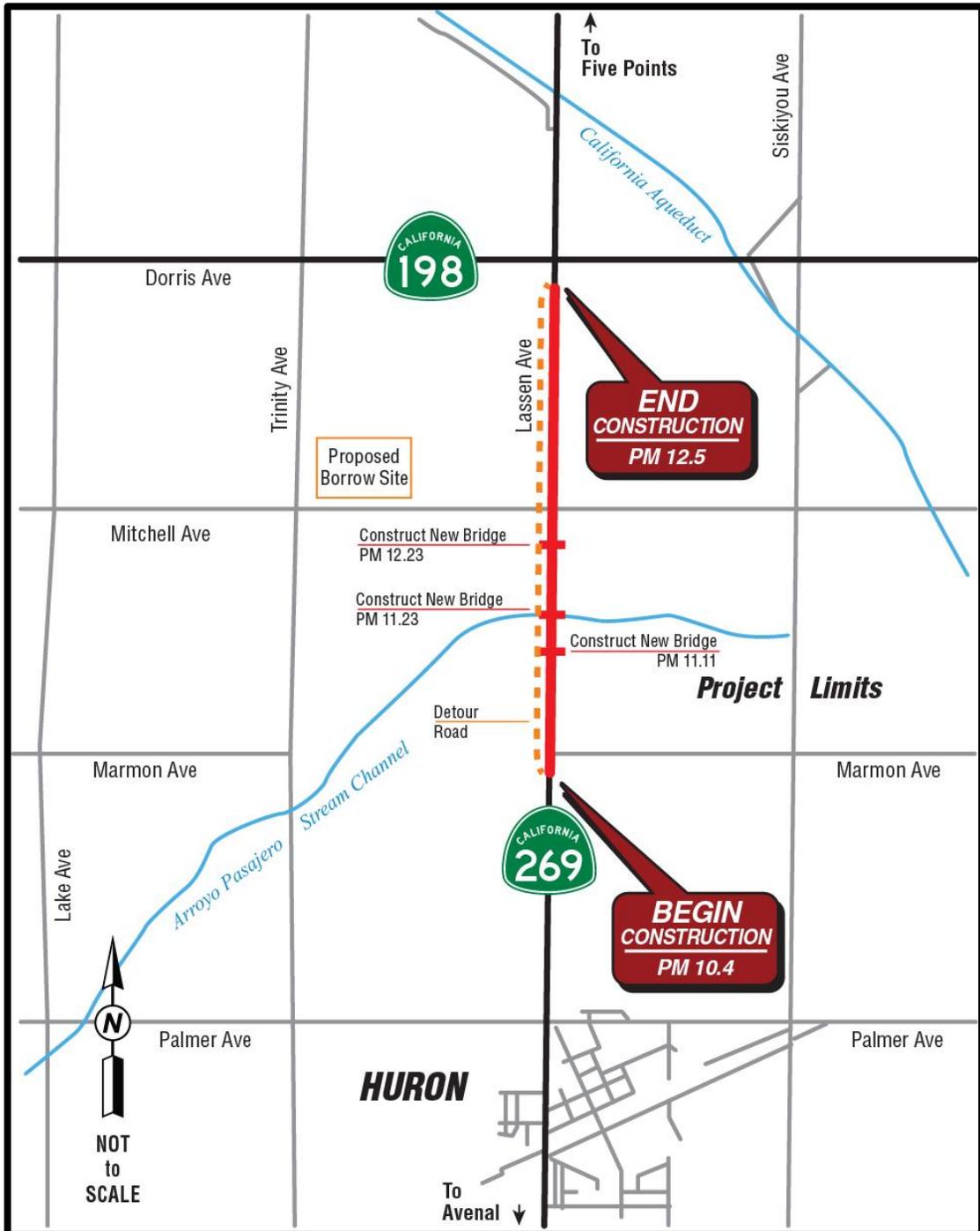


Figure 1-2 Project Location Map



1.3 Project Description

Within the limits of the project, State Route 269 is a two-lane undivided highway. Caltrans will raise the profile of State Route 269 and construct three new bridges to prevent closure of the highway due to flooding at nearby Arroyo Pasajero Creek.

1.4 Project Alternatives

One Build Alternative and a No-Build Alternative were considered.

1.4.1 Build Alternative

The Build Alternative is located on State Route 269 between Palmer Avenue and State Route 198 from post miles 10.4 to 12.5. The details of the Build Alternative are shown in Appendix I and include the following:

- Raise the existing highway up by approximately 15 feet.
- Replace the existing highway with two 12-foot lanes and 8-foot shoulders.
- Replace Bridge #42-0376 at post mile 12.23 with a new bridge approximately 110 feet long by 43 feet wide to allow 3 feet of additional clearance under the bridge.
- Construct a new bridge over Arroyo Pasajero Creek at post mile 11.23 with a span of approximately 500 feet long by 43 feet wide. The new structure will accommodate a 100-year flood and is approximately 11.5 feet above the existing ground.
- Construct a dike in the channel approximately 880 feet long (540 feet upstream and 340 feet downstream of the new bridge) and approximately 6 feet deep with 4:1 side slopes to direct water to the Arroyo Pasajero Bridge.
- Construct a new bridge approximately 580 feet south of Arroyo Pasajero Creek at post mile 11.11 with a span of 44 feet long by 42 feet wide. The new bridge will be approximately 15 feet above the existing ground.
- Potentially use an existing borrow site for the import of fill material as needed.
- Construct a temporary detour road west of the existing highway to accommodate traffic during construction when the highway is closed.
- Construct retaining walls at post mile 12.25 to protect an existing agricultural water well.

The project is anticipated to begin construction in 2017 and will open to traffic in 2019.

1.4.2 No-Build (No-Action) Alternative

The No-Build Alternative would keep the existing highway and bridge at their current profile, resulting in continued flooding of the highway. The No-Build Alternative does not meet the project purpose and need because it would not correct the flooding problem on State Route 269 at Arroyo Pasajero Creek.

1.4.3 Alternatives Considered but Eliminated from Further Discussion Prior to Draft Environmental Document

The following build alternatives (Alternative 2 and Alternative 3) were considered but eliminated.

- Alternative 2 proposed to shorten the detour 9 miles by extending Butte Avenue from Gale Avenue to State Route 198. Also, the segment of Gale Avenue between Butte Avenue and State Route 269 would have to be improved and rehabilitated. This alternative would require a new bridge across Arroyo Pasajero Creek.

This alternative was eliminated because of inadequate bridge length and unstable, steep channel banks, which make new abutments more susceptible to washouts.

- Alternative 3 proposed to shorten the detour 9 miles by constructing a detour along the east side of the California Aqueduct from State Route 198 to Gale Avenue. The segment along Gale Avenue would be rehabilitated to meet county standards. A structure overcrossing with the Southern Pacific Railroad would be required.

This alternative was eliminated because Gale Avenue lies within the flood path of Arroyo Pasajero Creek and would still be susceptible to closure during heavy flooding.

1.4.4 Identification of Preferred Alternative

On July 22, 2015, the Caltrans project development team met to discuss the project alternatives and comments made on the draft environmental document. The Build Alternative was selected as the preferred alternative because it meets the purpose and need for the project. Raising the profile of the highway and constructing three bridges will have the greatest benefit in regard to preventing flooding of State Route 269 north of the City of Huron. This will eliminate hazardous flooding conditions that often close the highway and restrict travel in and out of Huron.

1.5 Permits and Approvals Needed

The following permits, reviews, and approvals will be required for project construction:

Agency	Permit/Approval	Status
Regional Water Quality Control Board	Clean Water Act Section 402—National Pollutant Discharge Elimination System (NDPES): Waste Discharge Permit A Storm Water Pollution Prevention Plan required by the Caltrans will be prepared and is expected to provide all the necessary temporary pollution and erosion control measures required during construction	Compliance with (1) the Statewide National Pollutant Discharge Elimination System Permit (Order No. 99-06-DWQ NPDES No. CAS000003) and (2) the General Permit, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity (Order No. 99-08-DWQ, NPDES No. CAS000002).
	Clean Water Act Section 401 Water Quality Certification	401 certification (permit) to be obtained prior to start of construction.
U.S. Army Corps of Engineers	Clean Water Act Section 404 Nationwide Permit for filling or dredging waters of the U.S.	<i>(if required)</i> 404 permit to be obtained prior to start of construction.
California Department of Fish and Wildlife	Fish and Game Code Section 1602 Streambed Alteration Agreement	Streambed Alteration Agreement to be obtained prior to start of construction.
U.S. Fish and Wildlife Service	Endangered Species Act Section 7 Consultation for federally listed Threatened and Endangered Species Letter of Concurrence from U.S. Fish and Wildlife Service	The U.S. Fish and Wildlife Service issued a Letter of Concurrence on June 16, 2015.
U.S. Bureau of Reclamation	Easement/Encroachment Permit(s)	Encroachment permit approval to be obtained prior to start of construction.
San Joaquin Valley Unified Air Pollution Control District	National Emissions Standards for Hazardous Air Pollutants notification	Contractor would be required to notify the air district 10 days prior to start of construction.

Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

As part of the scoping and environmental analysis done for the project, the following environmental issues were considered, but no adverse impacts were identified. So, there is no further discussion of these issues in this document.

- **Land Use**—The project is consistent with existing and future land use and with state, regional, and local plans: the 2013 State Highway Operation and Protection Program, the Fresno County General Plan, and the City of Huron General Plan. The project is not near a coastal zone, and Arroyo Pasajero Creek is not designated as a wild and scenic river.
- **Growth**—The project will not induce growth because the project will only raise the existing highway profile and construct three bridges to mitigate frequent flooding.
- **Community Impacts**—The project will not affect community character or cohesion or result in any relocation of businesses or residences because no one lives in the project area.
- **Environmental Justice**—No identified minority or low-income populations will be adversely affected by the project. No one lives in the project area.
- **Paleontology**—Test pits were excavated and inspected for potential paleontological resources at the borrow site on September 23, 2014. No further studies are required because paleontological resources are unlikely to be encountered. If another borrow site is selected or if excavation for fill material is expected to exceed 5 feet, another Paleontological Identification Report will be prepared. (Paleontological Identification Report, September 30, 2014)
- **Air Quality**—The project falls under the category of “widening narrow pavements or reconstructing bridges (no additional travel lanes)” and is exempt from a requirement that a conformity determination be made per 40 Code of Federal Regulations Section 93.126 Table 2. Caltrans standard specifications pertaining to dust control and dust palliative requirements will reduce and control emission impacts during construction. (Air Quality Compliance Memo, July 21, 2014)
- **Noise and Vibration**—The project is considered a Type I project, but there are no receptors present in the area. With implementation of temporary construction noise mitigations measures, additional noise investigation in accordance with Caltrans Traffic Noise Analysis Protocol is not required. (Noise Study Compliance Memo, September 19, 2014)

- **Geology, Soils, Seismicity and Topography**—No project impacts related to geology, soils, seismicity or topography are anticipated. Groundwater data within the project area reflected a deep water level. Due to the soil types in the area, the potential for liquefaction in the project area is low to moderate. There are no major topographic or geologic features within the project area. The project will be designed to meet current seismic standards.
- **Mineral Resources**—The project will not affect mineral resources because there are no known resources in the area and none are delineated on a local general plan, specific plan, or other land use plan.
- **Population and Housing**—The project will not affect population or housing because it will not induce growth or displace any housing or people.
- **Public Services**—The project will not negatively affect public services including schools and parks and recreation. The project will prevent the closure of State Route 269 due to flooding, which would benefit access to these public services in the City of Huron.

2.1 Human Environment

2.1.1 Farmland

Regulatory Setting

The National Environmental Policy Act and the Farmland Protection Policy Act (FPPA, 7 U.S. Code 4201-4209; and its regulations, 7 Code of Federal Regulations Part 658) require federal agencies such as the Federal Highway Administration to coordinate with the Natural Resources Conservation Service if there is a chance federal agency activities might convert farmland (directly or indirectly) to nonagricultural use. For purposes of the Farmland Protection Policy Act, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

The California Environmental Quality Act requires the review of projects that would convert Williamson Act contract land to nonagricultural uses. The Williamson Act is designed to preserve agricultural land and to encourage open-space preservation and efficient urban growth. The Williamson Act provides incentives to landowners—through reduced property taxes—to deter the early conversion of agricultural and open-space lands to other uses.

Affected Environment

The Natural Resources Conservation Service Farmland Conversion Impact Rating was completed for the project in September 2014 (see Appendix C). Farmland surrounds the entire project area. The area is used mostly to grow seasonal crops. The Bureau of Land Management property in the area is generally fallow in and near the Arroyo Pasajero Creek channel. The direct impact area surrounding the Arroyo Pasajero Creek Bridge does not include active cropland. A small area of permanent crops sits near the north end

of the project at the intersection of State Routes 269 and 198. Farmland improvements including water wells and irrigation ditches may potentially be affected by the project. A total of 12 parcels lie within the project area. Four of these parcels are under Williamson Act contract.

Soils in the project area are composed of Excelsior sandy substratum-westhaven association, Excelsior sandy loam and Cerini clay loam. The Excelsior sandy substratum-westhaven association soil is considered non-prime; the Excelsior sandy loam and Cerini clay loam soils are considered prime.

Environmental Consequences

The Farmland Conversion Impact Rating determines the relative value of farmland to be converted by using a formula that weighs farmland classification, soil characteristics, irrigation, acreage, creation of non-farmable land, availability of farm services, and other factors. The Natural Resources Conservation Service uses only prime/unique and statewide/local importance-classified land on the Farmland Conversion Impact Rating form found in Appendix C. If the rating is more than 260 points for a corridor-type project, Caltrans considers measures to minimize or mitigate farmland impacts. The rating for the project is 145 points.

Approximately 23 acres of permanent new right-of-way will be converted from designated agricultural land with approximately 2.25 acres being classified as prime farmland. About 24 additional acres will be acquired for a temporary construction easement that will include a detour road to accommodate traffic during construction.

Four of the parcels needed for construction of the proposed project (see Table 2.1) are under Williamson Act contract. It was not feasible to avoid Williamson Act parcels, however, the partial acquisition from parcels under contract will not reduce any parcel below the minimum size required to remain under contract. Once the project is approved and the exact acreages of land to be converted have been determined, the Director of the Department of Conservation will be notified of the number of acres of agricultural land being converted for the project and the number of acres under the Williamson Act being converted.

Table 2.1 Agricultural Land Affected by the Project

APN	Proposed Acquisition Acreage	Total Acres (before acquisition)
07503206S	0.95	58.36
07503205S	0.95	158.79
068111074S	0.24	238.02
068111073S	0.08	238.02

Avoidance, Minimization, and/or Mitigation Measures

Once the project is approved and the exact acreages of land to be converted have been determined, the Director of the Department of Conservation will be notified of the conversions. The project will go through the public acquisition process per GC §51291, or Caltrans will submit a petition for partial cancellation to Fresno County for the land that is required for the project.

Property owners will be compensated for any displaced improvements, including trees, irrigation wells, ditches, and bare land during the right-of-way acquisition process. Acquisitions will be minimized to allow for the continued farming of adjacent properties.

2.1.2 Relocations and Real Property Acquisition

Regulatory Setting

Caltrans makes every effort to acquire property interests expeditiously in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act. Offers to purchase land and easements are based on a departmentally approved appraisal that determines the fair market value of the property rights being sought. It is Caltrans' goal to settle these transactions in a fair, equitable and expeditious manner, thereby avoiding the condemnation process.

Affected Environment

The area affected by the acquisition of real property and temporary easements is located along the east and west sides of State Route 269 between Palmer Avenue and State Route 198, just north of the City of Huron. All property needed for the construction of the project is agricultural land, much of which is fallow. There are no residences within the construction limits of the proposed project area.

Environmental Consequences

Under the No-Build Alternative, no acquisition of property or need for long-term or temporary construction easements will occur.

The Build Alternative will not result in the acquisition of any homes or businesses. Right-of-way will be purchased from 13 parcels of which 6 will be purchased in fee, and 6 will be acquired through permits from the U.S. Bureau of Reclamation. A temporary easement will be acquired from two private landowners and the U.S. Bureau of Reclamation for a detour road.

The project will require the acquisition of right-of-way for the permanent highway improvements totaling approximately 23 acres and temporary easements totaling approximately 24 acres. The property breakdown of permanent acquisitions and temporary easements is shown in Table 2.2, and maps detailing the acquisitions are provided in Appendix I.

All properties are agricultural. There are no residential acquisitions.

Table 2.2 Property Acquisition

Owner	APN	Proposed Acquisition Acreage	Acquisition Type
Private	07503206S	0.95	Permanent
Bureau of Reclamation	0681114ST	3.74	Permanent
Bureau of Reclamation	06811113T	1.84	Permanent
Bureau of Reclamation	06811103ST	6.33	Temporary easement
		3.05	Permanent
Bureau of Reclamation	06811158ST	3.19	Permanent
Bureau of Reclamation	06811122ST	0.28	Permanent
Private	06811162S	0.30	Permanent
Private	07503205S	2.65	Temporary easement
		0.95	Permanent
Bureau of Reclamation	068111052T	13.49	Temporary easement
		7.52	Permanent
Bureau of Reclamation	06811105ST	0.60	Temporary easement
		0.46	Permanent
Private	068111072S	0.04	Temporary Easement
Private	068111073S	0.33	Temporary Easement
		0.08	Permanent
Private	068111074S	0.24	Temporary Easement
		0.37	Permanent

Avoidance, Minimization, and/or Mitigation Measures

Caltrans will acquire needed property in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Acquisitions for the construction easement are temporary and will be returned to their preconstruction condition after completion of construction.

2.1.3 Utilities and Emergency Services

Affected Environment

Utilities

Four utility companies operate within the project limits: Pacific Gas and Electric Company, Southern California Gas, Pacific Bell, and SBC Communications, Inc. The affected utilities may involve, but are not limited to, electricity, gas, water, fiber optics and telephone.

Emergency Services

The Fresno County Fire Protection District provides fire protection, emergency medical and rescue service to the area. The Fresno County Sheriff’s Department provides law enforcement to the area and uses State Route 269 to access its rural areas of jurisdiction in western Fresno County. The California Highway Patrol is responsible for traffic enforcement on State Route 269.

Environmental Consequences

Utilities

Utilities within the project area will have to be relocated for construction of the project. Electricity, gas, water, fiber optics and telephone utilities will be relocated along State Route 269 in the project area. Caltrans will work with affected companies including Pacific Gas and Electric Company, Southern California Gas, Pacific Bell, and SBC Communications, Inc. to determine where utilities will be relocated.

Emergency Services

The project will have a beneficial impact on fire protection, law enforcement, and emergency services by providing an improved highway that is not subject to being closed due to flooding. The detour required from the closure of the highway due to flooding requires approximately 23.5 miles of out-of-direction travel. During construction, traffic will travel on the temporary detour road.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures will prevent temporary impacts to utilities and emergency services:

Utilities

- Utilities will be relocated to accommodate construction of the project. All utility relocation work will be done by the affected utility companies. Utility users will be informed of the date and time in advance of any service disruptions.

Emergency Services

- A traffic management plan will be developed to minimize delays and maximize safety during construction. The traffic management plan may include, but is not limited to, the following:
 1. Release of information through brochures and mailers, press releases, and notices from the Caltrans public information office.
 2. Use of fixed and portable changeable message signs.
 3. Incident management through the Construction Zone Enhancement Enforcement Program and the transportation management plan.

2.1.4 Traffic and Transportation/Pedestrian and Bicycle Facilities

Regulatory Setting

Caltrans, as assigned by the Federal Highway Administration, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 Code of Federal Regulations 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When

current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 Code of Federal Regulations Part 27) implementing Section 504 of the Rehabilitation Act (29 U.S. Code 794). The Federal Highway Administration has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the 1990 Americans with Disabilities Act requirements to federal-aid projects, including Transportation Enhancement Activities.

Affected Environment

State Route 269 is a conventional two-lane undivided highway that runs from State Route 33 in Kings County to State Route 145 in Fresno County. The project sits just north of the City of Huron between Palmer Avenue and State Route 198.

State Route 269 is a major corridor in the middle of a productive agricultural region and also provides access to the City of Huron. The highway is open to local and regional bicycle and pedestrian travel. The current shoulders on State Route 269 are about 3 feet wide.

Environmental Consequences

The project will prevent the closure of State Route 269 due to flooding by raising the profile of the highway and constructing three bridges. The project will not result in an increase in traffic on the highway. The segment of highway and the bridges will be constructed to Caltrans standards, giving bicyclists and pedestrians more room to maneuver on the shoulders. Although construction of the project may result in short traffic delays, a temporary detour road next to State Route 269 will provide continued access to the surrounding area during construction. The project is expected to start construction in 2017 and open to traffic in 2019.

Avoidance, Minimization, and/or Mitigation Measures

A traffic management plan will be developed to minimize delays and maximize safety for motorists. The traffic management plan may include, but is not limited to, the following:

- Release of information through brochures and mailers, press releases, and advertisements managed by the public information office.
- Use of fixed and portable changeable message signs.
- Incident management through the Construction Zone Enhancement Enforcement Program and the transportation management center.
- Use of one-way traffic control.

- Bridge railing will be required as appropriate for the safe travel of bicyclists.
- Construction of a detour road for use during construction.

2.1.5 Visual/Aesthetics

Regulatory Setting

The National Environmental Policy Act of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* and culturally pleasing surroundings (42 U.S. Code 4331[b][2]). To further emphasize this point, the Federal Highway Administration in its implementation of the National Environmental Policy Act (23 U.S. Code 109[h]) directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of *aesthetic*, natural, scenic and historic environmental qualities” (California Public Resources Code Section 21001[b]).

Affected Environment

A Visual Impact Assessment was completed in October 2014. The project is in a rural area that is undeveloped and used mostly for agriculture. Most of the agricultural land in the area is either fallow or planted in seasonal crops. Small amounts of land on the north and south ends of the project are planted with permanent crops. The surrounding topography is gently rolling natural rural landscape, while the highway is generally flat. Arroyo Pasajero Creek runs through the project site across State Route 269; it carries floodwater during winter storms.

State Route 269 is a two-lane conventional highway that has no median and does not include any highway landscaped vegetation. Roadside vegetation is composed mostly of shrubs, grasses and crops. Also, no segment of State Route 269 is listed as officially designated scenic or eligible scenic highway.

Environmental Consequences

No qualifying scenic resources will be affected by the construction of the proposed project. To accommodate the three bridge structures and channels, some existing slopes will be either cut or filled. It is estimated that 75,000 cubic yards of fill will be placed within the project footprint. Depending on the placement and slope of the fill, visual inconsistency to the natural landscape might occur. Although the new bridge structures and railing might create a more urban look if not designed in keeping with the rural environment, State Route 269 will remain passable during and after any flooding. The Visual Impact Assessment anticipates there will be a low public concern regarding the project design features such as new bridge structures and railings.

Avoidance, Minimization, and/or Mitigation Measures

The following will ensure that the visual quality of this segment of State Route 269 is preserved:

- Bridge and railings design features would be in keeping with the rural environment to minimize visual impacts.
- Slopes should not exceed a gradient of 1:3. Slopes that are designed at gradients of 1:2 or steeper will require the written concurrence of the District Landscape Architect, Maintenance, and the Storm Water Coordinator.
- Tops and toes of slopes should be rounded to create a natural appearance.
- All exposed disturbed soil areas will require permanent erosion control application, which will restore the disturbed project area to natural vegetation.

2.2 Cultural Resources

Regulatory Environment

The term “cultural resources” as used in this document refers to all “built environment” resources (structures, bridges, railroads, water conveyance systems, etc.), culturally important resources, and archaeological resources (both prehistoric and historic), regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places. Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 Code of Federal Regulations 800). On January 1, 2004, a Section 106 Programmatic Agreement between the Advisory Council, the Federal Highway Administration, State Historic Preservation Officer (SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with Federal Highway Administration involvement. The Section 106 Programmatic Agreement implements the Advisory Council’s regulations, 36 Code of Federal regulations 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The Federal Highway Administration’s responsibilities under the Programmatic Agreement have been assigned to Caltrans as part of the Surface Transportation Project Delivery Program (23 U.S. Code 327).

The Archaeological Resources Protection Act (ARPA) applies when a project may involve archaeological resources located on federal or tribal land. This act requires that a permit be obtained before excavation of an archaeological resource on such land can take place.

Affected Environment

A Historic Property Survey Report was completed in November 2014 to comply with Section 106 of the National Historic Preservation Act. None of the architectural or structural resources identified within the project area required evaluation. Efforts to identify archaeological resources within the project area included archival research, a pedestrian archaeological survey, and consultation with knowledgeable local Native American groups and individuals. A cultural resource records search by California Historical Resources Information System staff at the Southern San Joaquin Valley Information Center (SSJVIC), California State University, Bakersfield identified the presence of an ethnographic village, Golon, in the vicinity of the project area (Huron, California).

Environmental Consequences

The Archaeological Survey Report with archival research was prepared in October 2014 and identified no archaeological resources within the area of potential effects for the project. Two small portions of the project area could not be accessed during the pedestrian survey because Caltrans did not have a right to enter those properties. These areas will be surveyed before the project is constructed. The Santa Rosa Rancheria Tachi Yokuts Tribe requested that it be consulted throughout the length of the project. The tribe also made a request to monitor construction activities.

The project area is considered to be sensitive for archaeological resources due to the Southern San Joaquin Valley Information Center records search identification of the ethnographic Village of Golon. The hydrology of the area and geoarchaeological information also indicate high sensitivity. In consideration of these factors, an Extended Phase I/geoarchaeological investigation was conducted. The Santa Rosa Rancheria was consulted regarding the geoarchaeological studies. These investigations were conducted to determine the presence or absence of buried archaeological deposits within the proposed project impact areas. Seventeen trenches were excavated across the project area where subsurface/construction impacts are planned. No archaeological materials or buried Late Pleistocene or Holocene soils were encountered. No historic properties were identified within the project area except for the inaccessible areas discussed above.

Avoidance, Minimization, and/or Mitigation Measures

- Consulting Native American tribes and a Caltrans archaeologist will monitor construction activities involving excavation as needed and determined by the Caltrans archeologist and Caltrans Native American Coordinator. If buried cultural materials are encountered during construction, work will stop in that area until a qualified archaeologist can evaluate the nature and significance of the find.
- If human remains are exposed during project activities, State Health and Safety Code Section 7050.5 states that no further disturbance should occur until the county coroner has made the necessary findings as to the origin and disposition pursuant to Public Resources Code 5097.98.

2.3 Physical Environment

2.3.1 Hydrology and Floodplain

Regulatory Setting

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 Code of Federal Regulations 650 Subpart A. To comply, the following must be analyzed:

- Practicability of alternatives to any longitudinal encroachments.
- Risks of the action.
- Impacts on natural and beneficial floodplain values.
- Support of incompatible floodplain development.
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The base floodplain is defined as the area subject to flooding by the flood or tide having a 1 percent chance of being exceeded in any given year. An encroachment is defined as an action within the limits of the base floodplain.

Affected Environment

A Location Hydraulic Study was completed in July 2014, and a Floodplain Evaluation was completed in August 2014. An addendum to the Location Hydraulic Study was also prepared in April 2015. Arroyo Pasajero Creek crosses State Route 269 in Fresno County, just north of the City of Huron. The stream course within the project area is a wide, naturally winding channel. State Route 269 was accepted into the state highway system in 1976. At that time, the roadway was over 3 feet higher than the surrounding topography. Today, this section of the roadway is 3 or more feet lower than the existing topography, so the highway is affected by seasonal flooding just north of Huron.

Due to the topography and sediment load, anytime the Arroyo Pasajero waters cross State Route 269, the sediment is deposited on the roadway. Flooding and the resulting sedimentation often require the closing of the highway. The highway has been closed due to flooding an average of 29 days a year over a 19-year period (1978 to 1998). In addition to the flooding of State Route 269, floods have occurred in the City of Huron area in 1958, 1963, 1966, 1969, and 1978.

The project is located in both Federal Emergency Management Agency (FEMA) Flood Zone AO (post mile 10.4/12.227) and Flood Zone A (post mile 12.227/12.5) as shown on Flood Insurance Rate Map (FIRM) #06019C3255H and FIRM #06019C3100H, dated February 18, 2009. Zone AO is defined as an area where “Flood Depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.” Zone A is defined as “No Base Flood Elevations determined.” The project does not constitute a significant

floodplain encroachment as defined in 23 Code of Federal Regulations 650.105 and is not a longitudinal encroachment.

Before construction of the California Aqueduct, floodwater flowed northeasterly toward Lassen Avenue and then north to State Route 198. In 1967, the segment of the California Aqueduct near State Route 269 was constructed under joint participation of the U.S. Bureau of Reclamation and the State Department of Water Resources. This segment of the aqueduct intercepted the Arroyo Pasajero Creek. It was known that the construction of the aqueduct would impound water upstream of the aqueduct. However, the magnitude of water and the sediment load were underestimated significantly. The floodwater volume from a 100-year flood is five times greater than the original estimate, and the average annual sedimentation is four times greater than the original estimate.

