

# **Chumash Drainage Repair Project**

At Santa Ynez

From 0.1 mile east of Via Juana Lane to 0.1 mile west of Cuesta Street

05-SB-246-PM 32.5-32.7

05-1A170/0512000028

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



January 2015



The California Department of Transportation (Caltrans) proposes to replace an existing drainage pipe that crosses under the roadway and repair an eroded slope at the outlet of two existing drainage pipes on State Route 246 from post miles 32.5 to 32.7, at Santa Ynez, from 0.1 mile east of Via Juana Lane to 0.1 mile west of Cuesta Street

**INITIAL STUDY  
with Proposed Mitigated Negative Declaration**

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

THE STATE OF CALIFORNIA  
Department of Transportation

1/28/2015  
Date of Approval

  
Kirsten Helton  
Senior Environmental Planner  
California Department of Transportation  
CEQA Lead Agency

The following person may be contacted for additional information about this document:

Kirsten Helton  
Senior Environmental Planner  
855 M Street, Suite 200  
Fresno, CA 93721  
(559) 445-6461

## **Proposed Mitigated Negative Declaration**

Pursuant to: Division 13, Public Resources Code

### ***Project Description***

The California Department of Transportation (Caltrans) proposes to replace an existing drainage pipe that crosses under the roadway and repair an eroded slope at the outlet of two existing drainage pipes. The project is located on State Route 246 from post miles 32.5 to 32.7, at Santa Ynez, from 0.1 mile east of Via Juana Lane to 0.1 mile west of Cuesta Street.

### ***Determination***

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

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

The proposed project would have no effect on existing and future land use, consistency with state, regional, and local plans and programs, plant species, coastal zone, wild and scenic rivers, parks and recreational facilities, growth, farmlands/timberlands, hydrology and floodplain, community impacts, air quality, community character and cohesion, relocations and real property acquisition, environmental justice, paleontology, water quality, noise, geology/soils/seismic/topography, hazardous waste/materials, traffic and transportation, pedestrian and bicycle facilities, or utilities/emergency services.

In addition, the proposed project would have no significant adverse effect on visual/aesthetics, cultural resources, biology, and wetlands and other waters of the U.S. because the following mitigation measures would reduce potential effects to insignificance:

#### ***Visual/Aesthetics***

- Plant and maintain 50 oak trees and appropriate riparian trees with a minimum one-year plant establishment period within the project limits south of the highway. The plants shall be planted in the most publicly visible locations possible considering safety requirements. The trees shall be planted in natural-appearing patterns that visually transition the project to the surrounding landscape.
- The new headwall at work location post mile 32.5 shall include architectural treatment to make it appear more natural and less noticeable from public viewing areas. The specific type of architectural treatment shall be developed in conjunction with a Caltrans Landscape Architecture representative.

### *Negative Declaration*

- Impacts to native oak trees greater than 6 inches in diameter at breast height (DBH) would be offset by replacement planting within the project limits. Replacement plantings would be achieved using a minimum 10:1 ratio for each oak tree removed (this is satisfied by the visual/aesthetics requirement to plant and maintain 50 oak trees south of State Route 246). Replacement plantings will be detailed in Caltrans' Landscape Architecture Landscape Planting Plan, in coordination with a biologist, with developed planting specifications to assure survival of the replacement trees.
- A minimum one-year plant establishment period will be required. Oak tree replacement areas will be delineated on project plans.

#### *Wetlands and Other Waters of the U.S.*

- Compensatory mitigation for impacts to state and federal jurisdictional waters is proposed at a 2:1 ratio for permanent impacts, and at a 1:1 ratio for temporary impacts.
- Where impacts to riparian vegetation will occur, the impacts will be offset primarily by restoration (re-establishment) and supplemented with enhancement.
- Prior to any ground-disturbing activities, environmentally sensitive area (ESA) fencing and/or flagging shall be installed around jurisdictional waters, and the drip line of trees to be protected within project limits. Caltrans-defined ESAs shall be noted on design plans.
- During construction, activities in jurisdictional waters shall be timed to occur between June 1 and October 15 in any given year, or as otherwise directed by the regulatory agencies, when the surface water is likely to be dry or at seasonal minimum. Deviations from this work window will only be made with permission from the relevant regulatory agencies.
- During construction, all project-related hazardous materials spills shall be cleaned up immediately. Readily accessible spill prevention and cleanup materials shall be kept by the contractor onsite at all times.
- During construction, erosion control measures shall be implemented. Silt fencing, fiber rolls, and barriers shall be installed as needed between the project site and adjacent waters. At a minimum, erosion controls shall be maintained by the contractor on a daily basis throughout the construction period.
- During construction, the cleaning and refueling of equipment and vehicles shall occur only within a designated staging area and at least 60 feet from Other Waters of the U.S., or other aquatic areas. The staging areas shall conform to Best Management Practices (BMPs) applicable to attaining zero discharge of storm water runoff. At a minimum, all equipment and vehicles shall be checked and maintained by the contractor on a daily basis to ensure proper operation and avoid potential leaks or spills.
- After construction, stream contours shall be restored as close as possible to original condition.