Environmental Consequences

With the raising of State Route 269 on an embankment within the floodplain area and the construction of three bridges, it is anticipated that flood flows would be able to follow their historic patterns, eliminating flooding of the highway. The project does not constitute a significant floodplain encroachment, is not a longitudinal encroachment, and would not substantially affect the base flood elevation.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required. Raising the profile of State Route 269 and constructing three new bridges will prevent the highway from being flooded and sediment from being deposited onto the highway.

2.3.2 Water Quality and Storm Water Runoff

Regulatory Setting

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the U.S. from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System permit. Known today as the Clean Water Act, the act has been amended by Congress several times. In the 1987 amendments, Congress directed dischargers of stormwater from municipal and industrial/construction point sources to comply with the National Pollutant Discharge Elimination System permit scheme. The following are important Clean Water Act sections:

- Sections 303 and 304 require states to tell the public about water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge would comply with other provisions of the Clean Water Act. Section 401 compliance is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the National Pollutant Discharge Elimination System, a permitting system for the discharge (except for dredge or fill material) of any

pollutant into waters of the U.S. Regional Water Quality Control Boards administer this permitting program in California. Section 402(p) requires permits for discharge of stormwater from industrial/construction and municipal separate storm sewer systems.

- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers.

The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters.

The U.S. Army Corps of Engineers issues two types of 404 permits: General and Standard permits. There are two types of General permits: Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to authorize a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of the U.S. Army Corps of Engineers' Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For Standard permits, the U.S. Army Corps of Engineers decision to approve is based on compliance with the U.S. Environmental Protection Agency's Section 404 (b)(1) Guidelines (Code of Federal Regulations 40 Part 230), and whether permit approval is in the public interest.

The Section 404(b)(1) Guidelines were developed by the U.S. Environmental Protection Agency in conjunction with the U.S. Army Corps of Engineers and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative that would have less adverse effects. The guidelines state that the U.S. Army Corps of Engineers may not issue a permit if there is a least environmentally damaging practicable alternative to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. As stated in the guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order.

The guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause significant degradation to waters of the U.S. In addition every permit from the U.S. Army Corps of Engineers, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements (see 33 Code of Federal Regulations 320.4).

State Requirements: Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may

impair beneficial uses for surface and/or groundwater of the state. It predates the Clean Water Act and regulates discharges to waters of the state. Waters of the state include more than just Waters of the U.S. like groundwater and surface waters not considered Waters of the U.S. Also, the Porter-Cologne Act prohibits discharges of waste as defined and this definition is broader than the Clean Water Act definition of pollutant. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements and may be required even when the discharge is already permitted or exempt under the Clean Water Act.

The State Water Resources Control Board and Regional Water Quality Control Boards are responsible for establishing the water quality standards (objectives and beneficial uses) required by the Clean Water Act and regulating discharges to ensure compliance with the water quality standards. Details regarding water quality standards in a project area are contained in the applicable Regional Water Quality Control Board's Basin Plan. States designate beneficial uses for all water-body segments, and then set criteria necessary to protect these uses. Consequently, the water quality standards developed for particular water segments are based on the designated use and vary depending on such use. In addition, each state identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with the Clean Water Act Section 303(d). If a state determines that waters are impaired for one or more constituents, and the standards cannot be met through point source controls, the Clean Water Act requires the establishment of total maximum daily loads that specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The State Water Resources Control Board administers water rights, water pollution control, and water quality functions throughout the state. Regional Water Quality Control Boards are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollution Discharge Elimination System Program

Section 402(p) of the Clean Water Act requires the issuance of National Pollution Discharge Elimination System permits for five categories of storm water dischargers, including municipal separate storm sewer systems. The U.S. Environmental Protection Agency defines municipal separate storm sewer systems as any conveyance or system of conveyances—roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains—owned or operated by a state, city, town, county, or other public body having jurisdiction over storm-water conveyances designed or used for collecting or moving storm water. The State Water Resources Control Board has identified Caltrans as an owner/operator of municipal separate storm sewer systems. The National Pollution Discharge Elimination System permit covers all Caltrans rights-of-way, properties, facilities, and activities in the state. The State Water Resources Control Board or the Regional Water Quality Control Board

issues National Pollution Discharge Elimination System permits for five years. Permit requirements remain active until a new permit has been adopted.

The Caltrans Municipal Separate Storm Sewer Systems Permit, under revision at the time of this update, contains three basic requirements:

- Caltrans must comply with the Construction General Permit (see below).
- Caltrans must use a year-round program throughout the state to effectively control stormwater and non-stormwater discharges.
- Caltrans stormwater discharges must meet water quality standards through the use of permanent and temporary (construction) best management practices and other measures.

To comply with the permit, Caltrans developed the Statewide Stormwater Management Plan to address stormwater pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The Statewide Stormwater Management Plan assigns responsibilities within Caltrans for using stormwater management procedures and practices as well as training; public education and participation; monitoring and research; program evaluation; and reporting activities. The Statewide Stormwater Management Plan describes the minimum procedures and practices Caltrans uses to reduce pollutants in stormwater and non-stormwater discharges. The water management plan outlines procedures and responsibilities for protecting water quality, including the selection and implementation of best management practices. The proposed project would be programmed to follow the guidelines and procedures outlined in the latest Statewide Stormwater Management Plan to address stormwater runoff.

Construction General Permit

The Construction General Permit (Order No. 2009-009-DWQ), adopted on September 2, 2009, became effective on July 1, 2010. The permit regulates stormwater discharges from construction sites that result in a disturbed soil area of 1 acre or greater, and/or are smaller construction sites that are part of a larger common plan of development. By law, all stormwater discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least 1 acre must comply with the provisions of the General Construction Permit.

Construction activity that results in soil disturbances of less than 1 acre is subject to this Construction General Permit if there is potential for significant water quality impairment as determined by the Regional Water Quality Control Board. Operators of regulated construction sites are required to develop stormwater pollution prevention plans; use sediment, erosion, and pollution prevention control measures; and obtain coverage under the Construction General Permit.

The 2009 Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels, determined during the planning and design phases, are based on potential erosion and transport to receiving waters. The risk level determines the requirements. For example, a Risk Level 3 (highest risk) project would require the following: compulsory stormwater runoff pH and turbidity monitoring; and before- and after-construction aquatic biological assessments during specified seasonal windows. For all projects subject to the Construction General Permit, applicants are required to develop and use an effective Stormwater Pollution Prevention Plan. In accordance with the Caltrans Standard Specifications, a Water Pollution Control Plan is necessary for projects with disturbed soil areas less than 1 acre.

Section 401 Permitting

Under Section 401 of the Clean Water Act, any project requiring a federal license or permit that may also discharge to a water body must obtain a 401 Certification that certifies the project would be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are Clean Water Act Section 404 permits issued by the U.S. Army Corps of Engineers. Depending on project location, 401 Certification is obtained from the appropriate Regional Water Quality Control Board. Certification is required before the U.S. Army Corps of Engineers issues a 404 permit.

In some cases, the Regional Water Quality Control Board may have specific concerns with discharges associated with a project. As a result, the Regional Water Quality Control Board may issue Waste Discharge Requirements under the State Water Code. The water codes define activities such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals to be used for protecting or benefiting water quality. Waste Discharge Requirements can be issued to address both permanent and temporary discharges of a project.

Affected Environment

A Water Quality Assessment Report was completed in September 2014. The project area sits on a portion of a 450-square-mile alluvial fan created by the Arroyo Pasajero channel as it flows eastward from the Diablo Coast Range. Arroyo Pasajero Creek is the only watercourse found within the project area. It is a temporary channel that is normally dry, but does flood during heavy rains. Floodwaters travel east toward the San Luis Canal where the channel ends as it fans out and enters an area of detention basins and then the San Luis Canal.

The main topographic features on the project site are the constructed dike along the Arroyo Pasajero flood control channel. The purpose of the dike is to direct flood flows away from the private agricultural land to the north and keep flood waters from entering the aqueduct. The agricultural fields that surround the Department of Water Resources property are generally flat, but the fields are bisected by small irrigation ditches and dirt access roads.

Groundwater throughout the basin is suitable for agricultural water supply and industrial use. Generally, the water quality within the Arroyo Pasajero Creek is moderate to good. During floods, the Arroyo Pasajero Creek carries large quantities of sediments onto State

Route 269, north of the City of Huron. Floodwaters deposit large amounts of sediment, causing the sediment basins to fill over time. There are some areas of the Arroyo Pasajero Creek floodplain where large concentrations of asbestos in the deposited sediments are prevalent.

The Clean Water Act requires the identification of water bodies that are considered impaired, which means the water body does not meet water quality standards. These water bodies must then be placed on the “Clean Water Act Section 303(d) List of Water Quality Limited Segments.” Arroyo Pasajero Creek is not listed as being impaired in the Environmental Protection Agency’s 2010 303 (d) list.

Environmental Consequences

Short-term impacts to water quality within the area may occur during project construction. Long-term impacts to water quality impacts associated with the project may occur from pollutants entering Arroyo Pasajero Creek through stormwater runoff. Increased pollutant discharges from the road surface during storms could affect local water bodies. Uncontrolled water flow from the highway surface may cause erosion that could alter the stream and create gullies. To protect water quality, control erosion and prevent washout within the project area, rock slope protection would be used on the banks along the channel and at the Arroyo Pasajero Creek Bridge. The scope of work would not alter the river creek-sectional area, and it would not change the 100-year flood elevation because it is not changing the hydraulics of the creek. Due to the design, permitting, and site-specific conditions of this project, however, the potential long-term impacts to water quality are not considered adverse.

Avoidance, Minimization, and/or Mitigation Measures

Design Features

To protect water quality, control erosion and prevent washout within the project area, a training dike with rock slope protection along the dike embankments will be used to protect the banks of the Arroyo Pasajero channel east and west of the bridge.

Temporary Construction Measures

Standard temporary construction site and permanent design pollution prevention and permanent stormwater treatment best management practices will be used during and after project construction to control potential discharges of pollutants to surface water. Best management practices will be designed to control general gross pollutants and sedimentation/siltation, depending on location.

Stormwater Best Management Practices

A National Pollutant Discharge Elimination System Stormwater Permit is required for the project along with any subsequent permit in effect at the time of construction. The contractor must comply with the requirements of the General National Pollutant Discharge Elimination System Permit for Construction Activities. The contractor will use best management practices as specified in the Caltrans Stormwater Management Plan.

Prepare and Implement a Stormwater Pollution Prevention Plan

The contractor will be required to develop an acceptable Stormwater Pollution Prevention Plan. The plan will contain best management practices that have demonstrated effectiveness in reducing stormwater pollution. The plan will address all construction-related activities, equipment, and materials with the potential to affect water quality. All construction site best management practices will follow the latest edition of the Stormwater Quality Handbooks and Construction Site Best Management Practices Manual to control and minimize the impacts of construction-related pollutants. The Stormwater Pollution Prevention Plan will include best management practices to control pollutants, sediment from erosion, stormwater runoff, and other construction-related impacts. In addition, the Stormwater Pollution Prevention Plan will include the use of specific stormwater effluent-monitoring requirements based on the project's risk level to ensure that the best management practices are effective in preventing the degradation of any water quality standards.

2.3.3 Hazardous Waste and Materials

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health and land use.

The main federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Resource Conservation and Recovery Act of 1976 (RCRA). The purpose of the Comprehensive Environmental Response, Compensation and Liability Act, often referred to as "Superfund," is to identify and clean up abandoned contaminated sites so that public health and welfare are not compromised. The Resource Conservation and Recovery Act provides for "cradle to grave" regulation of hazardous waste generated by operating entities. Other federal laws include the following:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control Standards, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the California Health and Safety Code and is also authorized by the federal government to implement the Resource Conservation and Recovery Act in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning of hazardous waste.

The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact groundwater and surface water quality. California regulations that address waste management and prevention and cleanup contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material are vital if it is found, disturbed, or generated during project construction.

Affected Environment

An Initial Site Assessment/Hazardous Waste Compliance Memo, completed in December 2012, consisted of a site visit and a database records search. The resource agency databases included, but are not limited to: Department of Toxic Substances Control's EnviroStor, State Water Resources Control Board's Geotracker, and CalRecycle's Solid Waste Information System. Three open cases were listed on the Geotracker website and are in the process of identifying the extent of soil contamination on their respective properties. Although these facilities are potential hazardous waste risks, construction activities would not occur south of Palmer Avenue in the vicinity of the leaking gas stations. No other sites were listed within project boundaries. A Preliminary Site Investigation was recommended to address lead-based paint and asbestos-containing materials on the bridge proposed to be removed and replaced (Huron Dike Bridge #42-0376).

A Preliminary Site Investigation was conducted for the project by Geocon Consultants, Inc. on behalf of Caltrans on March 26, 2014 and April 9, 2014 and was reported on in May 2014. Huron is not an area that contains ultramafic/serpentine rock. However, there was a potential risk of naturally occurring asbestos existing in the Arroyo Pasajero Creek (owned by the Bureau of Reclamation/Department of Water Resources) and adjacent soils from surface runoff/erosion. Asbestos-containing material and lead-based paint samples were taken from Huron Dike Bridge. Soil samples were taken at various locations along State Route 269 for aerially deposited lead and naturally occurring asbestos. Naturally occurring asbestos samples were also taken at the borrow site (owned by the Department of Water Resources) to determine if soil could be used as fill material for the project. A Naturally Occurring Asbestos Survey (addressing Bureau of

Reclamation/Department of Water Resources parcels), an Asbestos and Lead-Containing Paint Survey Report, and an Aerially Deposited Lead and Naturally Occurring Asbestos Report were completed in May 2014.

Environmental Consequences

Information in this section is based on the Preliminary Site Investigation Results Memo (dated May 30, 2014).

Asbestos-Containing Materials/Lead-Based Paint

A Bridge Survey was conducted on Huron Dike (#42-0376). A total of six bulk asbestos samples representing three suspect materials (expansion joint material, bearing pad, and concrete) were collected. Asbestos was not detected in any of the samples.

The bridge structure itself is not painted. However, one sample of intact graffiti paint was sampled from under the bridge, and the total lead concentration was 4.4 milligrams/kilogram (mg/kg). It would not be classified as a California hazardous waste or Federal Resource Conservation and Recovery Act waste based on lead content if stripped, blasted, or otherwise separated from the substrate.

Aerially Deposited Lead

Twenty-four direct-push borings were drilled with samples collected at 0.0 to 1.0 foot, 1.0 to 2.0 feet, and 2.0 to 3.0 feet below ground surface, yielding a total of 72 soil samples. Samples were taken from the unpaved shoulders of the highway every 800 to 1,000 feet from Palmer Avenue to State Route 198.

Total lead concentrations ranged from 2.3 milligrams/kilogram (mg/kg) to 45 mg/kg, less than 50 mg/kg (10 times the Soluble Threshold Limit Concentration of 5 milligrams/liter). The average total lead value was 7.47 mg/kg, well below regulatory levels. Therefore, soil would be considered non-hazardous and could be reused onsite, relinquished to the contractor, and/or disposed of as non-hazardous soil.

Naturally Occurring Asbestos

Within the U.S. Bureau of Reclamation/Department of Water Resources right-of-way 14 hand-auger borings were collected: 6 next to the Arroyo Pasajero Creek and 8 at the potential borrow site at the intersection of Mitchell and Trinity avenues. Soil samples were collected at approximate depth intervals of 0.0 to 1.0 foot, 1.0 to 2.0 feet and 2.0 to 3.0 feet. The samples were analyzed for asbestos by the California Air Resources Board Method 435 (CARB 435) using polarized light microscopy (PLM). A total of 42 samples were analyzed from U.S. Bureau of Reclamation/Department of Water Resources property. All of the samples were reported to contain chrysotile asbestos below the California Air Resources Board's regulatory level of 0.25% for use as a surfacing application/fill material. All samples were found to be non-fibrous asbestos. Soil from these areas may be reused onsite or disposed of in a landfill without restriction.

In addition to the samples taken on the U.S. Bureau of Reclamation/Department of Water Resources property, 72 aerially deposited lead soil samples were collected within the Caltrans right-of-way, 24 of those were randomly selected to also be analyzed for naturally occurring asbestos. Results within project boundaries indicate that levels were generally below the permitted threshold. However, along the northbound shoulder from Palmer Avenue to Marmon Avenue, 3 samples were at or above the 0.25% limit for chrysotile asbestos. Soil from this area may not be used as surfacing application or uncovered fill material and is considered a Restricted Material. Also, two of the three samples were at or greater than the permitted threshold of 1.0% asbestos; soil could potentially be considered a hazardous waste if disposed of offsite. If soil from Palmer Avenue to Marmon Avenue cannot be encapsulated within the project area by placing 6 inches of clean soil or paving over it, the soil will need to be excavated to a depth of 1 foot and hauled off as a hazardous waste. Using the soil to raise the profile or as a surfacing material while leaving it uncovered where it could be disturbed or kicked up could cause asbestos exposure to the public or workers.

Two personal air samples were taken by Geocon Consultants during the April 2014 sampling activities. Results were analyzed in accordance with National Institute for Occupational Safety and Health and were below the California Occupational Safety and Health Administration's Permissible Exposure Limits (PEL) for asbestos. Results were further analyzed to better evaluate the presence of asbestos fibers in the air samples; no asbestos fibers were reported.

Based on the personal air samples, soil-disturbing activities will not be expected to result in worker exposures greater than the regulatory thresholds, provided that engineering controls (wetting the area for dust suppression) are properly implemented.

Avoidance, Minimization, and/or Mitigation Measures

- Special provisions will be included in the construction contract addressing the potential hazardous materials/hazardous waste issues for lead and asbestos to ensure proper handling, disposal, and worker/public safety.
- Soil from Palmer Avenue to Marmon Avenue, with asbestos levels exceeding the regulatory threshold of 1.0%, will be encapsulated within the project area by placing 6 inches of clean soil or paving over it, or the soil will be excavated to a depth of 1 foot and hauled off as a hazardous waste.

2.4 Biological Environment

2.4.1 Natural Communities

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat

fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Critical habitat under the Federal Endangered Species Act is discussed in Threatened and Endangered Species, Section 2.4.5. Wetlands and other waters are discussed in Section 2.4.2.

Affected Environment

A Natural Environment Study was completed in December 2014. The project impact area is defined as the area directly affected, plus adjacent areas that may be indirectly affected. The biological study area consists of a 200-foot-wide buffer along the approximate 2-mile-long segment of State Route 269 that would be disturbed during construction, the Arroyo Pasajero Creek Bridge site, a potential borrow site, and easements including a temporary detour road.

The biological study area contains habitat from the following natural communities:

- Fremont cottonwood forest alliance—This natural community sits along the margins of the Arroyo Pasajero channel and represents a riparian-type habitat. True riparian characteristics of this habitat on the site are poorly developed and degraded due to the very dry soil conditions and high amount of disturbance.
- Mulefat scrub alliance—Mulefat scrub is associated with riparian soils, which can occur on alluvial systems that experience periodic flooding. Mulefat scrub occurs in the eastern portion of the Department of Water Resources drainage basin, with only a very small portion overlapping the biological study area boundary on the north side of the Arroyo Pasajero channel.
- Saltbrush (Quailbrush) scrub alliance—Saltbrush scrub habitat consists of open stands of dry and/or salty soil-adapted scrub species in areas of the San Joaquin Valley that are associated with low precipitation, low humidity, high summer temperatures, and cool winters but with high levels of solar radiation year-round. Saltbrush scrub habitat is found within the biological study area mostly south of the Arroyo Pasajero channel, west of State Route 269.
- Aquatic Resources—The project area does not contain any features that would provide permanent aquatic or wetland habitat. Ephemeral pools can occur in the area, sufficient to maintain populations of spadefoot toads (*Spea hammondi*), which have been observed in the Westside Detention Basin in the recent past. The only creek within the project area, the Arroyo Pasajero, is normally dry, experiencing flows only in response to significant precipitation in the Coast Ranges to the west of the project site. Some of these floods can be severe, and the Department of Water Resources has removed up to 41,000 cubic yards of soil from the channel to maintain a clear path for floods (DWR 2012). Between 1978 to 1997, State Route 269 was closed an average of 29 days per year due to floods (Caltrans data). The only other aquatic features in the area are irrigation ditches that surround the agricultural fields to the north, west, and south of the project area. State Route 269 crosses such ditches near the north and south ends of the project area.

Five other habitat types found in the biological study area do not have a “natural community” classification:

- Tamarisk—This community dominates the northeast portion of the project area, with a smaller stand also located along the west side of State Route 269 in the northern end of the biological study area. It is a result of the 1995 flood depositing seeds on the site. Before that event, there were no tamarisk trees in the area.
- (Ruderal) Annual grasslands—This natural community is found south of the Arroyo Pasajero channel on both sides of State Route 269. The annual grasslands here are dominated by non-native species, and areas of this habitat type exhibit varying degrees of disturbance and invasion by ruderal species.
- Ruderal—These areas dominate the center-west portion of the biological study area and the shoulders of State Route 269, including areas that undergo frequent disturbance, such as the informal parking areas around the Arroyo Pasajero channel.
- Bare Ground—The flood control channel portion of the Arroyo Pasajero channel is routinely cleaned out and maintained by Department of Water Resources personnel. Sediments deposited by flood flows are removed and placed onto the control dikes along the channel. So, the ground in these areas is mostly bare, with only a scattered growth of Russian thistle and other ruderal species. This habitat type is located in the center portion of the biological study area where the new Arroyo Pasajero Bridge will be located.
- Agricultural Lands—Crops are actively cultivated in all areas surrounding the Department of Water Resources property. This includes the far northern and southern portions of the biological study area in areas where the temporary detour road is proposed. A plot of land cultivated by the California Department of Fish and Wildlife for wildlife purposes sits on Department of Water Resources land about a quarter mile west of the project area and a quarter mile south of the proposed borrow site. All other croplands are outside of the Department of Water Resources property.

Environmental Consequences

No natural communities of special concern were identified within or near the biological study area for the project. There is no designated critical habitat within the biological study area for the State Route 269 Bridge project.

The project would permanently affect 0.18 acre of saltbush scrub due to the widening of State Route 269. The detour road and installation of the training dikes would result in an additional 0.59 acre of temporary impacts to saltbrush scrub.

The project may also permanently affect up to 0.04 acre and temporarily impact up to 0.74 acre of cottonwood riparian habitat. The actual amount of impact will be refined at the design stage (Plans, Specifications and Estimates phase) of the project.

Avoidance, Minimization, and/or Mitigation Measures

Mitigation Measures

In areas where saltbush scrub or cottonwood riparian habitat would be temporarily affected by construction, mitigation will be required by way of reseeding and/or revegetating the areas where the vegetation was removed. The temporary impact areas will be restored to original grade and planted with native saltbrush and/or cottonwood vegetation, where appropriate, after construction. Revegetation of the saltbrush scrub will be required by the U.S. Fish and Wildlife Service per the San Joaquin Kit Fox Protection Measures listed in Appendix H.

2.4.2 Wetlands and Other Waters

Regulatory Setting

A Natural Environment Study was completed in January 2015. Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (33 U.S. Code 1344) is the main law regulating wetlands and surface waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of: hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present under normal circumstances for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes the following regulatory program: discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army of Corps of Engineers with oversight by the U.S. Environmental Protection Agency.

The U.S. Army of Corps of Engineers issues two types of 404 permits: General and Standard permits. Nationwide permits, a type of General permit, authorizes a variety of minor project activities with no more than minimal effects. Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of U.S. Army of Corps of Engineers Standard permits.

For Standard permits, the U.S. Army of Corps of Engineers decision to approve is based on compliance with the U.S. Environmental Protection Agency's Section 404(b)(1) Guidelines (40 Code of Federal Regulations Part 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines were developed by the U.S. Environmental Protection Agency in conjunction with U.S. Army of Corps of Engineers, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative that would have fewer adverse effects. The guidelines state that the U.S. Army of Corps of Engineers may not issue a permit if there is a least environmentally damaging practicable alternative to the proposed discharge that

would have fewer effects on waters of the U.S., and there would not be any other significant adverse environmental consequences.

The executive order for the Protection of Wetlands (Executive Order 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this order states that a federal agency, such as the Federal Highway Administration and/or Caltrans, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) there is no practicable alternative to the construction; and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated mainly by the California Department of Fish and Wildlife, the State Water Resources Control Board, and the Regional Water Quality Control Boards. In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or Tahoe Regional Planning Agency) may also be involved. Sections 1600 to 1607 of the California Fish and Wildlife Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify the California Department of Fish and Wildlife before beginning construction. If the California Department of Fish and Wildlife determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. California Department of Fish and Wildlife jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian (streamside) vegetation, whichever is wider. Wetlands under jurisdiction of the U.S. Army Corps of Engineers may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the California Department of Fish and Wildlife.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The Regional Water Quality Control Boards also issue water quality certifications for impacts to wetlands and waters in compliance with Section 401 of the Clean Water Act. See the Water Quality section for additional details.

Affected Environment

Arroyo Pasajero Creek is a seasonal stream that flows east through the project site. Jurisdictional waters of the United States are defined as those waters used—currently, in the past, or in the future—for interstate commerce, including all waters subject to the ebb and flow of the tide and all interstate waters including interstate wetlands. This definition also includes interstate lakes, rivers, streams (including seasonal streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, and playa lakes, or natural ponds where the use, degradation, or destruction of which could affect interstate or foreign commerce.

Wetlands can fall under the jurisdiction of the U.S. Army Corps of Engineers, California Regional Water Quality Control Board and California Department of Fish and Wildlife. Jurisdictional wetlands generally include swamps, marshes, bogs, natural drainage

channels, and seasonal wetlands. The project area does not contain any features that would provide permanent aquatic or wetland habitat. No wetlands are located within the project area.

No coordination with regulatory agencies has taken place at this point in the project planning process. Coordination with these regulatory agencies, as well as determination of agency jurisdiction of the Arroyo Pasajero Creek, would take place during the Plans, Specifications and Estimates phase of the project.

Environmental Consequences

During construction of the project, Arroyo Pasajero Creek will be disturbed by equipment used to construct the new Arroyo Pasajero Creek bridge and the dikes. At this point in the project's development, the exact acreage of impacts are not known and will be finalized during the Plans, Specifications and Estimates phase. Therefore, preliminary estimates indicate that there will be 1.15 acres of temporary impacts, and 0.66 acre of permanent impacts to potentially jurisdictional waters of the United States.

Temporary impacts are due to the operation of construction equipment within the creek channel. These areas would be restored to original grade after construction. Permanent impacts are due to the removal of one existing channel under State Route 269, the installation of training dikes, and the footprint of the new bridge columns within the waterway.

Avoidance, Minimization, and/or Mitigation Measures

Best management practices would be included so the smallest practical footprint would be in place to minimize temporary, indirect, and permanent impacts to potential waters of the United States to prevent impacts related to degradation of the Arroyo Pasajero Creek. Work will take place only when Arroyo Pasajero Creek is dry.

If Arroyo Pasajero Creek is determined to be jurisdictional, Caltrans will obtain permits from the U.S. Army Corps of Engineers (404 Nation Wide Permit), California Regional Water Quality Control Board (401 Certification), and California Department of Fish and Wildlife (Streambed Alteration Agreement). These permits will identify measures to mitigate impacts to the Arroyo Pasajero Creek. All proposed permits are listed in section 1.5 "Permits and Approvals Needed" in this report.

To ensure no net loss of potential waters of the United States, one or more of the following options could compensate for the permanent loss of waters if Arroyo Pasajero Creek is determined to be jurisdictional:

- In-lieu fee payments to compensate for impacts to jurisdictional waters.
- Dedication of mitigation lands for impacts to jurisdictional waters.
- Development of an alternative mitigation plan for impacts to jurisdictional waters.

2.4.3 Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife have regulatory responsibility for the protection of special-status plant species. Special-status species are selected for protection because they are rare and/or subject to population and habitat declines. “Special status” is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). See the Threatened and Endangered Species section (2.4.5) in this document for detailed information about these species.

This section of the document discusses all the other special-status plant species, including California Department of Fish and Wildlife species of special concern, U.S. Fish and Wildlife Service candidate species, and California Native Plant Society rare and endangered plants. The regulatory requirements for the Federal Endangered Species Act can be found at U.S. Code 16, Section 1531, et seq. See also 50 Code of Federal Regulations Part 402. The regulatory requirements for the California Endangered Species Act can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, California Public Resources Code, Sections 2100-21177.

Affected Environment

A Natural Environment Study for the project was completed in December 2014. The biological study area consisted of a 200-foot-wide buffer of the approximately 2-mile-long segment along State Route 269, the Arroyo Pasajero Creek Bridge site, and a potential borrow site east of the highway. Easements, including a temporary detour road, were also included in the biological study area.

The project area lies within the Arroyo Pasajero Westside Detention Basin. This basin was created to alleviate flood threats to the California Aqueduct east of the project and also to protect the City of Huron. The surrounding lands adjacent to the Arroyo Pasajero Creek were cultivated in the past, allowed to go fallow, and have since recovered to include saltbrush scrub and grassland vegetation types with a large component of invasive plant species.

Hoover's eriastrum (Eriastrum hooveri)

Hoover's eriastrum (*Eriastrum hooveri*) is an annual herb that is part of the Phlox family (*Polemoniaceae*). This plant has white tub-like flowers with flat end petals. Leaves are tread-like and woolly. This herb blooms from March through July. Hoover's eriastrum has been delisted (2003) from federal status. The Hoover's eriastrum is included in the California Native Plant Society inventory of rare and endangered plants.

Focused botanical surveys of the Westside Detention Basin were performed by the Department of Water Resources in 2003; more generalized plant surveys were performed

from 1999 to 2002. No Hoover's eriastrum populations were found onsite during those efforts. The closest known occurrences are about 18 miles west, southwest of the project area, near Coalinga, and date from 1955 and 1987. Given the level of habitat disturbance and abundance of non-native invasive species on the project site, the potential that the species will occur is low.

Recurved larkspur (Delphinium recurvatum)

The recurved larkspur (*Delphinium recurvatum*) is an endemic perennial herb that is part of the Ranunculus family (*Ranunculaceae*). This plant has light blue and white flowers, with lateral petals and a spur. This herb blooms from March through June. The recurved larkspur is included in the California Native Plant Society inventory of rare and endangered plants.

Focused botanical surveys of the Westside Detention Basin were performed in 2003, and more generalized plant surveys were performed by the Department of Water Resources from 1999 to 2002. No recurved larkspur populations were found onsite during those efforts. The closest known occurrences are about 11.5 miles northwest of the project area and date from 2001. Given the distance to the closest known occurrence, the level of habitat disturbance, and abundance of non-native invasive species on the project site, the potential that the species will occur is low.

San Joaquin bluecurls (Trichostema ovatum)

The San Joaquin bluecurls (*Trichostema ovatum*) is an endemic annual herb that is part of the mint family (*Lamiaceae*). This plant has blue to purple flowers and woolly stems. This herb blooms from July through October. The San Joaquin bluecurls is included in the California Native Plant Society inventory of rare and endangered plants.

Focused botanical surveys of the Westside Detention Basin were performed by the Department of Water Resources in 2003, and more generalized plant surveys were performed from 1999 to 2002. No San Joaquin bluecurls populations were found onsite during those efforts. The closest known occurrences are about 20.8 miles south of the project area and date from 1937 (Calflora, 2014). Given the distance to the closest known occurrence, the level of habitat disturbance, and abundance of non-native invasive species on the project site, the potential that the species will occur is low.

Environmental Consequences

The Natural Environment Study evaluated the potential of Hoover's eriastrum, recurved larkspur, and San Joaquin bluecurls to occur within the project area. There is an estimated 4.52 acres of habitat that will be permanently affected by the project and 57.71 acres that will be temporarily affected. Based on the available survey data, it was determined that the potential of these species occurring in the project area is low.

Avoidance, Minimization, and/or Mitigation Measures

The following measures will be required for the protection of plant species identified in the Natural Environment Study prepared for the project.

- Preconstruction surveys will be completed during the appropriate blooming periods prior to groundbreaking activities.
- If Hoover's eriastrum, recurved larkspur, or San Joaquin bluecurls is observed onsite, Caltrans will notify the California Department of Fish and Wildlife to discuss conservation measures to be implemented.

2.4.4 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service), and California Department of Fish and Wildlife are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.4.5. All other special-status animal species are discussed here, including California Department of Fish and Wildlife fully protected species and species of special concern, and U.S. Fish and Wildlife Service or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600–1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

Affected Environment

A Natural Environment Study was completed in December 2014. The biological study area consisted of a 200-foot-wide buffer of the approximately 2-mile-long segment of State Route 269, the Arroyo Pasajero Creek Bridge site, and a potential borrow site east of the highway. Easements, including a temporary detour road, were also included in the biological study area.

The following species have the potential to occur in the project area:

Western spadefoot (Spea hammondi)

The western spadefoot (*Spea hammondi*) toad is a California species of special concern. This small, nocturnal toad is highly terrestrial, entering water only to breed. It inhabits a variety of habitats with sandy or gravelly soils, but requires temporary rain pools or vernal pools for breeding.

Biological surveys performed in 2001 by Department of Water Resources biologists found four instances of juvenile spadefoot toads leaving rain pools within the Westside Detention Basin property. One such occurrence was near the north end of the survey area on the west side of State Route 269, within the project area. A second occurrence was near the northeast corner of the proposed borrow site. The other two occurrences were not within the biological study area.

No western spadefoot toads have been observed by Caltrans biologists during surveys in 2012, 2013, and 2014. Because the spadefoot toad spends most of the year in underground burrows and is active for only short periods following rains, it is difficult for surveys to determine where or how many toads may occur within the project area.

San Joaquin whipsnake (Masticophis flagellum ruddocki)

The San Joaquin whipsnake (*Masticophis flagellum ruddocki*) is a California species of special concern. The San Joaquin whipsnake can range from 3 to 8 feet long. Coloration is highly variable—light yellow, olive brown, or occasionally reddish above, with a few faint or no neck bands.

Biological surveys performed in 2005 and 2008 by Department of Water Resources biologists provided two observations of this species outside of, but in proximity to, the project biological study area. However, no San Joaquin whipsnakes were observed onsite during surveys performed by Caltrans biologists in 2012, 2013, and 2014. The biological study area and project impact area both contain potentially suitable habitat for this species. San Joaquin whipsnakes are likely to be present in the biological study area because they have been observed near there within the last six years.

Burrowing owl (Athene cunicularia)

The burrowing owl (*Athene cunicularia*) is a California species of special concern. It is the only owl in North America that nests in underground burrows. The burrowing owl has long legs and spends a great deal of time standing on the ground or on a small mound near the burrow entrance, or perched on low perches such as brush and fence posts. Burrowing owls can be active during the day or night.

Previous survey efforts by Department of Water Resource biologists found burrowing owls within the Westside Detention Basin in May 2001, about 0.65 mile west of the project site and south of the proposed borrow site. Owls were also seen outside of the biological study area, about 1 mile northeast of Huron.

Level II protocol burrowing owl surveys were conducted across the project site and proposed borrow site by Caltrans biologists in January 2014. No burrowing owls or signs

of occupancy were found. The habitat within the biological study area is suitable for burrowing owls.

Loggerhead shrike (Lanius ludovicianus)

The loggerhead shrike (*Lanius ludovicianus*), a songbird, is a California species of special concern and is also protected by the Migratory Bird Treaty Act. Loggerhead shrikes were observed twice on the project site during Caltrans biological survey efforts, on January 28, 2014 and March 26, 2014. On both occasions, they were in the cottonwood trees next to the Arroyo Pasajero channel, 100 to 200 yards west of State Route 269, perched, singing, and hunting. Loggerhead shrikes have also been seen periodically during survey efforts for other species performed by Department of Water Resources biologists from 2002 to 2012. The loggerhead shrikes have not been observed nesting in the project area.

American badger (Taxidea taxus)

The American badger (*Taxidea taxus*) is a California species of special concern. The closest recording of the American badger is about 1 mile south of the project site near Huron. The California Natural Diversity Database record for this sighting does not provide a date. The record notes do indicate that a specimen was “collected” and thus may refer to a road-killed individual.

While no surveys specifically for the American badger have been performed onsite, annual surveys for small mammals, blunt-nosed leopard lizards, and other species performed by Department of Water Resources biologists since 1999, and several biological surveys performed by Caltrans biologists from 2012 to 2014, have all failed to observe any sign of badger activity within the biological study area. However, the habitat appears to be suitable, and a prey base of relatively abundant small mammals is also available. Based on the proximity of recorded sightings, habitat suitability, and available prey, the presence of American badgers is possible within the biological study area.

Migratory birds

According to the Natural Environment Study completed in January 2015, bird species protected by the Migratory Bird Treaty Act of 1918 and California Department of Fish and Game Code Section 3511 use the study area for roosting, nesting, and foraging year-round. Birds covered by the Migratory Bird Treaty Act are protected from hunting, taking, capture, killing, possession, sale, purchase, shipment, transportation, carriage, or export of any bird, or any part nest or egg. State fully protected species (including their parts) may not be taken or possessed at any time. Birds within California have an approximate breeding and nesting season from February 15 to September 1. See Appendix D for a list of the species observed within the proposed project area.

Environmental Consequences

Western spadefoot

The project area does contain suitable habitat for the western spadefoot, and the species has been observed in the area within the last 14 years. Any excavation, grading, or compaction of suitable soils within the project area has the potential to injure or kill

underground western spadefoots by crushing or entombment. The proposed project is anticipated to affect 67.12 acres of suitable habitat; of these, 5.22 acres will be permanent impacts associated mostly with the widening of State Route 269 and the installation of the new bridge and training dikes. The remaining 61.9 acres are temporary impacts, due mainly to the temporary detour road and borrow site. The species may attempt to breed in any pools that form within the project area should significant rain occur during construction. In that case, eggs, tadpoles, or dispersing juvenile metamorphs could be killed by vehicles, equipment, or personnel traveling through or near breeding pools. After construction, affected habitat would be expected to regain suitability as vegetation recovers and soils stabilize.

San Joaquin whipsnake

The project site contains suitable habitat and an appropriate prey base for the San Joaquin whipsnake. The project is anticipated to affect 67.12 acres of suitable habitat; of these, 5.22 acres would be permanent impacts associated mostly with the widening of State Route 269 and the installation of the new bridge and training dikes. The remaining 61.9 acres are temporary impacts, due mainly to the temporary detour road and borrow site. These areas would be restored after construction is complete. Snakes taking refuge in rodent burrows may be entombed or crushed by vehicles and heavy equipment. Disturbance to whipsnakes may result from equipment noise, motion, vibrations, dust, and human presence. Snakes moving along the ground can move very quickly and can avoid disturbance and are less likely to be harmed by construction equipment.

Burrowing owl

The project is expected to affect approximately 67.12 acres of potentially suitable foraging and nesting habitat for the burrowing owl; of these, 5.22 acres will be permanent impacts associated mostly with the widening of State Route 269 and the installation of the new bridge and training dikes. The remaining 61.9 acres are temporary impacts, due mainly to the temporary detour road and borrow site.

Construction activity may cause disturbance impacts to hunting areas along the State Route 269 corridor, and potentially to nesting areas within 500 feet of State Route 269 and the new bridge site. Disturbance may result from equipment noise, motion, vibrations, dust, and human presence. However, construction activities that would disturb small prey species (such as lizards and mice) could enhance hunting opportunities for the burrowing owl as prey species may flee the area and become exposed. However, the most current surveys have not located any indications that burrowing owls occur within or next to the biological study area. The potential that burrowing owls would be affected by the proposed project is very low.

Loggerhead shrike

It is not anticipated that the project would have any direct habitat impacts to the loggerhead shrike because no trees are anticipated to be removed. Construction activities may cause disturbance impacts to hunting areas along the State Route 269 corridor. Disturbance may result from equipment noise, motion, vibrations, dust, and human presence. However, construction activities that would disturb small prey species (such as

lizards and mice) could enhance hunting opportunities for the shrike as the prey species may flee the area and become exposed.

American badger

The project is within the historical range for this species, and badgers may occur in the area. The project is anticipated to affect 67.12 acres of potentially suitable habitat; of these, 5.22 acres would be permanent impacts associated mostly with the widening of State Route 269 and the installation of the new bridge and training dikes. The remaining 61.9 acres are temporary impacts, due mainly to the temporary detour road and borrow site.

Heavy equipment would compact soils and possibly collapse any existing burrows within the work area. Disturbance may also result from equipment noise, motion, vibrations, dust, and human presence. This would affect both badgers and their prey species (kangaroo rats and ground squirrels) within and next to the work area. With implementation of the avoidance and minimization measures, no direct impacts to the American badger are expected to occur.

Migratory birds

No tree removal is anticipated for construction of the project. However, suitable nesting habitat for migratory birds is present within the biological study area and the project area.

Avoidance, Minimization, and/or Mitigation Measures

No compensatory mitigation is required. The following are avoidance and minimization measures for each species:

Western spadefoot

A preconstruction survey would be performed within 30 days prior to construction if a rain sufficient to result in persistent puddles occurs in the biological study area. Persistent puddles are those that would pool for 3 to 7 consecutive days.

- Persistent rain pools discovered during the preconstruction surveys, or forming during construction, will be designated as an Environmentally Sensitive Area (ESA) and avoided where possible.
- A qualified biological monitor will be present onsite during initial ground disturbance.
- Ground-disturbing night work may be restricted, especially on nights during or following rains of sufficient intensity to result in persistent puddles and pools.

San Joaquin whipsnake

- Preconstruction surveys will be conducted to avoid potential impacts to this species.
- A qualified biologist will be present at the construction site during initial ground-disturbing activities.

- Requiring low speed limits within the construction site will lessen the probability that snakes could be run over by vehicles and equipment.

Burrowing owl

- Preconstruction surveys will be performed within 500 feet of the project impact area no more than 30 days prior to the start of construction to determine any presence or sign of burrowing owl occupancy.
- Active burrowing owl burrows will be protected by a 150-foot-radius Environmentally Sensitive Area (ESA) outside of the nesting season (September 1 to January 31).
- Active burrowing owl burrows will be protected by a 500-foot-radius Environmentally Sensitive Area during the nesting season (February 1 to August 31).
- If active burrows are located within a construction area that cannot be avoided by a protection buffer, passive relocation efforts will be implemented by installing one-way exclusion doors on burrow entrances, and providing artificial burrows constructed nearby (within 50 to 100 yards if possible). A minimum of 6.5 acres of contiguous foraging habitat will be available within a 300-foot radius around the new burrow site per owl pair or resident single bird. All passive relocation work will be performed by qualified biologists.
- Occupied burrowing owl burrows discovered during the preconstruction surveys and/or those protected by Environmentally Sensitive Area buffers will be monitored by a qualified biologist during construction activities occurring in proximity to the Environmentally Sensitive Area buffer.
- All burrowing owl avoidance and minimization guidelines will conform to the “*Burrowing Owl Survey Protocol and Mitigation Guidelines*” (California Burrowing Owl Consortium, 1993).

Loggerhead shrike

- Nesting surveys will be conducted during the nesting season (February 15 to September 1) prior to the start of construction to determine if any loggerhead shrikes are nesting within 250 feet of the project impact area.
- If nesting loggerhead shrikes are observed onsite, a 250-foot-radius Environmentally Sensitive Area will be established around the nest until it has been determined by a qualified biologist that the young have fledged.
- A qualified biologist will monitor active nests during construction activities within the project 250-foot-radius Environmentally Sensitive Area.
- A special provision for migratory birds will be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact area will be done outside of the nesting season, if tree removal is needed. At this time, tree removal is not anticipated for construction of the proposed project.

American badger

- A preconstruction survey will be performed by a qualified biologist no more than 30 days prior to the start of construction. If badgers are determined to be living and/or foraging within the biological study area during surveys, avoidance measures, such as Environmental Sensitive Area fencing, will be implemented where feasible.
- A qualified biological monitor will be present during initial ground-disturbing activity. Any badgers discovered during project activity would be allowed to leave the area free of harassment.

Migratory birds

- Nesting surveys will be conducted during the nesting season (February 15 to September 1) prior to the start of construction to determine what migratory birds are nesting within 100 feet of the project impact area.
- If nesting migratory birds are observed onsite, a qualified biologist will determine if an Environmentally Sensitive Area is required.
- If an Environmentally Sensitive Area is required, a qualified biologist will monitor active nests during construction activities within the project. A 100-foot-radius Environmentally Sensitive Area could be implemented.
- A special provision for migratory birds will be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact area will be done outside of the nesting season. At this time, tree removal is not anticipated for construction of the proposed project.

2.4.5 Threatened and Endangered Species

Regulatory Setting

The main federal law protecting threatened and endangered species is the Federal Endangered Species Act (16 U.S. Code Section 1531, et seq.) Also see 50 Code of Federal Regulations Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies such as the Federal Highway Administration are required to consult with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service to ensure that no undertaking, funding, permitting or authorizing actions are likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 is a Biological Opinion or an Incidental Take statement. Section 3 of Federal Endangered Species Act defines "take" as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted the California Endangered Species Act, California Fish and Wildlife Code, Section 2050, et seq. The California Endangered Species Act emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife is the agency responsible for implementing the California Endangered Species Act. Section 2081 of the Fish and Wildlife Code prohibits “take” of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Wildlife Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”

The California Endangered Species Act allows for take incidental to otherwise lawful development projects; for these actions, an incidental take permit is issued by the California Department of Fish and Wildlife. For species listed under both the Federal Endangered Species Act and California Endangered Species Act requiring a Biological Opinion under Section 7 of the Federal Endangered Species Act, the California Department of Fish and Wildlife may also authorize impacts to the California Endangered Species Act species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Wildlife Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and continental shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, continental shelf fishery resources, and fishery resources in special areas.

Affected Environment

A Natural Environment Study was completed in December 2014. The biological study area consisted of a 200-foot-wide buffer of the 2-mile-long segment of State Route 269, the Arroyo Pasajero Creek Bridge site, and a potential borrow site east of the highway. Easements, including a temporary detour road, were also included in the biological study area. A current U.S. Fish and Wildlife Service species list for the project is provided in Appendix E.

Study methods included a review of resource agency databases, inventories of special-status species, agency coordination, field studies, assessment of vegetation and habitat characteristics, and evaluation of impacts to identified resources. These methods were designed to meet both state and federal regulations, and are described in the Natural Environment Study completed for the proposed project.

The surrounding lands adjacent to the Arroyo Pasajero Creek were cultivated in the past, allowed to go fallow, and have since recovered to include saltbrush scrub and grassland vegetation types with a large component of invasive plant species.

California jewel-flower (Caulanthus californicus)

The California jewel-flower (*Caulanthus californicus*), a federal and state listed endangered species, is also in the California Native Plant Society inventory of rare and endangered plants. The California jewel-flower is an annual herb that is part of the mustard family (Brassicaceae). California jewel-flower are pouch-like at the base with white and purplish flowers and oval-shaped clasping leaves. They typically bloom from February through May.

San Joaquin woolly-threads (Monolopia congdonii)

The San Joaquin woolly-threads (*Monolopia congdonii*) is a federal listed endangered species and is also in the California Native Plant Society inventory of rare and endangered plants. The San Joaquin woolly-threads is an annual herb that is part of the sunflower family (Asteraceae). This species is found in sandy grasslands and alkali sink habitats. The San Joaquin woolly-threads is 2 to 12 inches long and loosely woolly. These plants have wavy, narrow, oblong leaves and yellow flower heads clustered at their branch tips. They typically bloom from February through May.

Although the San Joaquin woollythreads was not found during Department of Water Resources surveys from 1999 to 2003, the project site does contain suitable habitat for this species.

Blunt-nosed leopard lizard (Gambelia sila)

The blunt-nosed leopard lizard (*Gambelia sila*) is federal listed and state listed as endangered, and is a fully protected species. The blunt-nosed leopard lizard is a scarce resident of sparsely vegetated alkali and desert scrub habitats. Blunt-nosed leopard lizards are active during the day, hibernating in the winter months and active from March to June or July. The nearest recorded observations are 7.9 miles southwest of the project site and date from 1979. Within the region, there are no records of blunt-nosed leopard lizards recorded anywhere east of the Interstate 5 corridor.

Full protocol surveys for the blunt-nosed leopard lizard have been performed annually by Department of Water Resources biologists since 2000 and are currently ongoing. These surveys have been performed over various areas within the Westside Detention Basin property; large portions of the proposed project area, including the Arroyo Pasajero channel and areas both east and west of State Route 269, have been included. Blunt-nosed leopard lizards have not been seen during these surveys. The proposed borrow site is not considered suitable blunt-nosed leopard lizard habitat due to the high vegetation density.

Swainson's hawk (Buteo swainsoni)

The Swainson's hawk (*Buteo swainsoni*) is state listed as threatened and is protected by the Migratory Bird Treaty Act. Swainson's hawks have been observed nesting, soaring, and hunting within and near the Westside Detention Basin for several years. Department of Water Resources biologists recorded nesting Swainson's hawks in 2002 and each year from 2008 through 2012 within proximity to the project area. Swainson's hawks have consistently nested in cottonwood trees; nesting in tamarisks has not been observed.

While most of the nesting activity appears to take place along the California Aqueduct east of Huron (well outside of the biological study area), there is a nesting location that has been used frequently just west of State Route 269, next to the Arroyo Pasajero channel. This nesting site is potentially within 500 to 600 feet of the construction site for the new Arroyo Pasajero Creek Bridge.

Caltrans biologists performed nine Swainson's hawk and raptor surveys of the biological study area in 2013 and 2014. While these surveys did not observe any Swainson's hawk nesting within the biological study area, the species (both single hawks and pairs) was frequently observed flying around the area. Given these sightings, there is potential for Swainson's hawk to nest near or within the project area.

San Joaquin antelope squirrel (Amмосpermophilus nelsoni)

The San Joaquin antelope squirrel (*Amмосpermophilus nelsoni*), also known as the Nelson's antelope squirrel, is state listed as threatened. The closest recording for the antelope squirrel is about 1 mile south of the project, near Huron, but the sighting was in 1893. The Department of Water Resources did small mammal trapping surveys at the Westside Detention Basin from 1999 to 2003. No antelope squirrels were observed or caught during these surveys. None were observed during the general biological surveys performed by Caltrans biologists from 2012 to 2014.

Giant kangaroo rat (Dipodomys ingens)

The giant kangaroo rat (*Dipodomys ingens*), the largest kangaroo rat species in California, is federal and state listed as endangered. The closest recording of the giant kangaroo rat is 23.4 miles northwest of the project and dates from 1967. Department of Water Resources biologists did small mammal trapping surveys within various portions of the Westside Detention Basin from 1999 to 2003. No giant kangaroo rats were observed or caught during these surveys. No giant kangaroo rats or signs of occupancy have been observed during the general biological surveys performed by Caltrans biologists from 2012 to 2014.

Tipton kangaroo rat (Dipodomys nitratooides nitratooides)

The Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*) is one of three subspecies of the San Joaquin kangaroo rat (*D. nitratooides*). It is listed as federal and state endangered. The closest recording of the Tipton kangaroo rat is 16 miles due east of the project area and dates from 2008. Department of Water Resources biologists did small mammal trapping surveys in various portions of the Westside Detention Basin from 1999 to 2003. No Tipton kangaroo rats were observed or caught during these surveys. Only common deer mice, pocket mice, and Heerman's kangaroo rats have been located within the Westside Detention Basin. The presence of the Heerman's kangaroo rat makes it more unlikely that Tipton kangaroo rat would also occur there because the Heerman's kangaroo rat directly competes with the Tipton kangaroo rat. No Tipton kangaroo rats were observed within the biological study area during the general biological surveys performed by Caltrans biologists from 2012 to 2014.

Fresno kangaroo rat (Dipodomys nitratooides exilis)

The Fresno kangaroo rat (*Dipodomys nitratooides exilis*) is the second of three subspecies of the San Joaquin kangaroo rat (*Dipodomys nitratooides*) that has the potential to occur within the project area. It is listed as federal and state endangered. There have been no sightings of the Fresno kangaroo rat in Fresno County since 1992. The most recent sighting was at the Alkali Sink Ecological Reserve east of Mendota, almost 35 miles north of the project area. The closest recorded observation of the Fresno kangaroo rat was 11.6 miles northeast of the project area near the Lemoore Naval Air Station. The date of this sighting is not known, but it was before 1992.

Department of Water Resources biologists did small mammal trapping surveys in various portions of the Westside Detention Basin from 1999 to 2003. No Fresno kangaroo rats were observed or caught during these surveys. No Fresno kangaroo rats were observed within the biological study area during the general biological surveys performed by Caltrans biologists from 2012 to 2014. Given the absence of sightings of this species throughout Fresno County over the previous 22 years, it is highly unlikely to occur on or near the project site.

San Joaquin kit fox (Vulpes macrotis mutica)

The San Joaquin kit fox (*Vulpes macrotis mutica*) is federal listed as endangered and state listed as threatened. The San Joaquin kit fox is the smallest canid species in North America. 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. The Endangered Species Recovery Program classifies the habitat within the Westside Detention Basin as “sub-optimal” for San Joaquin kit fox, due mainly to the density of invasive vegetation such as Russian thistle (*Salsola tragus*). The area is also isolated from the nearest suitable San Joaquin kit fox habitat in the Pleasant Valley region, 6.6 miles to the southwest.

Department of Water Resources biologists performed San Joaquin kit fox spotlighting and camera station surveys throughout the Westside Detention Basin in 2001 and 2003. Canids observed during spotlighting included coyotes, feral dogs, red foxes, and one possible unconfirmed sighting of a San Joaquin kit fox. No photos of any San Joaquin kit fox were taken from any of the camera stations. Three burrows of the appropriate size for foxes were located within the biological study area by Caltrans biologists during the Phase II burrowing owl survey in 2014. None of the burrows had signs of recent occupancy, and the biologists were unable to determine whether kit foxes had dug the burrows or some other species (red foxes, coyotes) had done so.

Environmental Consequences

A Biological Assessment was prepared and a Section 7 informal consultation was initiated with the U.S. Fish and Wildlife Service for potential effects to federal listed species. A letter of concurrence was issued by the U.S. Fish and Wildlife Service on June 16, 2015 (see Appendix J). The Service concurred that the project will have no effect on the California jewel-flower and the Fresno kangaroo rat, and that it is reasonably likely that effects to individual San Joaquin woolly-threads, blunt-nosed leopard lizards, giant and Tipton kangaroo rats, and San Joaquin kit foxes will be discountable, and that effects

to habitat for the species will be insignificant and thus the project is not likely adversely affect these five species.

The following plant species were evaluated:

California jewel-flower (Caulanthus californicus)

The Natural Environment Study evaluated the presence of the endangered plant species California jewel-flower. This species is typically found in undisturbed habitat. The project site contains disturbed habitat. In its letter dated June 16, 2015 (see Appendix J), the U.S. Fish and Wildlife Service concurred with Caltrans that the project will have no effect on the California jewel-flower.

San Joaquin woolly-threads (Monolopia congdonii)

The Natural Environment Study evaluated the presence of the endangered plant species San Joaquin woolly-threads. Based on the available survey data, it was determined that the potential of this species occurring in the area is low. The U.S. Fish and Wildlife Service concurred that it is reasonably likely that effects to individual San Joaquin woolly-threads will be discountable, and that effects to habitat for the species will be insignificant and thus the project is not likely adversely affect this species.

The following animal species were evaluated:

Blunt-nosed leopard lizard

The project would affect 43.82 acres of habitat potentially suitable for the blunt-nosed leopard lizard; of these, 5.22 acres would be permanent impacts associated mostly with the widening of State Route 269 and installation of the new bridge and training dikes. The remaining 38.6 acres are temporary impacts, due mainly to the temporary detour road and installation of the training dikes. These areas would be restored after construction is complete. The species has not been located within the biological study area during multiple years of protocol survey efforts. No take of this species is anticipated with the implementation of the avoidance and minimizations measures, though potential habitat would be affected by construction of the proposed project. The U.S. Fish and Wildlife Service concurred that it is reasonably likely that effects to Blunt-nosed leopard lizards will be discountable, and that effects to habitat for the species will be insignificant and thus the project is not likely adversely affect this species.

Swainson's hawk

The project is not expected to have significant habitat impacts because no trees are planned to be removed. The project is expected to result in 0.04 acre of permanent and 0.74 acre of temporary impacts to cottonwood riparian habitat due to the construction of the training dikes. Construction activity would cause disturbance impacts to hunting areas along the State Route 269 corridor and potentially to nesting areas within 600 feet of State Route 269 and the bridge site. Disturbance may result from equipment noise, motion, vibrations, dust, and human presence. However, construction activities that would disturb small prey species (such as lizards and mice) could enhance hunting opportunities for the Swainson's hawk as the prey species may flee the area and become

exposed. The disruption and scattering of prey species allows the Swainson's hawk to forage in recently harvested or disked agricultural fields, often while disking and/or harvesting activities are occurring.

San Joaquin antelope squirrel

The project would affect 43.82 acres of potentially suitable habitat for the San Joaquin antelope squirrel; of these, 5.22 acres would be permanent impacts associated mainly with the widening of State Route 269 and the installation of the new bridge and training dikes. The remaining 38.6 acres are temporary impacts, due mainly to the temporary detour road and installation of the training dikes. These areas would be restored after construction is complete. However, no San Joaquin antelope squirrels have been observed during any survey from 1999 to present. With implementation of the avoidance and minimization measures, no impacts to the San Joaquin antelope squirrel are anticipated, though potential habitat would be affected by construction of the proposed project.

Giant kangaroo rat and Tipton kangaroo rat

The project is within the historical range for these species, but the giant kangaroo rat and Tipton kangaroo rat are not expected to occur in the area. The project would affect 43.82 acres of potentially suitable habitat; of these, 5.22 acres would be permanent impacts associated mostly with the widening of State Route 269 and the installation of the new bridge and training dikes. The remaining 38.6 acres are temporary impacts, due mainly to the temporary detour road and installation of the training dikes. These areas would be restored after construction is complete. With implementation of the avoidance and minimization measures, no direct impacts to these species are expected to occur because no sightings have been recorded since 1992 or closer than 11.6 miles to the project. The U.S. Fish and Wildlife Service concurred that it is reasonably likely that effects to Giant and Tipton kangaroo rats will be discountable, and that effects to habitat for the species will be insignificant and thus the project is not likely adversely affect this species.

*Fresno kangaroo rat (*Dipodomys nitratoides exilis*)*

The Fresno kangaroo rat (*Dipodomys nitratoides exilis*) is listed as federal and state endangered. Because this species has been determined to be extirpated in Fresno County, Caltrans determined that the project will have no effect on the species. In its letter dated June 16, 2015 (see Appendix J), the U.S. Department of Fish and Wildlife concurred with Caltrans that the project will have no effect on the Fresno kangaroo rat.

San Joaquin kit fox

Habitat within the study area contains suitable San Joaquin kit fox foraging habitat with an appropriate prey base and potential den sites. The project has the potential to affect up to 43.82 acres of sub-optimal San Joaquin kit fox habitat; of these acres, 5.22 acres are permanent impacts and 38.6 acres are temporary in that they would be restored to original grade and revegetated. Construction activity has the potential to disturb individual kit foxes due to the destruction of burrows and 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 potential for San Joaquin kit fox to be present on the project site is low. The U.S. Fish and Wildlife Service concurred that it is reasonably likely that effects to San Joaquin kit foxes will be discountable, and that effects to habitat for the species will be insignificant and thus the project is not likely adversely affect this species.

Avoidance, Minimization, and/or Mitigation Measures

There is not compensatory mitigation required for the project.

San Joaquin woolly-threads

Implementation of the following avoidance and minimization measures will reduce the potential for adverse effects to the San Joaquin woolly-threads:

- Caltrans will conduct preconstruction botanical surveys of the project footprint, plus an additional 100-foot area outside the footprint using the California Department of Fish and Wildlife's (CDFW) *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities*, dated November 24, 2009, or the most recent guidelines.
- If the San Joaquin woolly-threads is observed onsite, Caltrans will notify the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to discuss any additional conservation measures that should be implemented.

Blunt-nosed leopard lizard

Implementation of the following avoidance and minimization measures will reduce the potential for adverse effects to the blunt-nosed leopard lizard:

- Caltrans will conduct preconstruction surveys of the project footprint, plus an additional 200-foot area outside the footprint using the California Department of Fish and Wildlife's May 2004 *Approved Survey Methodology of the Blunt-nosed Leopard Lizard* in the year prior to the start of construction. The California Department of Water Resources also plans to conduct surveys for the species in 2015 and 2016. To avoid duplication of effort, Caltrans and the California Department of Water Resources' proposed survey areas will not overlap. The two agencies will coordinate and share data concerning these future surveys. If the species is found within the project area by either agency, Caltrans will contact the Service to discuss measures to avoid take of the blunt-nosed leopard lizard.
- A qualified biologist will be onsite during initial ground-disturbing activities.
- Caltrans will enforce low speed limits (maximum 10 miles per hour) within the project area, which will reduce the risk that the blunt-nosed leopard lizard may be run over by construction vehicles/equipment.

Swainson's hawk

With implementation of the following avoidance and minimization measures, no direct impacts to the Swainson's hawk are expected to occur:

- Protocol nesting surveys will be conducted during the nesting season prior to the start of construction to determine if any Swainson's hawks are nesting in proximity to the proposed project.
- Coordination and data-sharing with Department of Water Resources personnel regarding their Swainson's hawk survey efforts in 2015 and 2016 will be ongoing.
- If nesting Swainson's hawks are observed, the nest site will be designated an Environmentally Sensitive Area within a 600-foot radius around the nest until it has been determined by a qualified biologist that the young have fledged.
- A qualified biologist will monitor active nests during construction activities.
- A special provision for migratory birds will be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact area will be done outside of the nesting season (tree removal is not anticipated at this time).

San Joaquin antelope squirrel

With implementation of the following avoidance and minimization measures, no impacts to an individual San Joaquin antelope squirrel are expected to occur:

- Preconstruction surveys will be performed within 30 days prior to construction to determine if the species occurs in the project area. If occupied suitable habitat is observed during surveys, avoidance measures, such as Environmentally Sensitive Area fencing, will be implemented where feasible.
- A qualified biological monitor will be present at the construction site during initial ground-disturbing activities. A U.S. Fish and Wildlife Service-approved biologist will relocate San Joaquin antelope squirrels if necessary.

Giant kangaroo rat and Tipton kangaroo rat

Implementation of the following avoidance and minimization measures will reduce the potential for adverse effects to the giant kangaroo rat and Tipton kangaroo rat:

- Trapping surveys will be conducted no more than 30 days prior to construction. If occupied suitable habitat is observed during the surveys, Caltrans will discuss the implementation of avoidance measures with the U.S. Fish and Wildlife Service.
- A qualified biologist will be present onsite during initial ground-disturbing activities. If either of the two species is detected and requires removal from the project site, the biologist must hold a current Section 10(a)(1)(A) permit for the particular kangaroo rat species identified.

San Joaquin kit fox

Implementation of the following avoidance and minimization measures will reduce the potential for adverse effects to the San Joaquin kit fox:

- Preconstruction surveys will be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities. Surveys for the San Joaquin kit fox and its dens will be performed throughout the project footprint as well as within 200 feet of the footprint.
- A qualified biologist will conduct an environmental awareness training program for all construction personnel, covering the status of the San Joaquin kit fox, the importance of avoiding impacts to the species, and the penalties for not complying with minimization requirements. New construction personnel who are added to the project after the training is first conducted also will be required to take the training.
- A qualified biologist will be present onsite during initial ground-disturbing activities. To the extent possible, the biologist also will be available on an “on-call” basis when not present onsite.
- Disturbance to all San Joaquin kit fox dens will be avoided to the maximum extent possible.
 - Potential and atypical dens that are located at least 50 feet from construction will be protected with a 50-foot zone. Known dens that are located at least 100 feet from construction will be protected with a 100-foot zone. In instances where 50-foot or 100-foot exclusion zones cannot be maintained, potential and/or known dens will be monitored; once these dens are verified to be unoccupied, they will be blocked temporarily (via sandbagging or a one-way door) for the duration of the project.
 - If a natal/pupping den is discovered either within the project footprint or within 200 feet of the footprint, Caltrans will notify the U.S. Fish and Wildlife Service immediately.
- All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed daily from the project site to reduce the potential for attracting predator species.
- No pets or firearms will be allowed on the project site.
- The U.S. Fish and Wildlife Service *Standard Measures for Protection of the San Joaquin Kit Fox for Prior to or During Ground Disturbance, Construction and On-Going Operational Requirements* will also be implemented (Appendix H).

2.4.6 Invasive Species

Regulatory Setting

On February 3, 1999, President Bill Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” Federal Highway Administration guidance issued August 10, 1999 directs the use of the state’s invasive species list

maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act analysis for a proposed project.

Affected Environment

A Natural Environment Study was completed for the project in December 2014. The biological study area consisted of an approximate 2-mile-long segment along State Route 269, the Arroyo Pasajero Creek Bridge and a potential borrow site east of the highway. Easements, including a temporary detour road, were also included in the study area.

The surrounding lands next to the Arroyo Pasajero Creek were cultivated in the past, allowed to go fallow, and have since been recovered to include saltbrush scrub and grassland vegetation types with a large component of invasive plant species.

The following invasive plant species were identified within the biological study area:

- *Centaurea melitensis* – tocolote
- *Lepidium latifolium* – perennial peppergrass
- *Bassia hyssopifolia* – fivehook bassia
- *Salsola tragus* – Russian thistle
- *Convolvulus arvensis* – orchard bind-weed
- *Malvella leprosa* – alkali mallow
- *Arundo donax* – giant reed
- *Bromus madritensis ssp. rubens* – red brome
- *Sorghum halepense* – Johnson grass
- *Tamarix ramosissima* – tamarisk (salt-cedar)

Environmental Consequences

No species on the California list of invasive species are used by Caltrans for erosion control or landscaping. All equipment and materials would be inspected for the presence of invasive species.

Avoidance, Minimization, and/or Mitigation Measures

In compliance with the executive order on invasive species (Executive Order 13112) and guidance from the Federal Highway Administration, the landscaping and erosion control included in the project would not use species listed as invasive. In areas of particular sensitivity, extra precautions would be taken if invasive species are found in or next to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

To prevent the introduction and spread of invasive species, Caltrans has issued policy guidelines that provide a framework for addressing roadside vegetation management issues for construction activities and maintenance programs. The Caltrans invasive species policy guidelines, Standard Special Provisions, and best management practices

would minimize the potential that this project would introduce, transport, or spread invasive species to and/or from the project site.

2.5 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas emissions, particularly those generated from the production and use of fossil fuels. While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 has led to increased efforts devoted to greenhouse gas emissions reduction and climate change research and policy. These efforts are mainly concerned with the emissions of greenhouse gases generated by human activity including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of greenhouse gas emissions is electricity generation, followed by transportation. In California, however, transportation sources (including passenger cars, light-duty trucks, other trucks, buses, and motorcycles make up the largest source of greenhouse gas-emitting sources. The dominant greenhouse gas emitted is CO₂, mostly from fossil fuel combustion.

There are typically two terms used when discussing the impacts of climate change: "greenhouse gas mitigation" and "adaptation." "Greenhouse gas mitigation" is a term for reducing greenhouse gas emissions to reduce or "mitigate" the impacts of climate change. "Adaptation" refers to the effort of planning for and adapting to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels)¹.

There are four main strategies for reducing greenhouse gas emissions from transportation sources: 1) improving the transportation system and operational efficiencies, 2) reducing travel activity, 3) transitioning to lower greenhouse gas-emitting fuels, and 4) improving vehicle technologies/efficiency. To be most effective, all four strategies should be pursued cooperatively.²

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas emissions, particularly those generated from the production and use of fossil fuels.

¹ http://climatechange.transportation.org/ghg_mitigation/

² http://www.fhwa.dot.gov/environment/climate_change/mitigation/

Regulatory Setting

State

With passage of several pieces of legislation, including state senate and assembly bills and executive orders, California launched an innovative and proactive approach to dealing with greenhouse gas emissions and climate change.

Assembly Bill 1493 (AB 1493), Pavley, Vehicular Emissions: Greenhouse Gases, 2002: This bill requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck greenhouse gas emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year.

Executive Order S-3-05 (June 1, 2005): The goal of this order is to reduce California's greenhouse gas emissions to 1) year 2000 levels by 2010, 2) year 1990 levels by 2020, and 3) 80 percent below the year 1990 levels by 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32.

Assembly Bill 32 (AB 32), Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 sets the same overall greenhouse gas emissions reduction goals as outlined in Executive Order S-3-05, while further mandating that the Air Resources Board create a scoping plan and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.”

Executive Order S-20-06 (October 18, 2006): This order established the responsibilities and roles of the Secretary of the California Environmental Protection Agency (Cal/EPA) and state agencies with regard to climate change.

Executive Order S-01-07 (January 18, 2007): This order set forth the low carbon fuel standard for California. Under this order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Senate Bill 97 (SB 97) Chapter 185, 2007, Greenhouse Gas Emissions: This bill required the Governor's Office of Planning and Research to develop recommended amendments to the California Environmental Quality Act Guidelines for addressing greenhouse gas emissions. The amendments became effective on March 18, 2010.

Senate Bill 375 (SB 375), Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill required the California Air Resources Board (CARB) to set regional emissions reduction targets from passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a “Sustainable Communities Strategy” (SCS) that integrates transportation, land-use, and housing policies to plan for the achievement of the emissions target for its region.

Senate Bill 391 (SB 391) Chapter 585, 2009 California Transportation Plan: This bill requires the State's long-range transportation plan to meet California's climate change goals under AB 32.

Federal

Although climate change and greenhouse gas reduction are concerns at the federal level, currently no regulations or legislation has been enacted specifically addressing greenhouse gas emissions reductions and climate change at the project level. Neither the U.S. Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration has issued explicit guidance or methods to conduct project-level greenhouse gas analysis.³ The Federal Highway Administration supports the approach that climate change considerations should be integrated throughout the transportation decision-making process—from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will assist in decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project-level decision-making. Climate change considerations can be integrated into many planning factors, such as supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life.

The four strategies outlined by the Federal Highway Administration to lessen climate change impacts correlate with efforts that the State is undertaking to deal with transportation and climate change; these strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and a reduction in travel activity.

Climate change and its associated effects are also being addressed through various efforts at the federal level to improve fuel economy and energy efficiency, such as the “National Clean Car Program” and Executive Order 13514 - *Federal Leadership in Environmental, Energy and Economic Performance*.

Executive Order 13514 (October 5, 2009): This order is focused on reducing greenhouse gases internally in federal agency missions, programs and operations, but also directs federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

The U.S. EPA’s authority to regulate greenhouse gas emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that greenhouse gases meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the court’s ruling, the U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence, it found that six greenhouse gases constitute a threat to public health and welfare. So, it is the Supreme Court’s interpretation of the existing act and the EPA’s assessment of the scientific evidence that form the basis for EPA’s regulatory actions. The U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) issued the first of a

³ To date, no national standards have been established regarding mobile source greenhouse gases, nor has U.S. EPA established any ambient standards, criteria or thresholds for greenhouse gases resulting from mobile sources.

series of greenhouse gas emission standards for new cars and light-duty vehicles in April 2010.⁴

The U.S. EPA and the National Highway Traffic Safety Administration are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced greenhouse gas emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever greenhouse gas regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle greenhouse gas regulations.

The final combined standards that made up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards implemented by this program are expected to reduce greenhouse gas by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

On August 28, 2012, the U.S. EPA and National Highway Traffic Safety Administration issued a joint Final Rulemaking to extend the national program for fuel economy standards to model year 2017 through 2025 passenger vehicles. Over the lifetime of the model year 2017-2025 standards, this program is projected to save approximately four billion barrels of oil and two billion metric tons of greenhouse gas emissions.

The complementary U.S. EPA and National Highway Traffic Safety Administration standards that make up the Heavy-Duty National Program apply to combination tractors (semi-trucks), heavy-duty pickup trucks and vans, and vocational vehicles (including buses and refuse or utility trucks). Together, these standards will cut greenhouse gas emissions and domestic oil use significantly. This program responds to President Barack Obama's 2010 request to jointly establish greenhouse gas emissions and fuel efficiency standards for the medium- and heavy-duty highway vehicle sector. The agencies estimate that the combined standards will reduce CO₂ emissions by about 270 million metric tons and save about 530 million barrels of oil over the life of model year 2014 to 2018 heavy-duty vehicles.

Project Analysis

An individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of greenhouse gas.⁵ In assessing cumulative impacts, it must be determined if a project's

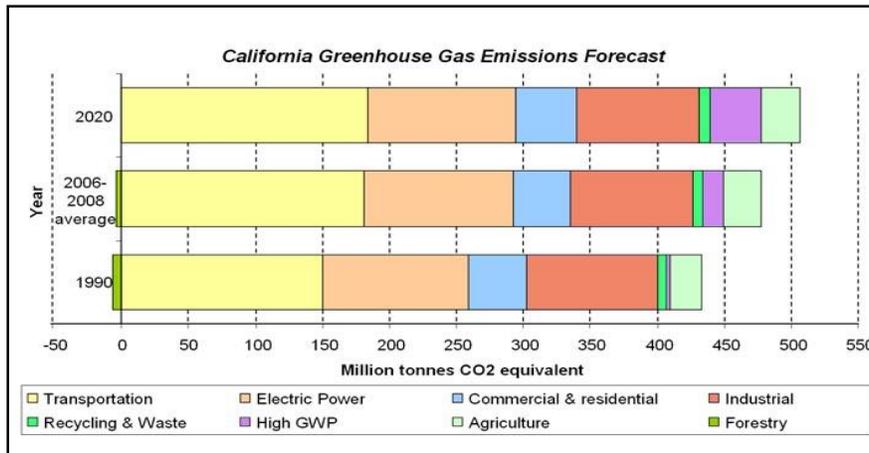
⁴ <http://www.c2es.org/federal/executive/epa/greenhouse-gas-regulation-faq>

⁵ This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the U.S. Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130). To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects to make this determination is a difficult, if not impossible, task.

The AB 32 Scoping Plan mandated by AB 32 includes the main strategies California will use to reduce greenhouse gas emissions. As part of its supporting documentation for the Draft Scoping Plan, the Air Resources Board released the greenhouse gas inventory for California (forecast last updated: October 28, 2010). See Figure 2-1. The forecast is an estimate of the emissions expected to occur in 2020 if none of the foreseeable measures included in the scoping plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the greenhouse gas inventory for 2006, 2007, and 2008.

Figure 2-1 California Greenhouse Gas Forecast



Source: <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

Caltrans and its parent agency, the Transportation Agency, have taken an active role in addressing greenhouse gas emission reduction and climate change. Recognizing that 98 percent of California’s greenhouse gas emissions are from the burning of fossil fuels and 40 percent of all human-made emissions are from transportation, Caltrans has created and is implementing the Climate Action Program that was published in December 2006.⁶

Construction Emissions

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction greenhouse gas emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due

⁶ Caltrans Climate Action Program is located at the following web address:
http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf

to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the greenhouse gas emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

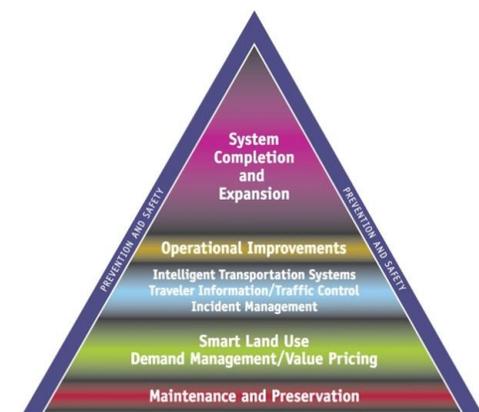
The proposed project is non-capacity enhancing and falls under the category of “culvert/drainage/storm water work.” An increase in greenhouse gas emissions during operation is not anticipated. The project could reduce greenhouse gas emissions during operation by eliminating the need to reroute or detour traffic due to flooding of State Route 269, reducing vehicle miles traveled.

CEQA Conclusion

While the project would result in a slight increase in greenhouse gas emissions during construction, it is anticipated that the project will not result in any increase in operational greenhouse gas emissions. While it is Caltrans’ determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and California Environmental Quality Act significance, it is too speculative to make a significance determination regarding the project’s direct impact and its contribution on the cumulative scale to climate change, Caltrans is firmly committed to implementing measures to help reduce greenhouse gas emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

Caltrans continues to be involved on the Governor’s Climate Action Team as the Air Resources Board works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from then-Governor Arnold Schwarzenegger’s Strategic Growth Plan for California. The plan targeted a significant decrease in traffic congestion below 2008 levels and a corresponding reduction in greenhouse gas emissions, while accommodating growth in population and the economy. The Strategic Growth Plan relies on a complete systems approach to attain CO₂ reduction goals: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements as shown in Figure 2-2: Mobility Pyramid.



Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high-density housing along transit corridors. Caltrans works closely with local jurisdictions on planning activities, but does not have local land use planning authority. It assists efforts to

Figure 2-2 Mobility Pyramid

improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, and light- and heavy-duty trucks. Caltrans is doing this by supporting ongoing research efforts at universities, supporting legislative efforts to increase fuel economy, and participating on the Climate Action Team. It is important to note, however, that control of fuel economy standards is held by the U.S. EPA and Air Resources Board.

Caltrans is also working toward enhancing the State's transportation planning process to respond to future challenges. Similar to requirements for regional transportation plans under Senate Bill 375 (Steinberg 2008), Senate Bill 391 (Liu 2009) requires the State's long-range transportation plan to meet California's climate change goals under AB 32.

The California Transportation Plan (CTP) is a statewide long-range transportation plan to meet our future mobility needs and reduce greenhouse gas emissions. The California Transportation Plan defines performance-based goals, policies, and strategies to achieve our collective vision for California's future statewide integrated multimodal transportation system.

The purpose of the California Transportation Plan is to provide a common policy framework that will guide transportation investments and decisions by all levels of government, the private sector, and other transportation stakeholders. Through this policy framework, the California Transportation Plan 2040 will identify the statewide transportation system needed to achieve maximum feasible greenhouse gas emission reductions while meeting the State's transportation needs.

Table 2.3 summarizes the departmental and statewide efforts that Caltrans is implementing to reduce greenhouse gas emissions. More detailed information about each strategy is included in the Climate Action Program at Caltrans (December 2006).

Table 2.3 Climate Change/CO₂ Reduction Strategies

Strategy	Program	Partnership		Method/Process	Estimated CO ₂ Savings Million Metric Tons (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Transportation System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	0.07	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, ARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	0.0045	0.0065 0.045 0.0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	0.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5 % limestone cement mix 25% fly ash cement mix > 50% fly ash/slag mix	1.2 0.36	4.2 3.6
Goods Movement	Office of Goods Movement	Cal EPA, ARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.18

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a department policy that will ensure coordinated efforts to incorporate climate change into departmental decisions and activities.

Caltrans Activities to Address Climate Change (April 2013)⁷ provides a comprehensive overview of activities undertaken by Caltrans statewide to reduce greenhouse gas emissions resulting from agency operations.

The following measures would also be included in the project to reduce greenhouse gas emissions and potential climate change impacts from the project:

1. Caltrans and the California Highway Patrol are working with regional agencies to implement Intelligent Transportation Systems (ITS) to help manage the efficiency of the existing highway system. Intelligent Transportation Systems commonly consist of electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.
2. According to Caltrans' Standard Specifications, the contractor must comply with all local Air Pollution Control District (APCD) rules, ordinances, and regulations for air quality restrictions. Construction measures to reduce greenhouse gas emissions include watering exposed surfaces for parking, staging areas, soil piles, graded areas and unpaved roads; limiting speeds on unpaved roads to 15 miles per hour; minimizing idling time of construction equipment when not in use by shutting off equipment or limiting idling time to 5 minutes; and maintaining equipment in accordance with manufacturers' specifications.
3. Climate Change/CO₂ Reduction Strategies are identified in Table 2.3.

Adaptation Strategies

“Adaptation strategies” refer to how Caltrans and others can plan for the effects of climate change on the State's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

⁷ http://www.dot.ca.gov/hq/tpp/offices/orip/climate_change/projects_and_studies.shtml

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the White House Council on Environmental Quality (CEQ), the Office of Science and Technology Policy (OSTP), and the National Oceanic and Atmospheric Administration (NOAA), released its interagency task force progress report on October 28, 2011⁸, outlining the federal government's progress in expanding and strengthening the nation's capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provides an update on actions in key areas of federal adaptation, including building resilience in local communities, safeguarding critical natural resources such as freshwater, and providing accessible climate information and tools to help decision-makers manage climate risks.

Climate change adaptation must involve the natural environment as well. Efforts are underway on a statewide level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

On November 14, 2008, then-Governor Arnold Schwarzenegger signed Executive Order S-13-08, which directed a number of state agencies to address California's vulnerability to sea level rise caused by climate change. This order set in motion several agencies and actions to address the concern of sea level rise.

In addition to addressing projected sea level rise, the California Natural Resources Agency (Resources Agency) was directed to coordinate with local, regional, state and federal public and private entities to develop the California Climate Adaptation Strategy (December 2009)⁹, which summarizes the best-known science on climate change impacts to California, assesses California's vulnerability to the identified impacts, and then outlines solutions that can be implemented within and across state agencies to promote resiliency.

The strategy outline is in direct response to Executive Order S-13-08 that specifically asked the Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events. Numerous other state agencies were involved in the creation of the Adaptation Strategy document, including the California Environmental Protection Agency; Business, Transportation and Housing; Health and Human Services; and the Department of Agriculture. The document is broken down into strategies for different sectors that include public health; biodiversity and habitat; ocean and coastal resources; water management; agriculture; forestry; and transportation and energy infrastructure. As data continues to be developed and collected, the State's adaptation strategy will be updated to reflect current findings.

⁸ <http://www.whitehouse.gov/administration/eop/ceq/initiatives/adaptation>

⁹ <http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.PDF>

The National Academy of Science was directed to prepare a Sea Level Rise Assessment Report¹⁰ to recommend how California should plan for future sea level rise. The report was released in June 2012 and included the following:

- Relative sea level rise projections for California, Oregon and Washington, taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge and land subsidence rates.
- Range of uncertainty in selected sea level rise projections.
- Synthesis of existing information on projected sea level rise impacts to state infrastructure (such as roads, public facilities and beaches), natural areas, and coastal and marine ecosystems.
- Discussion of future research needs regarding sea level rise.

In 2010, interim guidance was released by the Coastal Ocean Climate Action Team (CO-CAT) as well as Caltrans as a method to initiate action and discussion of potential risks to the State's infrastructure due to projected sea level rise. Subsequently, CO-CAT updated the Sea Level Rise guidance to include information presented in the National Academy's study.

All state agencies that are planning to construct projects in areas vulnerable to future sea level rise are directed to consider a range of sea level rise scenarios for the years 2050 and 2100 to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. Sea level rise estimates should also be used in conjunction with information on local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data.

All projects that have filed a Notice of Preparation (NOP) as of the date of Executive Order S-13-08, and/or are programmed for construction funding from 2008 through 2013, or are routine maintenance projects may, but are not required to, consider these planning guidelines. The proposed project is outside the coastal zone, and direct impacts to transportation facilities due to projected sea level rise are not expected.

Executive Order S-13-08 also directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level rise affecting safety, maintenance and operational improvements of the system, and economy of the state. The department continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

Currently, Caltrans is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change effects, Caltrans has not been able to determine what change, if any, may be made to its design standards for its transportation facilities.

¹⁰ *Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future* (2012) is available at http://www.nap.edu/catalog.php?record_id=13389.

Once statewide planning scenarios become available, Caltrans will be able review its current design standards to determine what changes, if any, may be needed to protect the transportation system from sea level rise.

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is an active participant in the efforts being conducted in response to Executive Order S-13-08 and is mobilizing to be able to respond to the National Academy of Science Sea Level Rise Assessment Report.

Chapter 3 **Comments and Coordination**

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures, and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods that include, but is not limited to, project development team meetings and interagency coordination meetings.

This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

Agency Coordination

The following agency coordination has occurred:

Karen Dulik, Environmental Program Manager, South Central Region of California
Department of Water Resources

- February 6, 2014: Caltrans provided Ms. Dulik a memorandum describing the required Extended Phase I geoarcheological study onsite, consisting of the excavation by backhoe of 20 trenches approximately 10 feet long by 3 feet wide and up to 10 feet deep to investigate the potential cultural resources in the project area.

Christa Collin, Department of Water Resources Biologist

- March 10, 2014: Phone message responding to a query regarding the coordination of the Department of Water Resources and Caltrans' blunt-nosed leopard lizard surveys.
- July 24, 2014: Email responding to further questions regarding the Department of Water Resources' plans for biological surveys in and near the project area in 2015 and 2016.

Thomas Leeman, U.S. Fish and Wildlife Service Chief, San Joaquin Valley Division

- June 6, 2014: Mr. Thomas Leeman issued a Letter of Concurrence (LOC) in response to informal consultation regarding the need for excavation of test pits on the project site as required to perform an Extended Phase 1/geoarcheological survey.
- June 16, 2015: Mr. Thomas Leeman issued a Letter of Concurrence as part of the Section 7 informal consultation process.

Jen Schofield, U.S. Fish and Wildlife Service Biologist, Sacramento Office (Caltrans Liaison)

- July 23, 2014: Email stating concurrence with Caltrans' proposal to coordinate biological survey efforts with Department of Water Resources biologists during

future field seasons within the project area. Jen Schofield, United States Fish and Wildlife Service Biologist, San Joaquin Valley Division (Caltrans Liaison)

Laura Peterson-Diaz, California Department of Fish and Wildlife Environmental Scientist, Fresno Office (Caltrans Liaison)

- Spring 2014: Ms. Peterson-Diaz informed Caltrans by phone that a 1602 permit would not be required for the Extended Phase I/geoarcheological surveys if no pits were located within the bed, bank, or berm of the Arroyo Pasajero channel.
- March 26, 2014: Ms. Peterson-Diaz issued a Verification Request Form (VRF) as part of the programmatic maintenance 1602 Agreement with Caltrans to permit hand auguring of soil test pits required to test for naturally occurring asbestos on the project site.
- July 23, 2014: Email stating concurrence with Caltrans' proposal to coordinate biological survey efforts with Department of Water Resources biologists during future field seasons within the project area.

Coordination with Native American Groups

In October 2012, a Sacred Lands Inventory Search was submitted to the Native American Heritage Commission requesting that the commission conduct a search of its files for any resources not previously identified during the archaeological records search conducted at the Southern San Joaquin Valley Information Center. The Native American Heritage Commission provided a list of potential Native American contacts.

Initial consultation was conducted in June 2013 with letters being sent to the tribes identified by the Native American Heritage Commission. Eleven tribes or tribal contacts were sent letters indicating that Caltrans was conducting environmental studies that would include ground-disturbing activities associated with Extended Phase I/ geoarchaeological investigations.

In accordance with 36 Code of Federal Regulations Part 800.2 (c)(1-4), the tribes were requested to comment regarding resources that may be affected by the proposed project. The letters were sent to various Yokuts and Mono tribes associated with Fresno County and the San Joaquin Valley or surrounding foothills, and included the project description, the available maps, and attachments.

Records on file indicated that Caltrans had established, in consultation with Santa Rosa Rancheria, that the project area was culturally sensitive for buried deposits (Nissen 2003). In response to the current request for comments, Santa Rosa Rancheria again responded to Caltrans confirming its concerns for the project. Santa Rosa Rancheria cultural resources staff initially asked to participate in the archaeological field surveys, but Caltrans arranged for them to attend a field visit separate from the survey. The field review was conducted on or around July 29, 2013. Caltrans was able to discuss the available mapping and project boundaries, including the proposed borrow site located west of the State Route 269. Subsequent emails and phone calls between Caltrans and the

Santa Rosa Rancheria staff were exchanged to discuss the project schedule, the maps and the proposed testing and their intent to monitor the project as previously arranged.

The Santa Rosa Rancheria staff requested to be involved with and were included as participants in the Extended Phase I/geoarchaeological investigation. Consultation with the Santa Rosa Rancheria Tachi Yokuts tribe is ongoing.

Coordination with the Public

The public Notice of Intent to adopt a Mitigated Negative Declaration for the project was published in the *Hanford Sentinel* newspaper on Tuesday, March 3, 2015. The public review period started March 3, 2015 ended April 3, 2015. An opportunity for a public hearing was provided but no one requested a hearing. The document was made available for public review at the Caltrans District 6 office in Fresno and the Fresno County Central Branch and the Huron Branch libraries. It was also available on the Caltrans District 6 website. During this 30-day review period, Caltrans received comments from two members of the public and three agencies. The public comments were from two adjacent property owners regarding potential impacts to a water well they share to irrigate orchards; they also commented about continued access to their properties. Agency comments were in regard to the Williamson Act from the Department of Conservation, Flood Zone designation from the Department of Water Resources, and compliance with CEQA from the State Clearinghouse. The comments and Caltrans responses to the comments are provided in Appendix I “Comments and Responses.”

In May 2015, Caltrans Design and Environmental staff met with two property owners who own orchards next to the project. The owners submitted comments during the circulation period for the draft environmental document expressing concern about the impact on their agricultural operations. Their concerns were based on potential impacts to a water well and related irrigation system, onsite farm roads, and direct access to the properties from State Route 269. After reviewing the property owners’ comments and meeting with them, Caltrans staff agreed to modify the project throughout the design phase to avoid or minimize impacts to these properties. Caltrans Design staff will continue to coordinate with the property owners.

In June 2015, Caltrans received an inquiry from the Central California Environmental Justice Network regarding the status of the environmental document and whether a Dust Mitigation Plan was approved by the San Joaquin Valley Unified Air Pollution Control District. Caltrans indicated that the final environmental document anticipated approval in August 2015 and the proposed level of the document would be a Mitigated Negative Declaration (CEQA) with a Finding of No Significant Impact (NEPA). Caltrans explained that the contractor will be responsible for submitting a Dust Control Plan to the Air District prior to start of construction. If the project disturbs more than 5 acres of land or the project requires more than 2,500 cubic yards of dirt removal for at least 3 days, Caltrans will include a Non-Standard Special Provisions in the bid package which tells the contractor he or she will need to submit a dust plan to the Air District. If the project does not meet this criteria, a dust plan is not required, though basic measures and best management practices must be used during construction, which is planned to begin in

2017. The final environmental document will be sent to the Central California Environmental Justice Network.

Chapter 4 **List of Preparers**

This document was prepared by the following Caltrans Central Region staff:

Neil Bretz, Senior Transportation Engineer, P.E. B.S., Civil Engineering, California State University, Fresno; 26 years of experience in transportation with Caltrans, including 16 years in Project Management. Contribution: Project Manager.

Diego Caldera, Civil Engineer, P.E. B.S., Civil Engineering, California State University, Fresno; 10 years of Hydraulics/Hydrology experience. Contribution: Hydraulics Report.

Phil Chick, Research Analyst II (GIS). B.A., Anthropology, California State University, Fresno; 14 years of environmental and GIS experience. Contribution: Prepared graphics for the environmental document.

Ronald Cummings, Principle Scientist, Parsons Corporation. Staff Augmentation Biologist for Caltrans. B.S., General Biology, Oregon State University, Corvallis, Oregon; 25 years of wildlife management and environmental assessment experience. Contribution: Completed the Natural Environment Study and Biological Assessment.

Rajeev Dwivedi, Associate Engineering Geologist. Ph.D., Environmental Engineering, Oklahoma State University, Stillwater; more than 20 years of environmental technical studies experience. Contribution: Completed the Water Quality Assessment Report, Noise Compliance, and Air Quality Compliance Memos.

Manny T. Marcos, Transportation Engineer, P.E. B.S., Civil Engineering, California State University, Fresno; 16 years of Design and 1 year of Construction experience with Caltrans. Contribution: Project Design Engineer.

Mandy Marine, Associate Environmental Planner/Native American Coordinator, Archaeologist. B.A., Anthropology, California State University, Fresno; more than 20 years of California archaeology experience. Contribution: Coordinated Native American outreach for the project.

Michelle Miller, Environmental Planner (Archaeology). B.A., Anthropology, California State University, Fresno; 7 years of environmental planning experience. Contribution: Cultural Coordinator. Completed the Historical Property Survey Report/Archeological Survey Report for the project.

Michelle Ray, Senior Environmental Planner. B.S., Environmental Toxicology and Biology, University of California, Riverside; 9 years of planning experience and 3 years biology experience. Contribution: Branch Chief of the Sierra Pacific Environmental Analysis Branch.

Jane Sellers, Research Writer. B.A., Journalism—News-Editorial Sequence, California State University, Fresno; more than 25 years of writing/editing, media, corporate communications, Request for Proposal, and public relations experience. Contribution: Reviewed and edited the final environmental document.

Jeff Sorensen, Associate Environmental Planner (Generalist). B.A., Business Administration, California State University, Fresno; 34 years of land use, transportation and environmental planning experience. Contribution: Completed the Initial Study/Environmental Assessment and coordinated the environmental process for the project.

Lea Spann, Associate Environmental Planner. B.A., Environmental Studies, University of California, Santa Barbara; 21 years of hazardous waste/materials experience and 5 years of environmental planning experience. Contribution: Completed the Initial Site Assessment/Hazardous Waste Compliance memo and the Preliminary Site Investigation Results memo for the project.

Richard C. Stewart, Engineering Geologist, P.G. B.S., Geology, California State University, Fresno; more than 25 years of hazardous waste, water quality and geology experience; 13 years of paleontology experience. Contribution: Prepared the paleontology memo for the project.

Appendix A California Environmental Quality Act 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 indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is 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
I. AESTHETICS: 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 checked="" type="checkbox"/>	<input 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"/>
II. AGRICULTURE AND FOREST RESOURCES: 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 Dept. of Conservation as an optional model to use in assessing impacts on 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 and the 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 checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Appendix A • California Environmental Quality Act Checklist

	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"/>

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

Appendix A • California Environmental Quality Act Checklist

	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?	<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:				
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"/>

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	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?

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 GHG 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. These measures are outlined in the body of the environmental document.

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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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	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 checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<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"/>

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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input 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"/>

Appendix A • California Environmental Quality Act Checklist

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

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

Appendix A • California Environmental Quality Act Checklist

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

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"/>

Appendix B Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

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March 2013

NON-DISCRIMINATION POLICY STATEMENT

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

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone: (916) 324-0449, TTY: 711, or via Fax: (916) 324-1949.

A handwritten signature in blue ink, appearing to read "Malcolm Dougherty".

MALCOLM DOUGHERTY
Director

"Caltrans improves mobility across California"

Appendix C Farmland Conservation Impact Rating

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request 9/5/14	4. Sheet 1 of 1	
1. Name of Project Arroyo Pasajaro Creek bridge project		5. Federal Agency Involved FHWA		
2. Type of Project Transportation		6. County and State Fresno, CA		
PART II (To be completed by NRCS)		1. Date Request Received by NRCS 9-19-14	2. Person Completing Form Jose Bermudez	
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 Average Farm Size 1,153,812 285	
5. Major Crop(s) Grapes-Tomatoes-Almonds		6. Farmable Land in Government Jurisdiction Acres: 1,250,984 32%	7. Amount of Farmland As Defined in FPPA Acres: 597,055 15.6%	
8. Name Of Land Evaluation System Used California - Storie system		9. Name of Local Site Assessment System None	10. Date Land Evaluation Returned by NRCS 9-23-14	

	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
PART III (To be completed by Federal Agency)				
A. Total Acres To Be Converted Directly	23.22			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0			
C. Total Acres In Corridor	23.22			
PART IV (To be completed by NRCS) Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	23.22			
B. Total Acres Statewide And Local Important Farmland	0			
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				
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)	85			
PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))	Maximum Points			
1. Area In Nonurban Use	15	15		
2. Perimeter in Nonurban Use	10	10		
3. Percent Of Corridor Being Farmed	20	0		
4. Protection Provided By State And Local Government	20	20		
5. Size of Present Farm Unit Compared To Average	10	0		
6. Creation Of Nonfarmable Farmland	25	0		
7. Availability Of Farm Support Services	5	5		
8. On-Farm Investments	20	10		
9. Effects Of Conversion On Farm Support Services	25	0		
10. Compatibility With Existing Agricultural Use	10	0		
TOTAL CORRIDOR ASSESSMENT POINTS	160	60	0	0
PART VII (To be completed by Federal Agency)				
Relative Value Of Farmland (From Part V)	100	85	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)	160	60	0	0
TOTAL POINTS (Total of above 2 lines)	260	145	0	0

1. Corridor Selected: Build Alt.	2. Total Acres of Farmlands to be Converted by Project: 23.22	3. Date Of Selection: 9/30/14	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
5. Reason For Selection: THE BUILD ALTERNATIVE IS THE ONLY ALTERNATIVE THAT MEETS THE PURPOSE & NEED.			

Signature of Person Completing this Part: Jeff Johnson DATE: 9/30/14

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

Appendix D Species Survey Data within Biological Study Area

A) PLANT LIST (Based on DWR Botanical Survey Data):

Scientific Name	Common Name	Form	Status/Notes
AMARANTHACEAE			
<i>Amaranthus blitoides</i>	prostrate pigweed	herb	Native
<i>Amaranthus retroflexus</i>	pigweed	herb	Introduced
ASCLEPIADACEAE			
<i>Asclepias fascicularis</i>	whorled or narrow-leaved milkweed	perennial herb	Native
ASTERACEAE			
<i>Achyrachaena mollis</i>	blow-wives	herb	Native
<i>Ambrosia psilostachya</i>	western ragweed	herb	Native
<i>Anthemis cotula</i>	dog-fennel, mayweed	herb	Introduced
<i>Artemisia californica</i>	California sage	shrub	Native
<i>Artemisia douglasiana</i>	mugwort	herb	Native
<i>Baccharis pilularis</i>	chaparral broom, coyote brush	shrub	Native
<i>Baccharis salicifolia</i>	mulefat	shrub	Native
<i>Centaurea melitensis</i>	tocolote	herb	Noxious weed CalEPPC List B
<i>Chamomilla suaveolens</i>	pineapple weed or chamomile	herb	Introduced
<i>Conyza canadensis</i>	horseweed	herb	Native
<i>Filago gallica</i>	herba impia	herb	Native
<i>Gnaphalium luteo-album</i>	pearly everlasting	herb	Native
<i>Gutierrezia californica</i>	California matchweed	shrub	Native
<i>Helianthus annuus</i>	sunflower	herb	Native
<i>Heterotheca grandiflora</i>	telegraph weed	herb	Native
<i>Isocoma acradenia</i>	goldenbush	shrub	Native
<i>Lactuca serriola</i>	prickly lettuce	herb	Introduced
<i>Lasthenia californica</i>	California goldfields	herb	Native
<i>Silybum marianum</i>	blessed milk thistle	herb	Introduced
<i>Sonchus asper</i>	prickly sow thistle	herb	Introduced
<i>Sonchus oleraceus</i>	common sow thistle	herb	Introduced
<i>Xanthium strumarium</i>	common cocklebur	herb	Native
BORAGINACEAE			
<i>Amsinckia menziesii</i> ssp. <i>intermedia</i>	farmer's fireweed	herb	Native
<i>Amsinckia menziesii</i> ssp. <i>menziesii</i>	farmer's fireweed	herb	Native
<i>Heliotropium curassavicum</i>	heliotrope	herb	Native
<i>Pectocarya penicillata</i>	winged pectocarya	prostrate herb	Introduced
BRASSICACEAE			
<i>Brassica nigra</i>	black mustard	herb	Introduced
<i>Capsella bursa-pastoris</i>	shepherd's purse	herb	Introduced
<i>Hirschfeldia incana</i>	field mustard	herb	Introduced

Appendix D • Species Survey Data within Biological Study Area

<i>Lepidium latifolium</i>	perennial peppergrass	herb	Noxious weed CalEPPC A-1/CDFA B
<i>Sinapsis arvensis</i>	Charlock	herb	Introduced
<i>Sisymbrium irio</i>	London rocket	herb	Introduced
<i>Sisymbrium orientale</i>	Oriental sisymbrium	herb	Introduced
CARYOPHYLLACEAE			
<i>Spergularia macrotheca</i> var. <i>leucantha</i>	large-flowered sand-spurrey	herb	Native
<i>Stellaria media</i>	common chickweed	herb	Introduced
CHENOPODIACEAE			
<i>Atriplex lentiformis</i>	quailbush	shrub	Native
<i>Atriplex polycarpa</i>	valley saltbush	shrub	Native
<i>Bassia hyssopifolia</i>	fivehook bassia	herb	Noxious weed CalEPPC List B
<i>Chenopodium album</i>	lamb's quarters	herb	Introduced
<i>Chenopodium multifidum</i>	goosefoot	shrub	Introduced
<i>Chenopodium murale</i>	nettleleaf goosefoot	herb	Introduced
<i>Monolepis nuttalliana</i>	poverty weed	herb	Native
<i>Salsola tragus</i>	Russian thistle	herb	Noxious weed CDFA List C
CONVOLVULACEAE			
<i>Convolvulus arvensis</i>	orchard bind-weed	herb	Noxious weed CDFA List C
<i>Cressa truxillensis</i>	alkali weed	herb	Native
CRASSULACEAE			
<i>Crassula connata</i>	pygmy-weed	herb	Native
CUCURBITACEAE			
<i>Marah fabaceus</i>	man-root, wild cucumber	perennial vine	Native
CUSCUTACEAE			
<i>Cuscuta</i> sp.	dodder	parasitic herb	Native
CYPERACEAE			
<i>Eleocharis macrostachya</i>	common spikerush	aq. herb	Native
EUPHORBIACEAE			
<i>Chamaesyce maculata</i>	prostrate spurge	herb	Introduced
<i>Eremocarpus setigerus</i>	doveweed, turkey mullein	herb	Native
FABACEAE			
<i>Astragalus oxyphysus</i>	Diablo locoweed	herb	Introduced
<i>Lotus purshianus</i>	Spanish clover	herb	Native
<i>Lotus wrangelianus</i>	Chile Hosackia	herb	Native
<i>Lupinus succulentus</i>	arroyo lupine	herb	Native
<i>Medicago polymorpha</i>	California burclover	herb	Introduced
<i>Medicago sativa</i>	alfalfa	herb	Introduced
<i>Melilotus alba</i>	white sweetclover	herb	Introduced
<i>Melilotus indica</i>	sourclover	herb	Introduced
<i>Trifolium microcephalum</i>	maiden clover	herb	Native
<i>Vicia</i> sp.	vetch	herb	Introduced
GERANIACEAE			
<i>Erodium cicutarium</i>	red-stemmed filaree	herb	Introduced
HIPPOCASTANACEAE			
<i>Aesculus californica</i>	buckeye	tree	Native
LAMIACEAE			
<i>Marrubium vulgare</i>	white horehound	herb	Introduced

Appendix D • Species Survey Data within Biological Study Area

<i>Salvia columbariae</i>	chia	herb	Native
MALVACEAE			
<i>Malva parviflora</i>	cheeseweed, little mallow	herb	Introduced
<i>Malvella leprosa</i>	alkali mallow	herb	Noxious weed CDFA C/Native
ONOGRACEAE			
<i>Epilobium brachycarpum</i>	willow herb	herb	Native
<i>Oenothera elata</i>	Hooker's evening-primrose	herb	Native
POACEAE			
<i>Arundo donax</i>	giant reed	perennial	Noxious weed CalEPPC A-1
<i>Avena fatua</i>	wild oat	herb	Introduced
<i>Bromus diandrus</i>	ripgut brome	herb	Introduced
<i>Bromus hordeaceus</i>	soft chess	herb	Introduced
<i>Bromus madritensis ssp. rubens</i>	red brome	herb	Noxious weed CalEPPC list A-2
<i>Hordeum marinum ssp. gussoneanum</i>	Mediterranean barley	herb	Introduced
<i>Hordeum murinum ssp. glaucum</i>	foxtail barley	herb	Introduced
<i>Phalaris minor</i>	Mediterranean canarygrass	herb	Introduced
<i>Polypogon monspeliensis</i>	annual beardgrass	herb	Introduced
<i>Schismus barbata</i>	Mediterranean grass	herb	Native
<i>Sorghum halepense</i>	Johnson grass	herb	Noxious weed CDFA List C
<i>Vulpia myuros var myuros</i>	rat-tail fescue	herb	Introduced
POLYGONACEAE			
<i>Rumex crispus</i>	curly dock	herb	Introduced
SALICACEAE			
<i>Populus fremontii</i>	Fremont cottonwood	tree	Native
<i>Salix exigua</i>	sandbar willow	shrub/tree	Native
<i>Salix gooddingii</i>	Goodding's willow	tree	Native
SCROPHULARIACEAE			
<i>Mimulus guttatus</i>	common large monkey-flower	herb	Native
<i>Verbascum thapsus</i>	common mullein	herb	Introduced
SOLANACEAE			
<i>Datura wrightii</i>	tolguacha, Jimson weed	herb	Native
<i>Nicotiana glauca</i>	tree tobacco	shrub/tree	Introduced
TAMARICACEAE			
<i>Tamarix aphylla</i>	athel	tree	Introduced
<i>Tamarix ramosissima</i>	tamarisk, salt-cedar	shrub or tree	Noxious CalEPPC List A-1
TYPHACEAE			
<i>Typha latifolia</i>	common cat-tail	aq. herb	Native
VERBENACEAE			
<i>Verbena litoralis</i>	shore vervain	herb	Introduced
ZYGOPHYLLACEAE			
<i>Tribulus terrestris</i>	puncture vine	herb	Introduced

B) ANIMAL LIST (Combined data from DWR and Caltrans Surveys)

Scientific Name	Common Name	Special Status ⁽¹⁾
AMPHIBIANS		
<i>Bufo boreas</i>	Western toad	
<i>Spea hammondi</i>	Spadefoot toad	CSC
REPTILES		
<i>Pituophis melanoleucus</i>	Gopher snake	
<i>Masticophis flagellum ruddocki</i>	San Joaquin whipsnake	CSC
<i>Lampropeltis getulus</i>	Common kingsnake	
<i>Lampropeltis getulus californiae</i>	California kingsnake	
<i>Cnemidophorus tigris</i>	Western whiptail	
<i>Sceloporus magister</i>	Desert spiny lizard	
<i>Sceloporus occidentalis</i>	Western fence lizard	
<i>Uta stansburiana</i>	Common side-blotched lizard	
BIRDS		
<i>Cathartes aura</i>	Turkey vulture	
<i>Circus cyaneus</i>	Northern harrier	
<i>Buteo jamaicensis</i>	Red-tailed hawk	
<i>Buteo swainsoni</i>	Swainson's hawk	CSC
<i>Falco sparverius</i>	American kestrel	
<i>Geococcyx californianus</i>	Greater roadrunner	
<i>Bubo virginianus</i>	Great horned owl	
<i>Tyto alba</i>	Barn owl	
<i>Athene cunicularia</i>	Burrowing owl	CSC
<i>Charadrius vociferus</i>	Killdeer	
<i>Callipepla californica</i>	California quail	
<i>Zenaida macroura</i>	Mourning dove	
<i>Columba livia</i>	Rock dove	
<i>Corvus corax</i>	Common raven	
<i>Corvus brachyrhynchos</i>	American crow	
<i>Petrochelidon pyrrhonota</i>	Cliff swallows	
<i>Hirundo rustica</i>	Barn swallow	
<i>Molothrus ater</i>	Brown-headed cowbird	
<i>Agelaius phoeniceus</i>	Red-winged blackbird	
<i>Euphagus cyanocephalus</i>	Brewer's blackbird	
<i>Sturnella neglecta</i>	Western meadowlark	
<i>Myiarchus cinerascens</i>	Ash-throated flycatcher	
<i>Lanius ludovicianus</i>	Loggerhead shrike	CSC
<i>Mimus polyglottos</i>	Northern mockingbird	
<i>Piranga ludoviciana</i>	Western tanager	
<i>Dendroica coronata</i>	Yellow-rumped warbler	
<i>Passer domesticus</i>	House sparrow	

Appendix D • Species Survey Data within Biological Study Area

<i>Zonotrichia leucophrys</i>	White-crowned sparrow	
<i>Sturnus vulgaris</i>	European starling	
<i>Archilochus alexandri</i>	Black-chinned hummingbird	
<i>Thryomanes bewickii</i>	Bewick's wren	
<i>Turdus migratorius</i>	American robin	
<i>Guiraca caerulea</i>	Blue grosebeak	
<i>Tyrannus verticalis</i>	Western kingbird	
<i>Icterus bullockii</i>	Bullock's oriole	
<i>Cardulis lawrencei</i>	Lawrence's goldfinch	
<i>Carpodacus mexicanus</i>	House finch	
MAMMALS		
<i>Felis catus</i>	Feral cat	
<i>Lynx rufus</i>	bobcat	
<i>Canis familiaris</i>	Feral dog	
<i>Canis latrans</i>	Coyote	
<i>Vulpes vulpes</i>	Red fox	
Order: <i>Chiroptera</i>	Unknown bat species	
<i>Thomomys bottae</i>	Botta's pocket gopher	
<i>Mus musculus</i>	House mouse	
<i>Peromyscus maniculatus</i>	Deer mouse	
<i>Chaetodipus californicus</i>	California pocket mouse	
<i>Dipodomys heermanni</i>	Heerman's kangaroo rat	
<i>Lepus californicus</i>	Black-tailed jackrabbit	
<i>Sylvilagus auduboni</i>	Desert cottontail	
<i>Procyon lotor</i>	Raccoon (tracks)	
<i>Otospermophilus beecheyi</i>	California ground squirrel	

Appendix E U.S. Fish and Wildlife Service Species List, CNPS Species List and CNDDDB Query



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
FEDERAL BUILDING, 2800 COTTAGE WAY, ROOM W-2605
SACRAMENTO, CA 95825
PHONE: (916)414-6600 FAX: (916)414-6713

Consultation Code: 08ESMF00-2015-SLI-0909

July 21, 2015

Event Code: 08ESMF00-2015-E-02829

Project Name: 06-39460 State Route 269 Bridge Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2)

of the Act and its implementing regulations (50 CFR 402 *et seq.*). Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/contow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

The table below outlines lead FWS field offices by county and land ownership/project type. Please refer to this table when you are ready to coordinate (including requests for section 7 consultation) with the field office corresponding to your project, and send any documentation regarding your project to that corresponding office. Therefore, the lead FWS field office may not be the office listed above in the letterhead. Please visit our office's website (<http://www.fws.gov/sacramento>) to view a map of office jurisdictions.

Lead FWS offices by County and Ownership/Program

County	Ownership/Program	Species	Office Lead*
Alameda	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Alameda	All ownerships but tidal/estuarine	All	SFWO
Alpine	Humboldt Toiyabe National Forest	All	RFWO
Alpine	Lake Tahoe Basin Management Unit	All	RFWO
Alpine	Stanislaus National Forest	All	SFWO
Alpine	El Dorado National Forest	All	SFWO
Colusa	Mendocino National Forest	All	AFWO
Colusa	Other	All	By jurisdiction (see map)
Contra Costa	Legal Delta (Excluding ECCHCP)	All	BDFWO
Contra Costa	Antioch Dunes NWR	All	BDFWO
Contra Costa	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Contra Costa	All ownerships but tidal/estuarine	All	SFWO

El Dorado	El Dorado National Forest	All	SFWO
El Dorado	LakeTahoe Basin Management Unit		RFWO
Glenn	Mendocino National Forest	All	AFWO
Glenn	Other	All	By jurisdiction (see map)
Lake	Mendocino National Forest	All	AFWO
Lake	Other	All	By jurisdiction (see map)
Lassen	Modoc National Forest	All	KFWO
Lassen	Lassen National Forest	All	SFWO
Lassen	Toiyabe National Forest	All	RFWO
Lassen	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Lassen	BLM Alturas Resource Area	All	KFWO
Lassen	Lassen Volcanic National Park	All (includes Eagle Lake trout on all ownerships)	SFWO
Lassen	All other ownerships	All	By jurisdiction (see map)

Marin	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Marin	All ownerships but tidal/estuarine	All	SFWO
Mendocino	Russian River watershed	All	SFWO
Mendocino	All except Russian River watershed	All	AFWO
Napa	All ownerships but tidal/estuarine	All	SFWO
Napa	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Nevada	Humboldt Toiyabe National Forest	All	RFWO
Nevada	All other ownerships	All	By jurisdiction (See map)
Placer	Lake Tahoe Basin Management Unit	All	RFWO
Placer	All other ownerships	All	SFWO
Sacramento	Legal Delta	Delta Smelt	BDFWO
Sacramento	Other	All	By jurisdiction (see map)
San Francisco	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO

San Francisco	All ownerships but tidal/estuarine	All	SFWO
San Mateo	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Mateo	All ownerships but tidal/estuarine	All	SFWO
San Joaquin	Legal Delta excluding San Joaquin HCP	All	BDFWO
San Joaquin	Other	All	SFWO
Santa Clara	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
Santa Clara	All ownerships but tidal/estuarine	All	SFWO
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Shasta	Hat Creek Ranger District	All	SFWO
Shasta	Bureau of Reclamation (Central Valley Project)	All	BDFWO
Shasta	Whiskeytown National Recreation Area	All	YFWO
Shasta	BLM Alturas Resource Area	All	KFWO

Shasta	Caltrans	By jurisdiction	SFWO/AFWO
Shasta	Ahjumawi Lava Springs State Park	Shasta crayfish	SFWO
Shasta	All other ownerships	All	By jurisdiction (see map)
Shasta	Natural Resource Damage Assessment, all lands	All	SFWO/BDFWO
Sierra	Humboldt Toiyabe National Forest	All	RFWO
Sierra	All other ownerships	All	SFWO
Solano	Suisun Marsh	All	BDFWO
Solano	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Solano	All ownerships but tidal/estuarine	All	SFWO
Solano	Other	All	By jurisdiction (see map)
Sonoma	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Sonoma	All ownerships but tidal/estuarine	All	SFWO
Tehama	Mendocino National Forest	All	AFWO
	Shasta Trinity National Forest		

Tehama	except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Tehama	All other ownerships	All	By jurisdiction (see map)
Yolo	Yolo Bypass	All	BDFWO
Yolo	Other	All	By jurisdiction (see map)
All	FERC-ESA	All	By jurisdiction (see map)
All	FERC-ESA	Shasta crayfish	SFWO
All	FERC-Relicensing (non-ESA)	All	BDFWO
*Office Leads:			
AFWO=Arcata Fish and Wildlife Office			
BDFWO=Bay Delta Fish and Wildlife Office			
KFWO=Klamath Falls Fish and Wildlife Office			
RFWO=Reno Fish and Wildlife Office			
YFWO=Yreka Fish and Wildlife Office			

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: 06-39460 State Route 269 Bridge Project

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-0909

Event Code: 08ESMF00-2015-E-02829

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Name: 06-39460 State Route 269 Bridge Project

Project Description: Project includes an approximately 2-mile stretch of SR 269, starting 1 mile north of the town of Huron, CA, in Fresno County. The project proposes to raise the profile of the roadway an average of 10 feet, construct two new bridges: one approximately 500 feet long over the Arroyo Pasajero channel with training dikes, a second new bridge approximately 40 feet long built 700 feet south of the Arroyo Pasajero channel, and reconstruct an existing bridge at the north end of the project area.

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>, 07/21/2015 01:17 PM

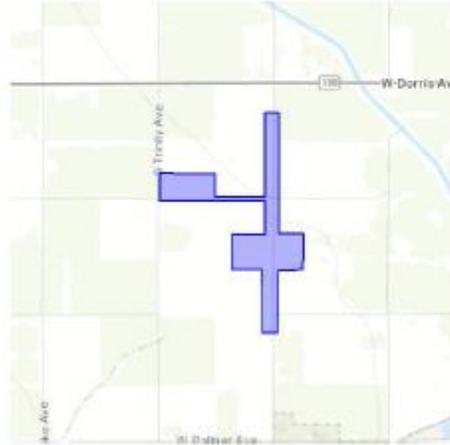
1



United States Department of Interior
Fish and Wildlife Service

Project name: 06-39460 State Route 269 Bridge Project

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-120.10485649108887 36.251610453909926, -120.10275363922119 36.251610453909926, -120.10271072387695 36.23638139100541, -120.09889125823975 36.23638139100541, -120.09897708892822 36.231846710420584, -120.10283946990967 36.23181209352678, -120.10296821594238 36.2239190416722, -120.10528564453125 36.2239190416722, -120.1054573059082 36.23188132729907, -120.11009216308594 36.23191594416221, -120.11017799377441 36.23631216121777, -120.10485649108887 36.23631216121777, -120.10494232177734 36.24046583996708, -120.12142181396483 36.24053506607642, -120.12142181396483 36.244065516359036, -120.11266708374023 36.243996293376384, -120.11266708374023 36.241088872744065, -120.10494232177734 36.241088872744065, -120.10485649108887 36.251610453909926)))

Project Counties: Fresno, CA

<http://ecos.fws.gov/ipac>, 07/21/2015 01:17 PM



United States Department of Interior
 Fish and Wildlife Service
 Project name: 06-39460 State Route 269 Bridge Project

Endangered Species Act Species List

There are a total of 12 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 draytoni</i>) Population: Entire	Threatened	Final designated	
Crustaceans:			
Vernal Pool fairy shrimp (<i>Branchinecta lynchi</i>) Population: Entire	Threatened	Final designated	
Fishes:			
Delta smelt (<i>Hypomesus transpacificus</i>) Population: Entire	Threatened	Final designated	
Flowering Plant:			
California jewelflower (<i>Caulanthus californicus</i>)	Endangered		
San Joaquin woolly-threads (<i>Monolopia (=Lambertia) congesta</i>)	Endangered		
San Mateo thornmint (<i>Acanthomintha obovata</i> ssp. <i>draytonii</i>)	Endangered		

<http://ecos.fws.gov/ipac>, 07/21/2015 01:17 PM



United States Department of Interior
Fish and Wildlife Service

Project name: 06-39460 State Route 269 Bridge Project

Mammals:			
Fresno kangaroo rat (<i>Dipodomys nitratoides exilis</i>) Population: Entire	Endangered	Final designated	
Giant kangaroo rat (<i>Dipodomys ingens</i>) Population: Entire	Endangered		
San Joaquin Kit fox (<i>Vulpes macrotis macrura</i>) Population: U.S.A.(CA)	Endangered		
Tipton kangaroo rat (<i>Dipodomys nitratoides nitratoides</i>) Population: Entire	Endangered		
Reptiles:			
Blunt-Nosed Leopard lizard (<i>Gambelia silus</i>) Population: Entire	Endangered		
Giant Garter snake (<i>Thamnophis gigas</i>) Population: Entire	Threatened		

<http://ecos.fws.gov/ipac>, 07/21/2015 01:17 PM



United States Department of Interior
Fish and Wildlife Service

Project name: 06-39460 State Route 269 Bridge Project

Critical habitats that lie within your project area

There are no critical habitats within your project area.

<http://ecos.fws.gov/ipac>, 07/21/2015 01:17 PM

5

CNPS Species List

CNPS
California Native Plant Society
Rare and Endangered Plant Inventory

[Home](#)
[About the Inventory](#)
[CNPS Home](#)
[Join CNPS](#)
[Simple Search](#)
[Advanced Search](#)

Plant List

8 matches found. [Click on scientific name for details](#)

Search Criteria

Found in 9 Quads around 36120B1

[Modify Search Criteria](#)
 [Export to Excel](#)
 [Modify Columns](#)
 [Modify Sort](#)
 [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Atriplex coronata var. coronata	crownscale	Chenopodiaceae	annual herb	4.2	S3	G4T3
Atriplex depressa	brittlescale	Chenopodiaceae	annual herb	1B.2	S2	G2
Caulanthus californicus	California jewel-flower	Brassicaceae	annual herb	1B.1	S1	G1
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	1B.2	S3	G3
Eriastrum hooveri	Hoover's eriastrum	Polemoniaceae	annual herb	4.2	S3	G3
Hordeum intercedens	vernal barley	Poaceae	annual herb	3.2	S3S4	G3G4
Monolopia congdonii	San Joaquin woollythreads	Asteraceae	annual herb	1B.2	S2	G2
Trichostema ovatum	San Joaquin bluecurls	Lamiaceae	annual herb	4.2	S4	G4

Suggested Citation

CNPS, Rare Plant Program. 2015. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 23 July 2015].

Appendix F Minimization and/or Mitigation Summary

The following section describes the avoidance, minimization and/or mitigation measures that would be required for construction of the project.

Farmland

- Acquisition of Williamson Act Contract land will require the following:
 - Comply with the public acquisition process per GC §51291, or submit a petition for partial cancellation to Fresno County for land required for the project.

Utilities

- All utility relocation work will be done by the affected utility companies. Utility users will be informed of the date and time in advance of any service disruptions.

Emergency Services

- A traffic management plan will be developed to minimize delays and maximize safety during construction. The traffic management plan could include, but is not limited to, the following:
 - Release of information through brochures and mailers, press releases, and advertisements managed by the public information office.
 - Use of fixed and portable changeable message signs.
 - Incident management through the Construction Zone Enhancement Enforcement Program and the transportation management plan.

Traffic and Transportation/Pedestrian and Bicycle Facilities

A traffic management plan including, but not limited to the following:

- Release of information through brochures and mailers, press releases, and advertisements managed by the public information office.
- Use of fixed and portable changeable message signs.
- Incident management through the Construction Zone Enhancement Enforcement Program and the transportation management center.
- Use of one-way traffic control.
- Construction of a detour road for use during construction.

- Bridge railing required as appropriate for the safe travel of bicyclists.

Visual/Aesthetics

- Provide bridge types and railings in keeping with the rural environment to minimize visual impacts.
- Slopes should not exceed a gradient of 1:3. Slopes that are designed at gradients of 1:2 or steeper will require the written concurrence of the District Landscape Architect, Maintenance, and the Stormwater Coordinator.
- Tops and toes of slopes should be rounded to create a natural appearance.
- All exposed disturbed soil areas will require permanent erosion control application, which will restore the disturbed project area to natural vegetation.

Cultural Resources

- Consulting Native American tribes and a Caltrans archaeologist will monitor construction activities involving excavation as needed and determined by the Caltrans archaeologist and Caltrans Native American Coordinator. If buried cultural materials are encountered during construction, work will stop in that area until a qualified archaeologist could evaluate the nature and significance of the find.
- If human remains are exposed during project activities, State Health and Safety Code Section 7050.5 states that no further disturbance should occur until the county coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98.

Water Quality and Stormwater Runoff

Design Features

- To protect water quality, control erosion and prevent washout within the project area, a training dike with rock slope protection along the dike embankments will be used to protect the banks of the Arroyo Pasajero channel east and west of the bridge.

Temporary Construction Measures

- **Standard temporary construction site measures**—Pollution prevention stormwater treatment best management practices will be used during and after project construction to control potential discharges of pollutants to surface water. Best management practices will be used to control general gross pollutants and sedimentation/siltation, depending on location.
- **Stormwater Best Management Practices**—A National Pollutant Discharge Elimination System Stormwater Permit is required for the project along with any subsequent permit in effect at the time of construction. The contractor must comply with the requirements of the General National Pollutant Discharge

Elimination System Permit for Construction Activities. The contractor will use best management practices as specified in the Caltrans Stormwater Management Plan.

- **Prepare and Implement a Stormwater Pollution Prevention Plan**—The contractor will be required to develop an acceptable Stormwater Pollution Prevention Plan. The Stormwater Pollution Prevention Plan will contain best management practices that have demonstrated effectiveness at reducing stormwater pollution. The Stormwater Pollution Prevention Plan will address all construction-related activities, equipment, and materials with the potential to affect water quality. All construction site best management practices will follow the latest edition of the Stormwater Quality Handbooks and Construction Site Best Management Practices Manual to control and minimize the impacts of construction-related pollutants. The Stormwater Pollution Prevention Plan will include best management practices to control pollutants, sediment from erosion, stormwater runoff, and other construction-related impacts. In addition, the Stormwater Pollution Prevention Plan will include the use of specific stormwater effluent monitoring requirements based on the project's risk level to ensure that the best management practices are effective in preventing the degradation of any water quality standards.

Hazardous Waste and Materials

The proposed project would have no significant adverse effect on hazardous waste and materials because the following measures would reduce potential effects to insignificance:

- Special provisions would be included in the construction contract addressing the potential hazardous materials/hazardous waste issues for lead and asbestos to ensure proper handling, disposal, and worker/public safety.
- Asbestos levels exceeded the regulatory threshold of 1.0%. Soil from Palmer Avenue to Marmon Avenue will be encapsulated within the project area by placing 6 inches of clean soil or paving over it, or the soil will be excavated to a depth of 1 foot and hauled off as a hazardous waste.

Biological Resources—Natural Communities

Mitigation Measures (by way of reseeded)

In areas where saltbush scrub or cottonwood riparian habitat will be temporarily affected by construction, mitigation will be required by way of reseeded and/or revegetating the areas where the vegetation was removed. The temporary impact areas will be restored to original grade and planted with native saltbrush and/or cottonwood vegetation, where appropriate, after construction. Revegetation of the saltbrush scrub will be required by the U.S. Fish and Wildlife Service per the San Joaquin Kit Fox Protection Measures listed in Appendix H.

Wetlands and Other Waters

Avoidance, Minimization, and Mitigation Measures

Best management practices will be included so the smallest practical footprint will be in place to minimize temporary, indirect, and permanent impacts to potential waters of the United States. Work will take place only when Arroyo Pasajero Creek is dry. In addition, the proposed project will incorporate standard Caltrans best management practices to prevent impacts related to degradation of the Arroyo Pasajero Creek. If Arroyo Pasajero Creek is determined to be jurisdictional, Caltrans will obtain permits from the U.S. Army Corps of Engineers (404 Nationwide Permit), California Regional Water Quality Control Board (401 Certification) and California Department of Fish and Wildlife (1602 Streambed Alteration Agreement). These permits will identify measures to mitigate impacts to the Arroyo Pasajero Creek. All proposed permits are listed in section 1.5 “Permits and Approvals Needed” in this report.

To ensure no net loss of waters of the United States, one or more of the following options can compensate for the permanent loss of waters, if Arroyo Pasajero Creek is determined to be jurisdictional:

- In-lieu fee payments may be required to compensate for impacts to jurisdictional waters.
- Dedication of mitigation lands for impacts to jurisdictional waters.
- Development of an alternative mitigation plan for impacts to jurisdictional waters.

Plant Species

Avoidance and Minimization Measures

Hoover’s eriastrum, recurved larkspur, and San Joaquin bluecurls

- Preconstruction surveys will be completed during the appropriate blooming periods prior to groundbreaking activities.
- If a Hoover’s eriastrum, recurved larkspur, or San Joaquin bluecurls is observed onsite, Caltrans will notify the California Department of Fish and Wildlife to discuss conservation measures to be implemented.

Animal Species

Avoidance and Minimization Measures

Western spadefoot

- A preconstruction survey will be performed within 30 days prior to construction if a rain event sufficient to result in persistent puddles occurs in the biological study area. Persistent puddles are those that would pool for 3 to 7 consecutive days.
- Persistent rain pools discovered during the preconstruction surveys, or forming during construction, will be designated as an Environmentally Sensitive Area (ESA) and avoided where possible.

- A qualified biological monitor will be present onsite during initial ground disturbance.
- Ground-disturbing night work may be restricted, especially on nights during or following rain events of sufficient intensity to result in persistent puddles and pools.

San Joaquin whipsnake

- Preconstruction surveys will be conducted to avoid potential impacts to this species.
- A qualified biologist will be present at the construction site during initial ground-disturbing activities.
- Requiring low speed limits within the construction site will lessen the probability that snakes could be run over by vehicles and equipment.

Burrowing owl

- Preconstruction surveys will be performed within 500 feet of the project impact area no more than 30 days prior to the start of construction to determine any presence or sign of burrowing owl occupancy.
- Active burrowing owl burrows will be protected by a 150-foot-radius Environmentally Sensitive Area outside of the nesting season (September 1 to January 31).
- Active burrowing owl burrows will be protected by a 500-foot-radius Environmentally Sensitive Area during the nesting season (February 1 to August 31).
- If active burrows are located within a construction area that cannot be avoided by a protection buffer, passive relocation efforts will be implemented by installing one-way exclusion doors on burrow entrances, and providing artificial burrows constructed nearby (within 50-100 yards if possible). A minimum of 6.5 acres of contiguous foraging habitat will be available within a 300-foot radius around the new burrow site per owl pair or resident single bird. All passive relocation work will be performed by qualified biologists.
- Occupied burrowing owl burrows discovered during the preconstruction surveys and/or those protected by Environmentally Sensitive Area buffers will be monitored by a qualified biologist during construction activities occurring in proximity to the Environmentally Sensitive Area buffer.
- All burrowing owls avoidance and minimization guidelines will conform to the “*Burrowing Owl Survey Protocol and Mitigation Guidelines*” (California Burrowing Owl Consortium, 1993).

Loggerhead shrike

- Nesting surveys will be conducted during the nesting season (February 15 to September 1) prior to the start of construction to determine if any loggerhead shrikes are nesting within 250 feet of the project impact area.
- If nesting loggerhead shrikes are observed onsite, then a 250-foot-radius Environmentally Sensitive Area, will be established around the nest until it has been determined by a qualified biologist that the young have fledged.
- A qualified biologist will monitor active nests during construction activities within the project 250-foot-radius Environmentally Sensitive Area.
- A special provision for migratory birds will be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact area will be done outside of the nesting season. At this time, tree removal is not anticipated for construction of the project.

American badger

- A preconstruction survey will be performed by a qualified biologist no more than 30 days prior to the start of construction. If badgers are determined to be living and/or foraging within the biological study area during surveys, avoidance measures, such as Environmental Sensitive Area fencing, will be implemented where feasible.
- A qualified biological monitor will be present during initial ground-disturbing activity. Any badgers discovered during project activity will be allowed to leave the area free of harassment.

Migratory birds

- Nesting surveys will be conducted during the nesting season (February 15 to September 1) prior to the start of construction to determine what migratory birds are nesting within 100 feet of the project impact area.
- If nesting migratory birds are observed onsite, a qualified biologist will determine if an Environmentally Sensitive Area is required.
- If an Environmentally Sensitive Area is required, a qualified biologist will monitor active nests during construction activities within the project. A 100-foot-radius Environmentally Sensitive Area may be implemented.
- A special provision for migratory birds will be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact area will be done outside of the nesting season. At this time, tree removal is not anticipated for construction of the proposed project.

Threatened and Endangered Species

Avoidance and Minimization Measures

San Joaquin woolly-threads

Implementation of the following avoidance and minimization measures will reduce the potential for adverse effects to the San Joaquin woolly-threads:

- Caltrans will conduct preconstruction botanical surveys of the project footprint, plus an additional 100-foot area outside the footprint using the California Department of Fish and Wildlife's *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities*, dated November 24, 2009, or the most recent guidelines.
- If the San Joaquin woolly-threads is observed onsite, Caltrans will notify the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to discuss any additional conservation measures that should be implemented.

Blunt-nosed leopard lizard

Implementation of the following avoidance and minimization measures will reduce the potential for adverse effects to the blunt-nosed leopard lizard:

- Caltrans will conduct preconstruction surveys of the project footprint, plus an additional 200-foot area outside the footprint using the California Department of Fish and Wildlife's May 2004 *Approved Survey Methodology of the Blunt-nosed Leopard Lizard* in the year prior to the start of construction. The California Department of Water Resources also plans to conduct surveys for the species in 2015 and 2016. To avoid duplication of effort, Caltrans and the California Department of Water Resources' proposed survey areas will not overlap. The two agencies will coordinate and share data concerning these future surveys. If the species is found within the project area by either agency, Caltrans will contact the Service to discuss measures to avoid take of the blunt-nosed leopard lizard.
- A qualified biologist will be onsite during initial ground disturbing activities.
- Caltrans will enforce low speed limits (maximum 10 miles per hour) within the project area, which will reduce the risk that the blunt-nosed leopard lizard is run over by construction vehicles/equipment.

Swainson's hawk

With implementation of the following avoidance and minimization measures, no direct impacts to the Swainson's hawk are expected to occur:

- Protocol nesting surveys will be conducted during the nesting season prior to the start of construction to determine if any Swainson's hawks are nesting in proximity to the proposed project.

- Coordination and data-sharing with Department of Water Resources personnel regarding their Swainson's hawk survey efforts in 2015 and 2016 will be ongoing.
- If nesting Swainson's hawks are observed, the nest site will be designated an Environmentally Sensitive Area within a 600-foot radius around the nest until it has been determined by a qualified biologist that the young have fledged.
- A qualified biologist will monitor active nests during construction activities.
- A special provision for migratory birds will be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact area will be done outside of the nesting season (tree removal is not anticipated at this time).

San Joaquin antelope squirrel

With implementation of the following avoidance and minimization measures, no impacts to an individual San Joaquin antelope squirrel are expected to occur:

- Preconstruction surveys will be performed within 30 days prior to construction to determine if the species occurs in the project area. If occupied suitable habitat is observed during surveys, avoidance measures, such as Environmentally Sensitive Area fencing, will be implemented where feasible.
- A qualified biological monitor will be present at the construction site during initial ground-disturbing activities. A California Department of Fish and Wildlife-approved biologist will relocate San Joaquin antelope squirrels if necessary.

Giant kangaroo rat and Tipton kangaroo rat

Implementation of the following avoidance and minimization measures will reduce the potential for adverse effects to the giant kangaroo rat and Tipton kangaroo rat:

- Trapping surveys will be conducted no more than 30 days prior to construction. If occupied suitable habitat is observed during the surveys, Caltrans will discuss the implementation of avoidance measures with the U.S. Fish and Wildlife Service.
- A qualified biologist will be present onsite during initial ground-disturbing activities. If either of the two species is detected and requires removal from the project site, the biologist must hold a section 10(a)(1)(A) permit for the particular kangaroo rat species identified.

San Joaquin kit fox

Implementation of the following avoidance and minimization measures will reduce the potential for adverse effects to the San Joaquin kit fox:

- Preconstruction surveys will be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction

activities. Surveys for the San Joaquin kit fox and its dens will be performed throughout the project footprint as well as within 200 feet of the footprint.

- A qualified biologist will conduct an environmental awareness training program for all construction personnel, covering the status of the San Joaquin kit fox, the importance of avoiding impacts to the species, and the penalties for not complying with minimization requirements. New construction personnel who are added to the project after the training is first conducted also will be required to take the training.
- A qualified biologist will be present onsite during initial ground-disturbing activities. To the extent possible, the biologist also will be available on-call when not present onsite.
- Disturbance to all San Joaquin kit fox dens will be avoided to the maximum extent possible.
 - Potential and atypical dens that are at least 50 feet from construction will be protected with a 50-foot zone. Known dens that are located at least 100 feet from construction will be protected with a 100-foot zone. In instances where 50-foot or 100-foot exclusion zones cannot be maintained, potential and/or known dens will be monitored; once these dens are verified to be unoccupied, they will be blocked temporarily (via sandbagging of a one-way door) for the duration of the project.
 - If a natal/pupping den is discovered either within the project footprint or within 200 feet of the footprint, Caltrans will notify the U.S. Fish and Wildlife Service immediately.
- All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed daily from the project site to reduce the potential for attracting predator species.
- No pets or firearms will be allowed on the project site.
- The U.S. Fish and Wildlife Service *Standard Measures for Protection of the San Joaquin Kit Fox for Prior to or During Ground Disturbance, Construction and On-Going Operational Requirements* will also be implemented (Appendix H).

Invasive Species

Avoidance and Minimization Measures

- In compliance with the Executive Order on Invasive Species, Executive Order 13112, and guidance from the Federal Highway Administration, the landscaping and erosion control included in the project will not use species listed as invasive. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

- To prevent the introduction and spread of invasive species, Caltrans has issued policy guidelines that provide a framework for addressing roadside vegetation management issues for construction activities and maintenance programs. The Caltrans invasive species policy guidelines, Standard Special Provisions, and best management practices would minimize the potential that this project would introduce, transport, or spread invasive species to and/or from the project site.

Climate Change/Air Quality

- Caltrans Standard specifications pertaining to dust control and dust palliative requirements will reduce and control emission impacts during construction.

Appendix G List of Proposed Species and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Species	Status ⁽¹⁾	Possible in Which Habitat Type	Ac. Habitat Impacts Perm/Temp	Species Impacts Expected After AMMs ⁽²⁾ ?	FESA Determination
California jewel-flower	FE, SE	Ruderal, but not in alkaline soils	3.79/47.71	No, unlikely to occur onsite.	<i>No effect.</i>
San Joaquin woolly-threads	FE	Ruderal and salt-brush	3.97/53.61	No, unlikely to occur onsite.	<i>May affect, not likely to adversely affect.</i>
Vernal pool fairy shrimp	FT	Vernal pools	0	No, no habitat onsite.	<i>No effect.</i>
Valley elderberry longhorn beetle	FT	Elderberry bushes, usually in riparian areas	0	No, no habitat onsite.	<i>No effect.</i>
Delta smelt	FT	Semi-saline aquatic habitat in the Bay Delta region	0	No, no habitat onsite, not upstream of suitable habitat.	<i>No effect.</i>
California tiger salamander, central population	FT	Vernal pools in open grasslands and brushy habitats	0	No, no habitat onsite.	<i>No effect.</i>
California red-legged frog	FT	Pools, ponds, slow streams and adjacent riparian areas	0	No, no habitat onsite.	<i>No effect.</i>
Blunt-nosed leopard lizard	FE, SE, FP	Entire project area except borrow site (vegetation too dense)	5.22/38.6	No, unlikely to occur onsite.	<i>May affect, not likely to adversely affect.</i>
Giant garter snake	FT	Marshes and aquatic habitats with slow water, and adjacent uplands	0	No, no habitat onsite.	<i>No effect.</i>
Giant kangaroo rat	FE, SE	Entire project area except borrow site (vegetation too dense)	5.22/38.6	No, unlikely to occur onsite.	<i>May affect, not likely to adversely affect.</i>

Appendix G • List of Proposed Species and Critical Habitat
Potentially Occurring or Known to Occur in the Project

Species	Status ⁽¹⁾	Possible in Which Habitat Type	Ac. Habitat Impacts Perm/Temp	Species Impacts Expected After AMMs ⁽²⁾ ?	FESA Determination
Fresno kangaroo rat	FE, SE	Entire project area except borrow site (vegetation too dense)	5.22/38.6	No, unlikely to occur onsite.	<i>No affect.</i>
Tipton kangaroo rat	FE, SE	Entire project area except borrow site (vegetation too dense)	5.22/38.6	No, unlikely to occur onsite.	<i>May affect, not likely to adversely affect.</i>
San Joaquin kit fox	FE, ST	Entire project area except borrow site (vegetation too dense)	5.22/38.6	Possible. Species not observed but may occur onsite.	<i>May affect, not likely to adversely affect.</i>

Appendix H San Joaquin Kit Fox Protection Measures

**U.S. FISH AND WILDLIFE
SERVICE STANDARDIZED
RECOMMENDATIONS
FOR PROTECTION OF THE ENDANGERED SAN
JOAQUIN KIT FOX PRIOR TO OR DURING GROUND
DISTURBANCE**

Prepared by the Sacramento Fish and Wildlife
Office
January
2011

INTRODUCTION

The following document includes many of the San Joaquin kit fox (*Vulpes macrotis mutica*) protection measures typically recommended by the U. S. Fish and Wildlife Service (Service), prior to and during ground disturbance activities. **However, incorporating relevant sections of these guidelines into the proposed project is not the only action required under the Endangered Species Act of 1973, as amended (Act) and does not preclude the need for section 7 consultation or a section 10 incidental take permit for the proposed project.** Project applicants should contact the Service in Sacramento to determine the full range of requirements that apply to your project; the address and telephone number are given at the end of this document. Implementation of the measures presented in this document may be necessary to avoid violating the provisions of the Act, including the prohibition against "take" (defined as killing, harming, or harassing a listed species, including actions that damage or destroy its habitat). These protection measures may also be required under the terms of a biological opinion pursuant to section 7 of the Act resulting in incidental take authorization (authorization), or an incidental take permit (permit) pursuant to section 10 of the Act. The specific measures implemented to protect kit fox for any given project shall be determined by the Service based upon the applicant's consultation with the Service.

The purpose of this document is to make information on kit fox protection strategies readily available and to help standardize the methods and definitions currently employed to achieve kit fox protection. The measures outlined in this document are subject to modification or revision at the discretion of the Service.

IS A PERMIT NECESSARY?

Certain acts need a permit from the Service which includes destruction of any known (occupied or unoccupied) or natal/pupping kit fox dens. Determination of the presence or absence of kit foxes and /or their dens should be made during the environmental review process. All surveys and monitoring described in this document must be conducted by a qualified biologist and these activities do not require a permit. A qualified biologist (biologist) means any person who has completed at least four years of university training in wildlife biology or a related science and/or has demonstrated field experience in the identification and life history of the San Joaquin kit fox. In addition, the biologist(s) must be able to identify coyote, red fox, gray fox, and kit fox tracks, and to have seen a kit fox in the wild, at a zoo, or as a museum mount. Resumes of biologists should be submitted to the Service for review and approval prior to any survey or monitoring work occurring.

SMALL PROJECTS

Small projects are considered to be those projects with small foot prints, of approximately one acre or less, such as an individual in-fill oil well, communication tower, or bridge repairs. These projects must stand alone and not be part of, or in any way connected to larger projects (i.e., bridge repair or improvement to serve a future urban development). The Service recommends that on these small projects, the biologist survey the proposed project boundary and a 200-foot area outside of the project footprint to identify habitat features and utilize this information as guidance to situate the project to minimize or avoid impacts. If habitat features cannot be completely avoided, then surveys should be conducted and the Service should be contacted for technical assistance to determine the extent of possible take.

Preconstruction/preactivity surveys shall 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. Kit foxes change dens four or five times during the summer months, and change natal dens one or two times per month (Morrell 1972). Surveys should identify kit fox habitat features on the project site and evaluate use by kit fox and, if possible, assess the potential impacts to the kit fox by the proposed activity. The status of all dens should be determined and mapped (see Survey Protocol). Written results of preconstruction/preactivity surveys must be received by the Service within five days after survey completion and prior to the start of ground disturbance and/or construction activities.

If a natal/pupping den is discovered within the project area or within 200-feet of the project boundary, the Service shall be immediately notified and under no circumstances should the den be disturbed or destroyed without prior authorization. If the preconstruction/preactivity survey reveals an active

natal pupping or new information, the project applicant should contact the Service immediately to obtain the necessary take authorization/permit.

If the take authorization/permit has already been issued, then the biologist may proceed with den destruction within the project boundary, except natal/pupping den which may not be destroyed while occupied. A take authorization/permit is required to destroy these dens even after they are vacated. Protective exclusion zones can be placed around all known and potential dens which occur outside the project footprint (conversely, the project boundary can be demarcated, see den destruction section).

OTHER PROJECTS

It is likely that all other projects occurring within kit fox habitat will require a take authorization/permit from the Service. This determination would be made by the Service during the early evaluation process (see Survey Protocol). These other projects would include, but are not limited to: Linear projects; projects with large footprints such as urban development; and projects which in themselves may be small but have far reaching impacts (i.e., water storage or conveyance facilities that promote urban growth or agriculture, etc.).

The take authorization/permit issued by the Service may incorporate some or all of the protection measures presented in this document. The take authorization/permit may include measures specific to the needs of the project and those requirements supersede any requirements found in this document.

EXCLUSION ZONES

In order to avoid impacts, construction activities must avoid their dens. The configuration of exclusion zones around the kit fox dens should have a radius measured outward from the entrance or cluster of entrances due to the length of dens underground. The following distances are **minimums**, and if they cannot be followed the Service must be contacted. Adult and pup kit foxes are known to sometimes rest and play near the den entrance in the afternoon, but most above-ground activities begin near sunset and continue sporadically throughout the night. Den definitions are attached as Exhibit A.

Potential den** - 50feet

Atypical den** - 50 feet

Known den* - 100 feet

Natal/pupping den (occupied and unoccupied) - Service must be contacted

*Known den: To ensure protection, the exclusion zone should be demarcated by fencing that encircles each den at the appropriate distance and does not prevent access to the den by kit foxes. Acceptable fencing includes untreated wood particle-board, silt fencing, orange construction fencing or other fencing as approved by the Service as long as it has openings for kit fox ingress/egress and keeps humans and equipment out. Exclusion zone fencing should be maintained until all construction related or operational disturbances have been terminated. At that time, all fencing shall be removed to avoid attracting subsequent attention to the dens.

**Potential and Atypical dens: Placement of 4-5 flagged stakes 50 feet from the den entrance(s) will suffice to identify the den location; fencing will not be required, but the exclusion zone must be observed.

Only essential vehicle operation on existing roads and foot traffic should be permitted. Otherwise, all construction, vehicle operation, material storage, or any other type of surface- disturbing activity should be prohibited or greatly restricted within the exclusion zones.

DESTRUCTION OF DENS

Limited destruction of kit fox dens may be allowed, if avoidance is not a reasonable alternative, provided the following procedures are observed. The value to kit foxes of potential, known, and natal/pupping dens differ and therefore, each den type needs a different level of protection. **Destruction of any known or natal/pupping kit fox den requires take authorization/permit from the Service.**

Destruction of the den should be accomplished by careful excavation until it is certain that no kit foxes are inside. The den should be fully excavated, filled with dirt and compacted to ensure that kit foxes cannot reenter or use the den during the construction period. If at any point during excavation, a kit fox is discovered inside the den, the excavation activity shall cease immediately and monitoring of the den as described above should be resumed. Destruction of the den may be completed when in the judgment of the biologist, the animal has escaped, without further disturbance, from the partially destroyed den.

Natal/pupping dens: Natal or pupping dens which are occupied will not be destroyed until the pups and adults have vacated and then only after consultation with the Service. Therefore, project activities at some den sites may have to be postponed.

Known dens: Known dens occurring within the footprint of the activity must be monitored for three days with tracking medium or an infra-red beam camera to determine the current use. If no kit fox activity is observed during this period, the den should be destroyed immediately to preclude subsequent use.

If kit fox activity is observed at the den during this period, the den should be monitored for at least five consecutive days from the time of the observation to allow any resident animal to move to another den during its normal activity. Use of the den can be discouraged during this period by partially plugging its entrances(s) with soil in such a manner that any resident animal can escape easily. Only when the den is determined to be unoccupied may the den be excavated under the direction of the biologist. If the animal is still present after five or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgment of a biologist, it is temporarily vacant, for example during the animal's normal foraging activities.

The Service encourages hand excavation, but realizes that soil conditions may necessitate the use of excavating equipment. However, extreme caution must be exercised.

Potential dens: If a take authorization/permit has been obtained from the Service, den destruction may proceed without monitoring, unless other restrictions were issued with the take authorization/permit. If no take authorization/permit has been issued, then potential dens should be monitored as if they were known dens. If any den was considered to be a potential den, but is later determined during monitoring or destruction to be currently, or previously used by kit fox (e.g., if kit fox sign is found inside), then all construction activities shall cease and the Service shall be notified immediately.

CONSTRUCTION AND ONGOING OPERATIONAL REQUIREMENTS

Habitat subject to permanent and temporary construction disturbances and other types of ongoing project-related disturbance activities should be minimized by adhering to the following activities. Project designs should limit or cluster permanent project features to the smallest area possible while still permitting achievement of project goals. To minimize temporary disturbances, all project-related vehicle traffic should be restricted to established roads, construction areas, and other designated areas. These areas should also be included in preconstruction surveys and, to the extent possible, should be established in locations disturbed by previous activities to prevent further impacts.

1. Project-related vehicles should observe a daytime speed limit of 20-mph throughout the site in all project areas, except on county roads and State and Federal highways; this is particularly important at night when kit foxes are most active. Night-time construction should be minimized to the extent possible. However if it does occur, then the speed limit should be reduced to 10-mph. Off-road traffic outside of designated project areas should be prohibited.
2. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than 2-feet deep should be covered at the close of each working day by plywood or

similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the Service and the California Department of Fish and Game (CDFG) shall be contacted as noted under measure 13 referenced below.

3. Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe should not be moved until the Service has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.
4. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from a construction or project site.
5. No firearms shall be allowed on the project site.
6. No pets, such as dogs or cats, should be permitted on the project site to prevent harassment, mortality of kit foxes, or destruction of dens.
7. Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional project-related restrictions deemed necessary by the Service. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit fox.
8. A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the Service.
9. An employee education program should be conducted for any project that has anticipated impacts to kit fox or other endangered species. The program should consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and/or agency personnel involved in the project. The

program should include the following: A description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information should be prepared for distribution to the previously referenced people and anyone else who may enter the project site.

10. Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. should be re-contoured if necessary, and revegetated to promote restoration of the area to pre- project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the project, but after project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas should be determined on a site-specific basis in consultation with the Service, California Department of Fish and Game (CDFG), and revegetation experts.
11. In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the Service should be contacted for guidance.
12. Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFG immediately in the case of a dead, injured or entrapped kit fox. The CDFG contact for immediate assistance is State Dispatch at (916)445-0045. They will contact the local warden or Mr. Paul Hoffman, the wildlife biologist, at (530)934-9309. The Service should be contacted at the numbers below.
13. The Sacramento Fish and Wildlife Office and CDFG shall be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. The Service contact is the Chief of the Division of Endangered Species, at the addresses and telephone numbers below. The CDFG contact is Mr. Paul Hoffman at 1701 Nimbus Road, Suite A, Rancho Cordova, California 95670, (530) 934-9309.
14. New sightings of kit fox shall be reported to the California Natural Diversity Database (CNDDDB). A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the Service at the address below.

Any project-related information required by the Service or questions concerning the above conditions or their implementation may be directed in writing to the U.S. Fish and Wildlife Service at:

Endangered Species Division
2800 Cottage Way, Suite W2605
Sacramento, California 95825-1846
(916) 414-6620 or (916) 414-6600

EXHIBIT “A” - DEFINITIONS

"Take" - Section 9 of the Endangered Species Act of 1973, as amended (Act) prohibits the "take" of any federally listed endangered species by any person (an individual, corporation, partnership, trust, association, etc.) subject to the jurisdiction of the United States. As defined in the Act, take means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct". Thus, not only is a listed animal protected from activities such as hunting, but also from actions that damage or destroy its habitat.

"Dens" - San Joaquin kit fox dens may be located in areas of low, moderate, or steep topography. Den characteristics are listed below, however, the specific characteristics of individual dens may vary and occupied dens may lack some or all of these features. Therefore, caution must be exercised in determining the status of any den. Typical dens may include the following: (1) one or more entrances that are approximately 5 to 8 inches in diameter; (2) dirt berms adjacent to the entrances; (3) kit fox tracks, scat, or prey remains in the vicinity of the den; (4) matted vegetation adjacent to the den entrances; and (5) manmade features such as culverts, pipes, and canal banks.

"Known den" - Any existing natural den or manmade structure that is used or has been used at any time in the past by a San Joaquin kit fox. Evidence of use may include historical records, past or current radiotelemetry or spotlighting data, kit fox sign such as tracks, scat, and/or prey remains, or other reasonable proof that a given den is being or has been used by a kit fox. The Service discourages use of the terms "active" and "inactive" when referring to any kit fox den because a great percentage of occupied dens show no evidence of use, and because kit foxes change dens often, with the result that the status of a given den may change frequently and abruptly.

"Potential Den" - Any subterranean hole within the species' range that has entrances of appropriate dimensions for which available evidence is insufficient to conclude that it is being used or has been used by a kit fox. Potential dens shall include the following: (1) any suitable subterranean hole; or (2) any den or burrow of another species (e.g., coyote, badger, red fox, or ground squirrel) that otherwise has appropriate characteristics for kit fox use.

"Natal or Pupping den" - Any den used by kit foxes to whelp and/or rear their pups. Natal/pupping dens may be larger with more numerous entrances than dens occupied exclusively by adults. These dens typically have more kit fox tracks, scat, and prey remains in the vicinity of the den, and may have a broader apron of matted dirt and/or vegetation at one or more entrances. A natal den, defined as a den in which kit fox pups are actually whelped but not necessarily reared, is a more restrictive version of the pupping den. In practice, however, it is difficult to distinguish between the two, therefore, for purposes of this definition either term applies.

"Atypical den" - Any manmade structure which has been or is being occupied by a San Joaquin kit fox. Atypical dens may include pipes, culverts, and diggings beneath concrete slabs and buildings.

Appendix I Comments and Responses

This appendix contains the comments received during the public review and comment period. A Caltrans response follows each comment.



Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

April 2, 2015

Michelle Ray
California Department of Transportation, District 6
805 M Street
Fresno, CA 93721

Subject: State Route 269 Bridge Project
SCH#: 2015021089

Dear Michelle Ray:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on March 30, 2015, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,


Scott Morgan
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

1

**Document Details Report
State Clearinghouse Data Base**

SCH# 2015021088
Project Title State Route 269 Bridge Project
Lead Agency Caltrans #6

Type MND Mitigated Negative Declaration
Description Raise the profile of SR 269 and construct three bridges between W. Palmer Avenue and SR 198, just north of the City of Huron. The project is designed to prevent flooding and closure of the highway during storm events.

Lead Agency Contact

Name Michelle Ray
Agency California Department of Transportation, District 6
Phone 558 445 5286 **Fax**
Address 805 M Street
City Fresno **State** CA **Zip** 93721

Project Location

County Fresno
City Huron
Region
Lat / Long
Cross Streets SR 269/198 and 269/W. Palmer Ave
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways SR 198, I-5
Airports
Railways
Waterways Arroyo Pasajero Creek, California Aqueduct
Schools Huron HS, MS, ES
Land Use Agriculture

Project Issues Aesthetic/Visual; Agricultural Land; Archeologic-Historic; Biological Resources; Flood Plain/Flooding; Public Services; Toxic/Hazardous; Traffic/Circulation; Water Quality

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 4; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Air Resources Board; Air Resources Board, Transportation Projects; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Bd., Region 5 (Fresno); Department of Toxic Substances Control; Native American Heritage Commission.

Date Received 02/26/2015 **Start of Review** 02/27/2015 **End of Review** 03/30/2015

Note: Blanks in data fields result from insufficient information provided by lead agency

Response to Comments from the Governor's Office of Planning and Research, State Clearinghouse and Planning Unit

Thank you for your comments on the project.

Response to comment 1: The State Clearinghouse confirmed that the Draft Mitigated Negative Declaration was submitted to selected State agencies for review and no comments were received. The Clearinghouse acknowledges that Caltrans complied with the review requirements for the draft environmental document pursuant to the California Environmental Quality Act.

Comments from the Department of Conservation

NATURAL RESOURCES AGENCY

EDMUND G. BROWN JR., GOVERNOR



DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEB SITE conservation.ca.gov

April 3, 2015

Via Email: Michelle.Ray@dot.ca.gov
Michelle Ray, Environmental Branch Chief
Department of Transportation, Environmental Planning
855 M Street, Suite 200
Fresno, CA 93721

SUBJECT: STATE ROUTE 269 BRIDGE PROJECT - MITIGATED NEGATIVE DECLARATION; STATE CLEARINGHOUSE NO. 2015021089

Dear Ms. Ray:

The Department of Conservation's (Department) Division of Land Resource Protection (Division) monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act and other agricultural land conservation programs. The Division has reviewed the above referenced project and offers the following comments and recommendations.

PROJECT DESCRIPTION

State Route 269 is a two-lane undivided highway. The California Department of Transportation (Caltrans) proposes to raise the profile of State Route 269 and construct three new bridges to prevent flooding of the highway. The project is located between West Palmer Avenue and State Route 198, just north of the City of Huron.

Approximately 22 acres of permanent new right-of-way would be converted from designated agricultural land with approximately 2.45 acres being classified as prime farmland. Approximately 15 additional acres would be acquired for a temporary construction easement that would include a detour road to accommodate traffic during construction.

A total of 12 parcels lie within the project area. Four of these parcels are under Williamson Act contract and are needed for construction of the proposed project. The Mitigated Negative Declaration (MND) asserts that none of the contracts would have to be cancelled as a result of the project due to the size of the parcels.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The MND states that CEQA requires the review of projects that would convert Williamson Act contract land to nonagricultural uses. It also asserts that none of the contracts would have to be cancelled as a result of the project due to the size of the parcels. In addition, the checklist declares that no impact would occur with regard to conflicting with a Williamson Act contract.

State Route 269
April 3, 2015
Page 2 of 2

The Department does not agree with this assessment. If the Williamson Act contracted properties are to be acquired by Caltrans, then they are required to go through the public acquisition notification process (outlined in Government Code § 51291) to effectively remove the affected portions of the land from contract. If this process is not completed correctly, the contract would remain active on the land and the project would be in violation of the contract.

In order to adequately address the public acquisition of contracted land under CEQA, the Department recommends that the CEQA checklist be amended to state a less than significant impact. The MND should also be conditioned to require the public acquisition process, subject to GC § 51291, be followed or Caltrans will need to submit a petition for partial cancellation to the County for the land that is required for the project.

1

PUBLIC ACQUISITION

Notification provisions of the Williamson Act (GC § 51291) requires an agency to notify the Director of the Department of Conservation of the possible acquisition of Williamson Act contracted land for a public improvement. Such notification must occur when it appears that land within an agricultural preserve may be required for a public use. There are specific steps to be followed during acquisition, including notice, if there are any changes to the improvement that affect the acquisition footprint, or if the land acquired is ultimately not used for the public improvement. The local governing body responsible for the administration of the agricultural preserve must also be notified.

2

The project requires the public acquisition process to be started immediately. Please review the requirements for notification on our website at:

http://www.conservation.ca.gov/dlrp/lca/basic_contract_provisions/Pages/public_acquisitions.aspx

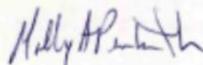
DEPARTMENT RECOMMENDATIONS AND CONCLUSIONS

Thank you for the opportunity to provide comments. We request copies of any Board of Supervisors resolution pertaining to this project. If you have any questions concerning our comments, please contact Meri Meraz, Associate Environmental Planner at (916) 445-9411 or at mmeraz@conservation.ca.gov.

3

Please contact Jacquelyn Ramsey at Jacquelyn.Ramsey@conservation.ca.gov or (916) 323-2379 for assistance on the Williamson Act public agency acquisition process.

Sincerely,



Molly A Penberth, Manager
Division of Land Resource Protection
Conservation Support Unit

Response to Comments from the Department of Conservation

Thank you for your comments on the project.

Response to comment 1: The CEQA Checklist has been amended indicating a Less Than Significant impact to Farmland. Section 2.1.1 Farmland has been changed to include additional discussion of Williamson Act properties and partial cancellation of the contracts. It was not feasible to avoid Williamson Act parcels, however, the partial acquisition from parcels under contract will not reduce any parcel below the minimum size required to remain under contract. Once the project is approved and the exact acreages of land to be converted have been determined, notification will be made to the Director of the Department of Conservation.

Response to comment 2: Section 2.1.1 Farmland has been changed to include additional discussion regarding the project being required to comply with the public acquisition process per GC §51291 or Caltrans will need to submit a petition for partial cancellation to Fresno County for the land that is required for the project.

Response to comment 3: Caltrans will provide the Department of Conservation with any Board of Supervisors resolutions pertaining to this project.

Comments from the Department of Water Resources

From: Farley, Stuart (Greg)@DWR
Sent: Friday, March 27, 2015 4:50 PM
To: Ray, Michelle@DOT
Cc: Romero, Paul@DWR; Bannister, Joshua@DWR; Alvarez, Ted@DWR
Subject: SR 269 Bridge Project Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment

Michelle Ray,

With this email we are transmitting to you the comments on the subject study from the Hydrology, Hydraulics and Flood Management Section of the South Central Regional Office of DWR. We have reviewed the subject study and offer the following comment with regard to the last paragraph on page 17:

The current wording in the study is; “The Flood Insurance Rate Map designates the project area as Zone AO (Areas of 100-year flood). AO is defined as an area where average flood depths of 1 to 3 feet have been determined.” This is not correct. Under the Fresno County Flood Insurance Rate Maps (FIRMs) panel numbers 06019C3100H and 0619C3255H, dated 02/18/09, the project is located in a Flood Zone A. No depth of Base Flood Elevation (BFE) is provided. Zone A is defined as no Base Flood Elevation determined.

Besides this one correction, we take no exceptions to the study and look forward to continuing to work with the design team on this worthwhile project. Thank you for the opportunity to review the SR 269 Bridge Project Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment.

Greg

S. Greg Farley, P.E., Senior Engineer
California Department of Water Resources
South Central Region Office
Chief, Hydrology, Hydraulics and Flood Management Section
3374 East Shields Avenue, Room A-22
Fresno, CA 93726
Phone (559) 230-3358 Fax (559) 230-3301
Email sfarley@water.ca.gov
Web Site <http://www.water.ca.gov>

Response to Comments from the Department of Water Resources

Thank you for your comments on the project.

Response to comment 1: It has been determined that the project is located in both Flood Zone AO and Flood Zone A as shown on Flood Insurance Rate Map (FIRM) #06019C3255H and FIRM #06019C3100H, dated February 18, 2009. Zone AO (post miles 10.4 to 12.227) is defined as an area with “Flood Depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan folding, velocities also are determined. Zone A (Post Mile 12.227/12.5) is defined as No Base Flood Elevations determined.

Section 2.3.1 Hydrology and Floodplain has been amended to include the clarification regarding the flood zones. An addendum to the Location Hydraulic Study is identified in the memorandum attached to the study in the technical appendices of the final environmental document.

Comments from Darrick J. Walker, Property Owner

Hi Jeff,

Thank you for your time last week on the phone. Recall, I am the owner of parcel #068-111-62s which owns the well on the east side of Lassen Ave about 1/2 mile south of 198 (please see attached image)

There are several issues which need to be address before the route 269 project gets off the ground.

1. With the ongoing drought, the well I have gets used 10 months out of the year. I cannot have any down time or my young trees could die from lack of water.

1

2. My neighbor to the west (Arroyo 315 LP c/o Rudy Hernandez see yellow line going under Lassen Ave) and I have a long term well agreement in place where I transport water through the pipeline under the road for irrigation 6-8 months out of the year. He too, cannot have any down time or his pistachio trees could die.

2

3. There is an existing pipe under Lassen Ave (see yellow line) which has been used to transport water to the neighboring property for at least 40 years and cannot be disrupted.

4. The blue line represents my farm access road which is used daily, (1) during harvest; (2) to bring in needed chemicals and supplies from vendors; (3) for tractors to spray and harvest the outside row and to be able to turn around; (4) diesel and water truck access; (5) PG&E and Westlands Water District access; and (6) ranch foreman and other W5 Ranches employees or agents. Part of the 269 construction documents suggested that you would be buying .68 acres of my ranch. Perhaps I would grant an easement?

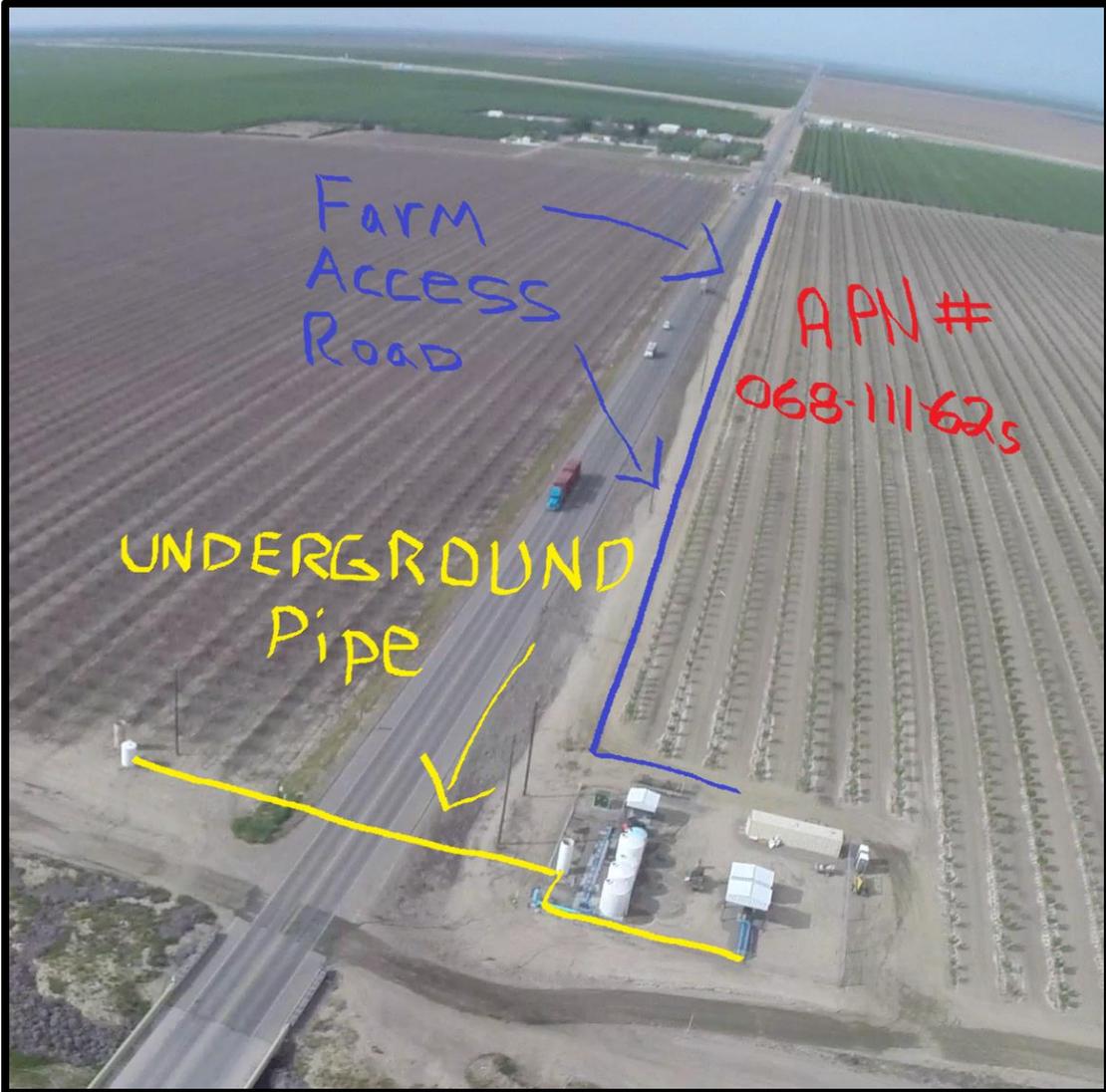
3

The issues for me and my neighbor are to **not disrupt** the access road, the well, or PG&E's power to the well or the underground pipeline.

Please confirm receipt of this transmission and I will also mail a hard copy to you and Michelle and I look forward to coming to a mutually agreeable solution.

Darrick J. Walker
B & D Walker Farms
W4 Ranches
Jackson Hole, Wyoming
(307) 699-1031





Response to Comments from Darrick J. Walker

Thank you for your comments on the project.

Response to comment 1: The project design has been changed to include a retaining wall that will avoid impacts to the water well site and irrigation system. The well production will not be interrupted during construction of the State Route 269 project.

Response to comment 2: The project design has been changed to avoid impacts to the distribution pipeline under State Route 269 serving the Arroyo 315 LP property. The distribution pipeline will not be interrupted during construction of the State Route 269 project. If needed, a new pipeline under State Route 269 will be constructed to current standards.

Response to comment 3: The project design has been changed to minimize the amount of right-of-way that that would be acquired along the farm road. The project will provide for continued access as needed for farming operations and others that use the road both during and after construction.

Comments from Rudy Hernandez, Property Owner

From: rudy [mailto:rudy@fivestarharvesting.com]
Sent: Monday, March 23, 2015 9:05 PM
To: Sorensen, Jeff@DOT
Cc: Ray, Michelle@DOT; Bretz, Neil E@DOT; Marcos, Manny T@DOT
Subject: RE: HWY 269 land owned by W5 Ranches

Jeff,

I am the neighbor (Arroyo 315) mentioned in the emails. Attached are the documents I received. I am unclear as to the exact scope of this project and the purported effect on my property. There appears to be a proposal to purchase parts of my property, I would like clarity on which particular area is marked for the temporary and permanent acquisitions.

Would you be able to provide a better map depicting this area, then be available to answer questions?

Thank you,

Rudy Hernandez
Managing Partner
Arroyo 315

1

Response to Comments from Rudy Hernandez

Thank you for your comments on the project.

Response to comment 1: The project plans are being revised to minimize the impacts to the adjacent properties. Acquisitions will be minimized to the extent feasible. Compensation will be provided for permanent acquisitions and temporary easements that are necessary for the project.

Appendix J U.S. Fish and Wildlife Service Letter of Concurrence



In Reply Refer to:
08ESMF00-
2014-I-0520

United States Department of the Interior

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



JUN 16 2015

Ms. Dena Gonzalez
Chief, Central Region Biology Branch
California Department of Transportation, District 6
855 M Street, Suite 200
Fresno, California 93721

Subject: Informal Consultation for the State Route 269 Bridge Project, Fresno County, California (California Department of Transportation 06-FRE-269-PM 10.51-12.47; EA 06-39460)

Dear Ms. Gonzalez:

This is the U.S. Fish and Wildlife Service's (Service) response to the California Department of Transportation's (Caltrans) letter requesting the initiation of informal consultation on its action to construct the proposed State Route 269 Bridge Project (project) in Fresno County, California.

The Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law on July 16, 2012. Caltrans was approved to participate in the MAP-21 Surface Transportation Project Delivery Program through the National Environmental Policy Act (NEPA) assignment Memorandum of Understanding (MOU) between the Federal Highway Administration (FHWA) and Caltrans (effective October 1, 2012), as codified in 23 U.S.C. 327. The MOU allows Caltrans to assume the FHWA's responsibilities under NEPA as well as FHWA's consultation and coordination responsibilities under Federal environmental laws for the majority of transportation projects in California.

We received Caltrans' initial February 27, 2015 letter in this office on March 2, 2015, along with its *State Route 269 Bridge Project Biological Assessment (BA)*, dated February 2015. In this letter, Caltrans determined that the proposed project will have no effect on the federally-listed as endangered California jewelflower (*Caulanthus californicus*) and the Fresno kangaroo rat (*Dipodomys nitratoides exilis*); Caltrans also determined that the proposed project may affect, but is not likely to adversely affect the federally-listed as endangered blunt-nosed leopard lizard (*Gambelia sila*), the giant kangaroo rat (*Dipodomys ingens*), the Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*), and the San Joaquin kit fox (*Vulpes macrotis mutica*). Following discussion with the Service, Caltrans sent a subsequent revised letter, dated February 27, 2015, which we received in this office, also on March 2, 2015. In this revised letter, Caltrans added a species that inadvertently had been omitted from the original letter and determined that the proposed project may affect, but is not likely to adversely affect the federally-listed as endangered San Joaquin woolly-threads (*Monolopia congdonii*). Following further

communications, Caltrans sent the Service, on May 27, 2015, an electronic copy of its revised BA, dated May 2015.

This document has been prepared in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*) (Act). The findings and recommendations of this document are based on: (1) Caltrans' February 27, 2015 original and revised letters and its supporting BA and revised BA; (2) email correspondence between the Service and Caltrans; and (3) other information available to the Service.

Project Description

Approximately 1-mile (mi) north of the town of Huron in southwestern Fresno County, Caltrans proposes to conduct bridge and roadway construction activities along an approximately 2-mi segment of State Route (SR) 269 (post-miles [PM] 10.51-12.47). The highway passes through the Westside Detention Basin (WDB), which is a 3,324 acre (ac) parcel owned by the United States Bureau of Reclamation and operated by the California Department of Water Resources (CDWR). The WDB was created to alleviate flood threats from the Arroyo Pasajero Creek to the town of Huron and the California Aqueduct that borders the eastern side of the WDB property. SR 269 transects the Arroyo Pasajero Creek channel. Consequently, the highway is subject to flooding during high-flow events within the creek, and subsequently can become impassable, suffer erosion damage, and become a depository for sediment that necessitates removal. To address these issues, Caltrans proposes to construct a bridge over the Arroyo Pasajero channel, and make several further improvements to SR 269 in order to allow uninterrupted use of the highway as well as to meet current design standards.

Bridges and Roadway

Caltrans proposes to build the new bridge over the Arroyo Pasajero channel between PM 11.153 and 11.247. The bridge will measure approximately 500-feet (ft.) long by 42-ft., 10-inches wide, and will be constructed with two abutments. Trenching for the foundations will measure 2-ft. deep by 12-ft. wide by 40-ft. long, with piles driven in to support the bridge deck. The maximum excavation depth at the bridge site will be 20-ft. The bottom of the new bridge deck will be approximately 10-ft. above the existing ground level. The new structure will accommodate 100-year flood levels.

Caltrans also proposes to construct a second new bridge at PM 11.1, located approximately 580-ft. south of the new Arroyo Pasajero Bridge. This much smaller bridge will measure 20-ft. long with 15-ft. of clearance, and will be designed to 1) release runoff that may become trapped by the bank of the Arroyo Pasajero channel and the road, and 2) allow maintenance vehicles to pass from one side of SR 269 to the other without impeding traffic.

In addition to the two new bridges, an existing bridge (No. 42-0376), at PM 12.21 will be replaced with a new 110-ft. long by 42-ft., 10-inch wide structure. This bridge will allow 3-ft. of additional freeboard (the clearance between the lower limit of the bridge structure and the high water surface elevation).

The bridge structures will accommodate two 12-ft. lanes and two 8-ft. shoulders and will conform to the width of the neighboring segments of existing highway. Caltrans proposes to raise the existing highway profile (using fill) by an average of 10-ft. along the approximately 2-mi project extent. Raising the profile will necessitate the widening of the highway. With side slopes at 4:1, an average

10-ft. raise will result in 40-ft. of additional width on either side of the highway. Combined with the 40-ft. of paved surface, the new roadbed will measure approximately 120-ft. in width.

Additional Project Features

1. At the new bridge site over the Arroyo Pasajero channel, Caltrans proposes to construct two new training dikes to direct the water under the structure through a single channel. The preliminary size of the channel is expected to be 452-ft. wide and 6-ft. deep, with a training dike located at the north and south ends of the channel, each measuring 6-ft. high and 20-ft. wide; side slopes will be at 4:1. Each dike will extend approximately 540-ft. west (upstream) of the new bridge abutments and approximately 50-ft. east (downstream) of the abutments. Caltrans will excavate and/or construct banks above the existing ground level, and apply rock slope protection (RSP) to protect the channel-side bank of the training dikes.
2. Located immediately north of the new bridge over the Arroyo Pasajero Creek channel, Caltrans proposes to remove an existing flow channel and an associated set of 18-inch diameter culverts within a concrete box that run under SR 269. All flows will be directed through the single channel under the new Arroyo Pasajero Creek Bridge.
3. To accommodate traffic during construction, Caltrans proposes to build a temporary road along the west side of the existing highway. Two 12-ft. lanes and two 4-ft. shoulders will be constructed for a total width of 32-ft. There will be no temporary bridge. However, temporary piping will be installed at the training dikes in order to manage roadway drainage.

K-rail

Temporary standard k-rail barriers likely will be installed at both the north and south ends of the project site in order to direct traffic off the main road and onto the temporary detour road, and off the temporary road and onto the main road again. An approximately 360 linear-ft. segment of k-rail will be placed at each end of the project site on the side abutting the work area. K-rail is a traffic control safety measure used to separate the construction areas from the roadways and vehicle traffic. The structures are likely to be present for the duration of construction given that the detour road will not be removed until all major work on SR 269 is completed.

Fill

Approximately 68,000 cubic yards of fill will be needed for the project. Fill will be sloped down to the catch point beyond the existing edge of the traveled way. The catch point is defined as the intersection of a cut/fill slope and the natural ground. The placement of the fill will require construction vehicles to work outside the existing traveled way. Prior to construction, the contractor will be responsible for the selection and environmental compliance of the selected borrow site from which fill material will be imported to the project area. Caltrans has identified a potential borrow site and temporary spoil stockpile located 0.5-mi west of the SR 269 alignment within the CDWR's WDB property; the site is situated in the northeast quadrant of the intersection of West Mitchell Avenue and South Trinity Avenue. The material at this location will need to be tested to determine its suitability for fill.

Caltrans proposes to begin construction in the summer of 2017 and to finish in the fall of 2019. No night work is anticipated to occur.

The contractor will follow Best Management Practices during construction. Dust control measures will be implemented as part of the project. Equipment parking, project access, equipment maintenance, and other project-related activities will occur within temporary construction easements. Areas that are temporarily affected will be re-contoured and re-vegetated once the project is completed. Caltrans has indicated that designated staging areas for equipment storage and vehicle parking will be pre-approved by a Caltrans biologist. For the purpose of this project, all staging areas will occur within the project footprint, as described on pages 5-6. Any location the contractor uses that is outside this area will need to be evaluated and may require Caltrans either to revise its informal consultation or initiate formal consultation.

Avoidance and Minimization Measures

Caltrans will implement the following measures to reduce the potential for adverse effects to the species.

San Joaquin woolly-threads

1. Caltrans will conduct preconstruction botanical surveys of the project footprint, plus an additional 100-ft. area outside the footprint using the California Department of Fish and Wildlife's (CDFW) *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities*, dated November 24, 2009, or the most recent guidelines.
2. If the species is observed on-site, Caltrans will notify the Service to discuss any additional conservation measures that should be implemented.

Blunt-nosed leopard lizard

1. Caltrans will conduct pre-construction surveys of the project footprint, plus an additional 200-ft. area outside the footprint using the CDFW's May 2004 *Approved Survey Methodology for the Blunt-nosed Leopard Lizard* in the year prior to the start of construction. The CDWR also plans to conduct surveys for the species in 2015 and 2016. In order to avoid duplication of effort, Caltrans' and the CDWR's proposed survey areas will not overlap. The two agencies plan to coordinate and share data concerning these future surveys. If the species is found within the project area by either agency, Caltrans will contact the Service to discuss measures to avoid take of the blunt-nosed leopard lizard.
2. A qualified biologist(s) will be on-site during initial ground-disturbing activities.
3. Caltrans will enforce low speed limits (maximum 10 mph) within the project area, which will reduce the risk that the blunt-nosed leopard lizard is run over by construction vehicles/equipment.

Giant kangaroo rat & Tipton kangaroo rat

1. Trapping surveys will be conducted no more than 30 days prior to construction. If occupied suitable habitat is observed during the surveys, Caltrans will discuss the implementation of avoidance measures with the Service.

2. A qualified biologist(s) will be on-site during initial ground-disturbing activities. If either of the two species is detected and requires removal from the project site, the biologist(s) must hold a section 10(a)(1)(A) permit for the particular kangaroo rat species identified.

San Joaquin kit fox

1. Preconstruction surveys will be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities. Surveys for the San Joaquin kit fox and its dens will be performed throughout the project footprint as well as within 200-ft. of the footprint.
2. A qualified biologist(s) will conduct an environmental awareness training program for all construction personnel, covering the status of the San Joaquin kit fox, the importance of avoiding impacts to the species, and the penalties for not complying with minimization requirements. New construction personnel who are added to the project after the training is first conducted also will be required to take the training.
3. A qualified biologist(s) will be present on-site during initial ground-disturbing activities. To the extent possible, the biologist(s) also will be available on-call when not present on-site.
4. Disturbance to all San Joaquin kit fox dens will be avoided to the maximum extent possible.
 - a. Potential and atypical dens that are located at least 50-ft. from construction will be protected with a 50-ft. zone. Known dens that are located at least 100-ft. from construction will be protected with a 100-ft. zone. In instances where 50-ft. or 100-ft. exclusion zones cannot be maintained, potential and/or known dens will be monitored; once these dens are verified to be unoccupied, they will be blocked temporarily (via sandbagging or installation of a one-way door) for the duration of the project.
 - b. If a natal/pupping den is discovered either within the project footprints or within 200-ft. of the footprint, Caltrans will notify the Service immediately.
5. All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed daily from the project site in order to reduce the potential for attracting predator species.
6. No pets or firearms will be allowed on the project site.

Action Area

The action area is defined in 50 CFR § 402.02, as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." The action area is composed of the project footprint (or construction impact area), which encompasses 1) the approximately 2-mi segment of SR 269, including adjacent strips of agricultural lands, annual grasslands, ruderal areas, bare channel, saltbrush scrub, and tamarisk scrub, in which bridges will be constructed, the highway raised and widened, a temporary detour road built, and other roadway

improvements carried out; 2) an approximately 950-ft. (north-south axis) by 700-ft. (east-west axis) area of the Arroyo Pasajero Creek channel associated with the new bridge site, new training dikes, and removal of the culvert-based secondary flow channel; and 3) the approximately 1,050-ft. wide by 2,100-ft. long proposed borrow and temporary spoil stockpile site located 0.5-mi west of SR 269. The action area also includes land extending approximately 200 ft. from the edge of the footprint, which will experience further-reaching effects of construction activities such as noise and visual disturbance.

Effects Analysis

The proposed project will take place within the WDB. The lands comprising this property used to be cultivated, but were then allowed to go fallow (mainly due to the presence of saline soils); since then, they have recovered to a semi-natural, though degraded state (due to the high degree of invasive plant species inhabiting the property, as well as disturbances resulting from periodic fires, sediment removal, and off-highway vehicle recreation). The Arroyo Pasajero is the only watercourse present within the action area; it is an ephemeral stream channel that is normally dry, but occasionally experiences flood flows in response to heavy rain events. Construction activities will impact multiple habitat/vegetation types, including saltbrush scrub, tamarisk scrub, Great Valley cottonwood riparian forest, ruderal land, bare channel, and Waters of the United States (WOUS). The WDB is surrounded in all directions by a broad expanse of agricultural croplands, so the property has no connection to neighboring areas containing habitat types that are likely to be more suitable for the species.

Surveys

According to the California Natural Diversity Database (CNDDB, 2015)¹, there are no records of the San Joaquin woolly-threads, blunt-nosed leopard lizard, giant and Tipton kangaroo rats, or San Joaquin kit fox within the action area. Caltrans conducted a reconnaissance survey of the site on December 20, 2012, but did not conduct any specific surveys for these species since the CDWR had already conducted extensive past surveys for them throughout the WDB property. The areas over which these surveys were performed overlap, in part, with the current project action area.

Focused botanical surveys were conducted by the CDWR in 2003, with more generalized plant surveys carried out concurrently with other species surveys from 1999 to 2002. No San Joaquin woolly-threads were detected on-site during those efforts. The closest CNDDB record for the species lies south of the action area, approximately 1-air mile from the SR 269/Arroyo Pasajero channel intersection; however, the record is extremely old (it dates from 1893) and identifies the population as “possibly extirpated.” Given the results of the surveys, the age and status of the only CNDDB record in proximity to the project site, the degraded state of the habitat, and the abundance of invasive species in the area, the potential for the San Joaquin woolly-threads to occur in the action area is very low.

Protocol-level surveys for the blunt-nosed leopard lizard were performed by the CDWR between 2000 and 2003 and again between 2008 and 2012. Large portions of the action area, including the Arroyo Pasajero channel and areas to the east and west of SR 269 were included in these surveys. No individuals were ever detected during these nine years of surveys. The closest CNDDB observation of the species was recorded approximately 8.5-air miles southwest of the

¹ California Natural Diversity Database. 2015. Natural Heritage Division, California Department of Fish and Wildlife. RareFind 5. Sacramento, California. Accessed April 9, 2015.

SR 269/Arroyo Pasajero channel intersection and dates from 1979. Extensive parts of the WDB are not considered to be suitable habitat for the blunt-nosed leopard lizard due to dense growths of invasive plant species such as Russian thistle (*Salsola tragus*). This is particularly true for the proposed borrow/temporary stockpile site. Given the results of the surveys, the absence of known occurrences in proximity to the project site, and the degraded quality of the habitat, the potential for the blunt-nosed leopard lizard to occur in the action area is very low.

Small mammal trapping surveys were conducted by the CDWR within multiple areas of the WDB from 1999 to 2003. Species detected included the deer mouse (*Peromyscus maniculatus*), California pocket mouse (*Chaetodipus californicus*), and Heerman's kangaroo rat (*Dipodomys heermanni*). However, no giant or Tipton kangaroo rats were observed or caught during this period. Neither did Caltrans observe any listed individuals or signs of occupancy during its December 2012 reconnaissance survey, nor during its raptor surveys in 2013 and 2014. The closest CNDDDB record for the giant kangaroo rat is from 1967 and is located approximately 23.3-air miles northwest of the SR 269/Arroyo Pasajero channel intersection, while the closest CNDDDB record for the Tipton kangaroo rat is located approximately 16-air miles east of this intersection and dates from 2008. Given the results of the surveys, the condition of the site, as well as there being no detections of the species in proximity to the project area, the potential for either the giant kangaroo rat or the Tipton kangaroo rat to occur in the action area is very low.

Spotlighting and camera station surveys for the San Joaquin kit fox were performed by the CDWR throughout the WDB in 2001 and 2003. Only one possible, though unconfirmed, sighting of the species was made during spotlighting efforts; no photos of the San Joaquin kit fox were taken by the camera stations. The closest CNDDDB observation of the species was recorded in 1981 along the California Aqueduct, approximately 3.5-air miles southeast of the SR 269/Arroyo Pasajero channel intersection. On January 28, 2014, while conducting burrowing owl surveys at the project site, Caltrans identified four potential San Joaquin kit fox dens. Three of these were clumped together on the west side of SR 269, approximately 700-ft. south of the existing bridge that will undergo replacement. The fourth was located approximately 1,600-ft. west of the proposed new bridge site, south of the Arroyo Pasajero. Only two of the four potential dens (those near the existing bridge) were located within the project footprint. Caltrans detected no other sign, such as tracks, scat, or prey remains that indicated the San Joaquin kit fox was present. In fact, none of the potential dens appeared to show any recent occupancy. Because there is an abundance of small mammal burrows, tracks, and gopher mounds throughout much of the WDB, there may be some potential for the San Joaquin kit fox to move through the project area in order to forage; however, due to the impaired quality of the habitat and the condition of the potential dens, the likelihood of the San Joaquin kit fox denning in the action area is low.

Habitat Impacts and other Construction Effects

The proposed project is expected to affect a total of 67.12 ac. Of this total, construction will permanently remove approximately 13.74 ac of land as a result of raising and widening the profile of SR 269, constructing the new bridge over the Arroyo Pasajero, building the new training dikes, and removing the existing flow channel and associated culverts that run under SR 269. The permanently affected area is composed of ruderal land, saltbrush scrub, Great Valley cottonwood riparian forest, bare channel, tamerisk scrub, annual grassland, and WOUS; of the total amount of permanently affected land, 11.33 ac provide potential habitat for the blunt-nosed leopard lizard, giant and Tipton kangaroo rats, and San Joaquin kit fox (ruderal, saltbrush scrub, tamerisk scrub, and annual grassland); 5.42 ac are considered to be suitable for the San Joaquin woolly-threads (ruderal and saltbrush scrub).

The proposed project also is expected to temporarily disturb approximately 30.08 ac of land as a result of constructing the new bridge, building the new training dikes, and installing and breaking-down the detour road. The temporarily affected area is composed of ruderal land, saltbrush scrub, Great Valley cottonwood riparian forest, bare channel, and WOUS; of the total amount of temporarily affected land, 28.86 ac provide potential habitat for the blunt-nosed leopard lizard, giant and Tipton kangaroo rats, San Joaquin kit fox, and the San Joaquin woolly-threads (ruderal and saltbrush scrub). Because it is unlikely that any of the five species is present in the action area, both the loss of and disturbance to this potential habitat will be unlikely to result in adverse effects to the species. There will be 23.3 ac of additional temporary impacts to an area of ruderal habitat encompassing the proposed borrow/temporary spoil stockpile site. However, Caltrans does not consider this area to be potential habitat for any of the species since it contains an extremely dense cover of Russian thistle, as well as other weedy vegetation.

With the implementation of the proposed avoidance and minimization measures such as preconstruction surveys, personnel training, monitoring, low speed limits, and den exclusion zones, adverse effects from project-related equipment/vehicle strikes are unlikely to occur.

Temporary K-rail Barriers

Caltrans is likely to use temporary standard k-rail barriers on the project site as a means of traffic control and safety. Although they function as impermeable concrete features, their presence will be unlikely to adversely affect the San Joaquin kit fox because: 1) the project area is located outside of the San Joaquin kit fox core, satellite, and linkage recovery areas (Service, 2010)²; and 2) habitat quality within the action area is heavily degraded and therefore is likely to be less suitable for the species.

Determination

Caltrans has concluded that the project may affect, but is not likely to adversely affect the San Joaquin woolly-threads, blunt-nosed leopard lizard, giant kangaroo rat, Tipton kangaroo rat, or San Joaquin kit fox. This determination is based on the results of previous surveys, the absence of known species occurrences in the vicinity of the action area, the impaired quality of habitat, and the conservation measures proposed to minimize potential effects to the species.

After reviewing Caltrans' revised letter, revised BA, and engaging in further correspondence with Caltrans, the Service concurs that it is reasonably likely that effects to individual San Joaquin woolly-threads, blunt-nosed leopard lizards, giant and Tipton kangaroo rats, and San Joaquin kit foxes will be discountable, and that effects to habitat for the species will be insignificant; the action, therefore, is not likely to adversely affect these five species.

Closing Statement

This concludes the Service's review of Caltrans' action to construct the State Route 269 Bridge Project and the Service's consideration of the project's effects on the San Joaquin woolly-threads, blunt-nosed leopard lizard, giant kangaroo rat, Tipton kangaroo rat, and San Joaquin kit fox. No further coordination with the Service under the Act is necessary at this time. Note that take of listed species is not exempted from the prohibitions described under section 9 of the Act. If

² U.S. Fish and Wildlife Service. 2010. San Joaquin Kit Fox (*Vulpes macrotis nuntica*) 5-Year Review: Summary and Evaluation. Sacramento Fish and Wildlife Office, Sacramento, California. 122 pp.

Ms. Dena Gonzalez

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conditions change so that the project may adversely affect listed species, initiation of formal consultation, as provided in 50 CFR § 402.14, is required.

If you have questions regarding this letter, please contact Jen Schofield, Wildlife Biologist (Jen_Schofield@fws.gov), or me (Thomas_Leeman@fws.gov), at the letterhead address, at (916) 414-6600, or by email.

Sincerely,



Thomas Leeman
Chief, San Joaquin Valley Division

cc:

Craig Bailey, California Department of Fish and Wildlife, Fresno, CA

Appendix K Project Photos and Mapping

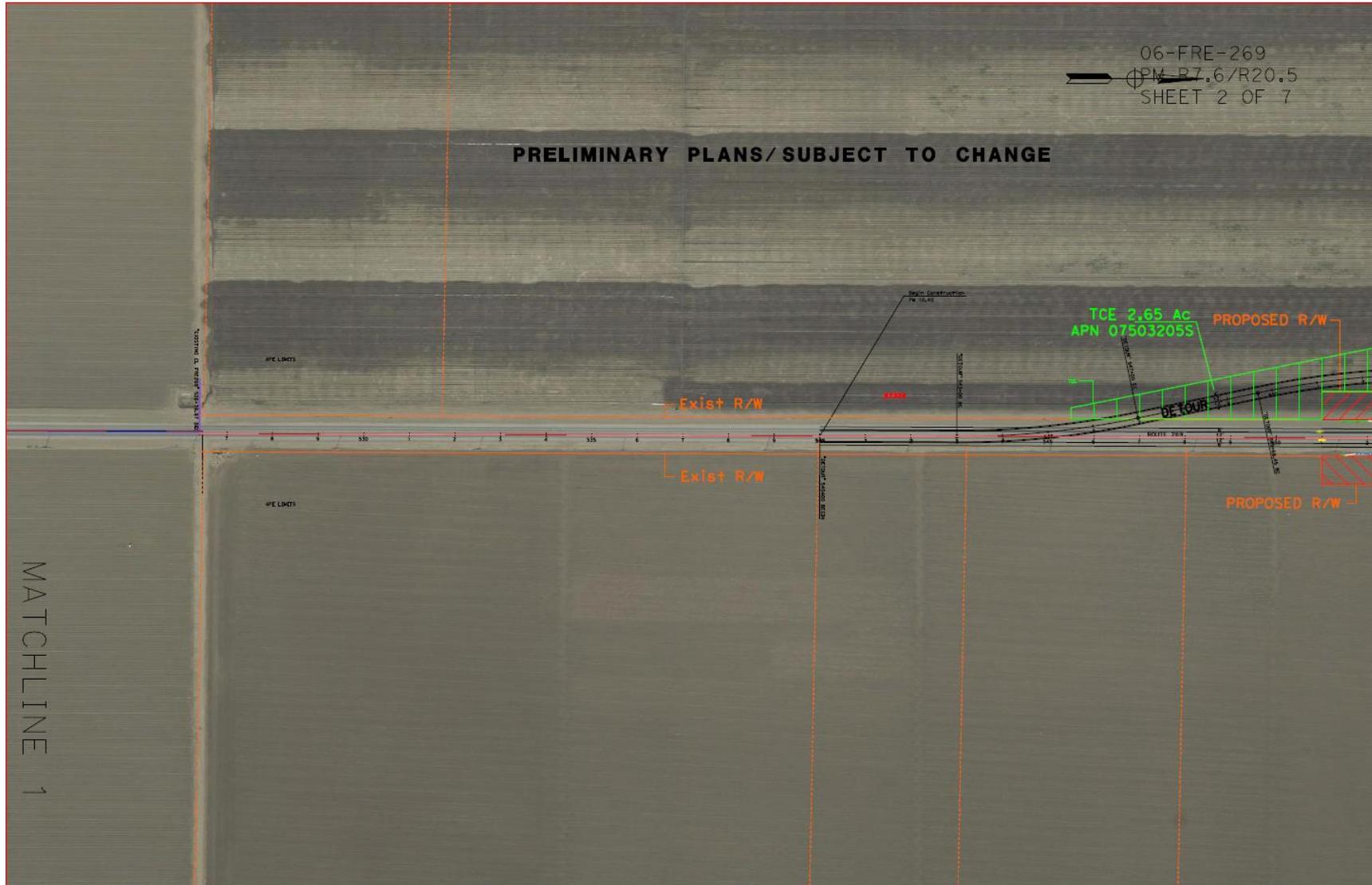
Photo 1. Flood Channel of Arroyo Pasajero at new bridge site, looking west.

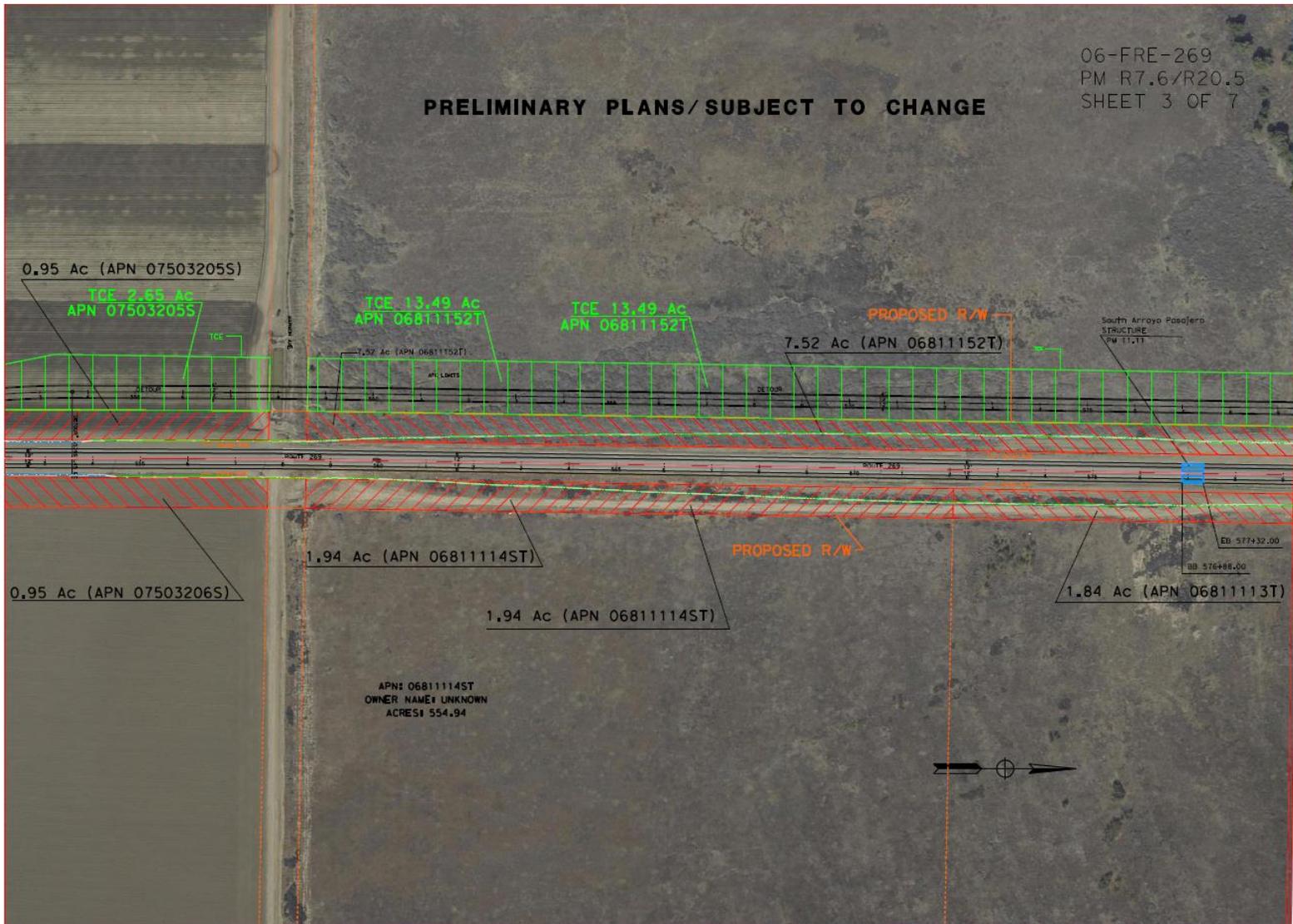


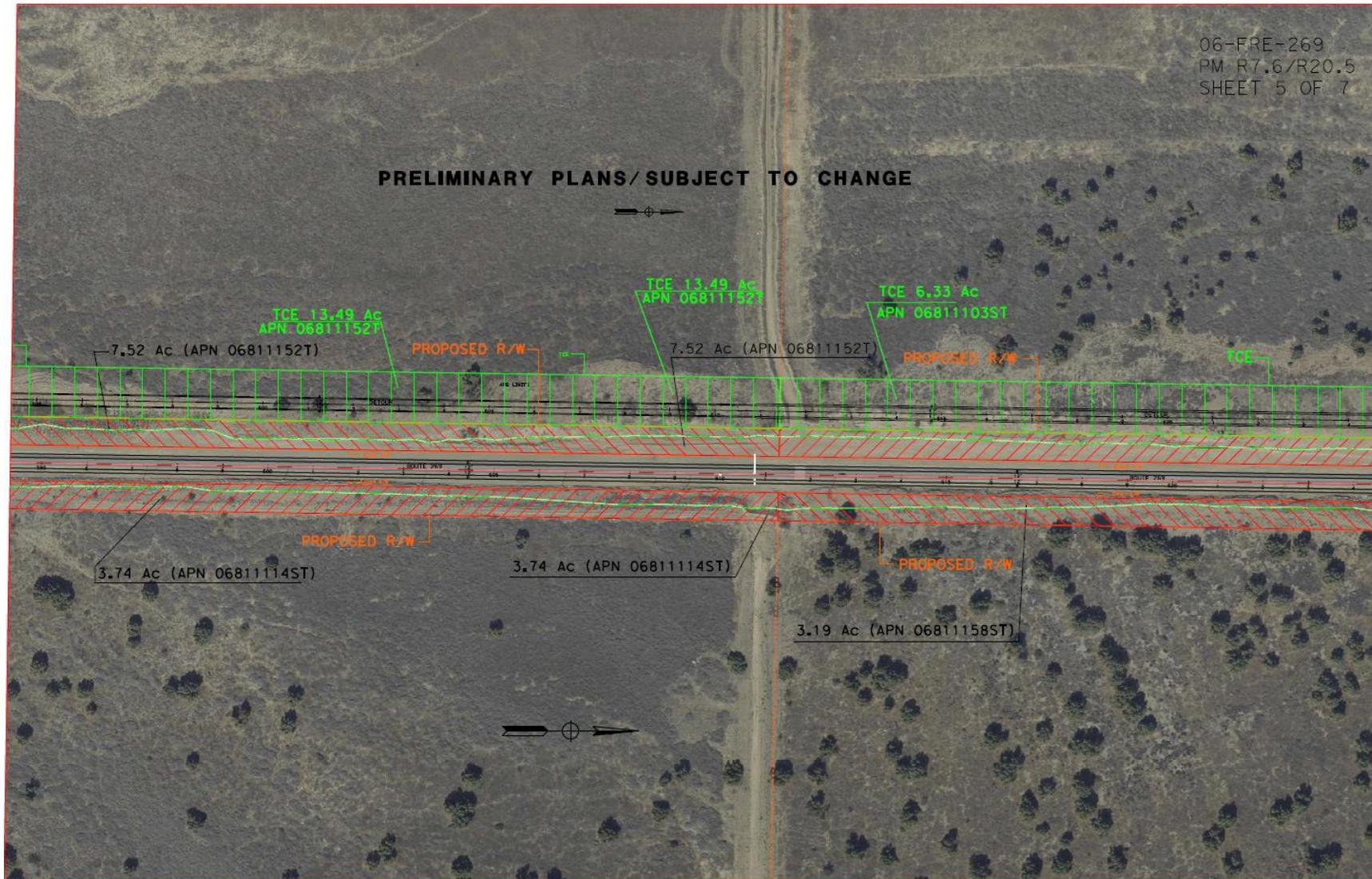
Photo 2: State Route 269, looking north from near the north side of the Arroyo Pasajero channel.













List of Technical Studies

- Air And Noise Study, September 2014
- Water Quality Assessment Report, September 2014
- Natural Environment Study, December 2014
- Addendum to Location Hydraulic Study, April 2015
- Location Hydraulic Study, July 2014
- Floodplain Evaluation Summary, August 2014
- Historic Property Survey Report, November 2014
 - Archaeological Survey Report, November 2014
- Hazardous Waste Reports
 - Initial Site Assessment memo, December 2012
 - Preliminary Site Investigation Results memo, May 2014
 - Naturally Occurring Asbestos Survey, May 2014
 - Asbestos and Lead Containing Paint Survey Report, May 2014
 - Aerially Deposited Lead and Naturally Occurring Asbestos Site Investigation Report, May 2014
- Scenic Resource Evaluation/Visual Assessment, October 2014
- Paleontological Identification Report, September 2014