## *Negative Declaration*

- The project construction area shall be delineated with high-visibility temporary fencing, flagging, or other barrier to prevent encroachment of construction personnel and equipment onto any sensitive areas during project work activities. Such fencing shall be inspected and maintained daily until completion of the project and will be removed only when all construction equipment is removed from the site. No project activities shall occur outside the delineated project area.
- To protect migratory birds, any trimming/removal of trees and shrubs shall be scheduled to occur from September 1 to February 14, outside of the typical nesting bird season, to avoid potential impacts to nesting birds. Trimming/removal of trees and shrubs that must be scheduled to occur during the nesting season (February 15 to August 31) shall require a nesting bird survey by a qualified biologist at least two weeks prior to scheduled trimming/removal. If construction activities are proposed to occur within 100 feet of potential bird nesting habitat during the nesting season (February 15 to August 31) within the area, a nesting bird survey shall be conducted by a biologist determined qualified by Caltrans at least two weeks prior to construction. If active bird nests are found during required preconstruction surveys, readily visible exclusion zones where construction activity must be avoided shall be established by the District Biologist (using environmentally sensitive area (ESA) fencing, stakes and flagging, etc.) until it is determined that young birds have fledged (permanently left the nest).
- Active bird nests shall not be disturbed, and eggs or young birds covered by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code shall not be killed, destroyed, injured, or harassed at any time.

### *Threatened and Endangered Species*

- Trees to be removed shall be noted on design plans. Prior to any ground-disturbing activities, ESA fencing shall be installed around the drip line of trees to be protected within project limits.
- All clearing/grubbing and vegetation removal shall be monitored and documented by the biological monitor(s) regardless of time of year.
- If least Bell's vireo is observed within 100 feet of the Area of Potential Impact during the course of construction, a qualified biologist shall implement an exclusion zone and work shall be avoided within the exclusion zone until the least Bell's vireo is located greater than 100 feet from project-related disturbance. If an active least Bell's vireo nest is observed within 100 feet of the Area of Potential Impact, all project activities shall immediately cease and U.S. Fish and Wildlife Service and Caltrans shall be contacted within 48 hours. Caltrans shall then reinstate Federal Endangered Species Act Section 7 formal consultation with the U.S. Fish and Wildlife Service for least Bell's vireo nest and implement additional avoidance/minimization measures as necessary.

### *Invasive Species*

- During construction, the biological monitor(s) will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.
- Only clean fill shall be imported. When practicable, invasive exotic plants in the project site will be removed and properly disposed. All vegetation removed from the construction site shall be taken to a certified landfill to prevent the spread of invasive

## Table of Contents

Proposed Mitigated Negative Declaration.....	iii
Table of Contents .....	ix
List of Figures.....	x
List of Tables.....	x
<b>Chapter 1</b> Proposed Project .....	1
1.1 Introduction.....	1
1.2 Purpose and Need .....	4
1.2.1 Purpose .....	4
1.2.2 Need.....	4
1.3 Project Description .....	4
1.4 Project Alternatives.....	4
1.4.1 Build Alternative .....	4
1.4.2 No-Build (No-Action) Alternative .....	5
1.5 Permits and Approvals Needed.....	6
<b>Chapter 2</b> Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures .....	7
2.1 Human Environment.....	8
2.1.1 Visual/Aesthetics.....	8
2.1.2 Cultural Resources.....	10
2.2 Biological Environment.....	12
2.2.1 Natural Communities.....	12
2.2.2 Wetlands and Other Waters.....	17
2.2.3 Animal Species.....	20
2.2.4 Threatened and Endangered Species .....	27
2.2.5 Invasive Species .....	30
2.3 Climate Change.....	31
<b>Chapter 3</b> Comments and Coordination .....	43
<b>Chapter 4</b> List of Preparers.....	45
<b>Chapter 5</b> Distribution List.....	47
<b>Appendix A</b> California Environmental Quality Act Checklist.....	49
<b>Appendix B</b> Title VI Policy Statement.....	59
<b>Appendix C</b> Glossary of Technical Terms .....	61
<b>Appendix D</b> Minimization and/or Mitigation Summary .....	63
List of Technical Studies .....	69

# **Chapter 1**      **Proposed Project**

---

## **1.1 Introduction**

The California Department of Transportation (Caltrans), as the lead agency under the California Environmental Quality Act (CEQA), proposes to replace an existing drainage pipe that crosses under the roadway and repair an eroded slope at the outlet of two existing drainage pipes. The project is located on State Route 246, from post miles 32.5 to 32.7, at Santa Ynez, from 0.1 mile east of Via Juana Lane to 0.1 mile west of Cuesta Street (see Figures 1-1 and 1-2).

Within the project limits, State Route 246 is a rural, flat, undivided two-lane conventional highway with 12-foot lanes and 5-foot shoulder widths. The property surrounding the corridor at this location is primarily owned by the Santa Ynez Band of Chumash Indians.

This project is in the Minor A program with funding from the 201.150 (HA42) Roadway Protective Betterments program. It is estimated that the project will cost approximately \$997,200.

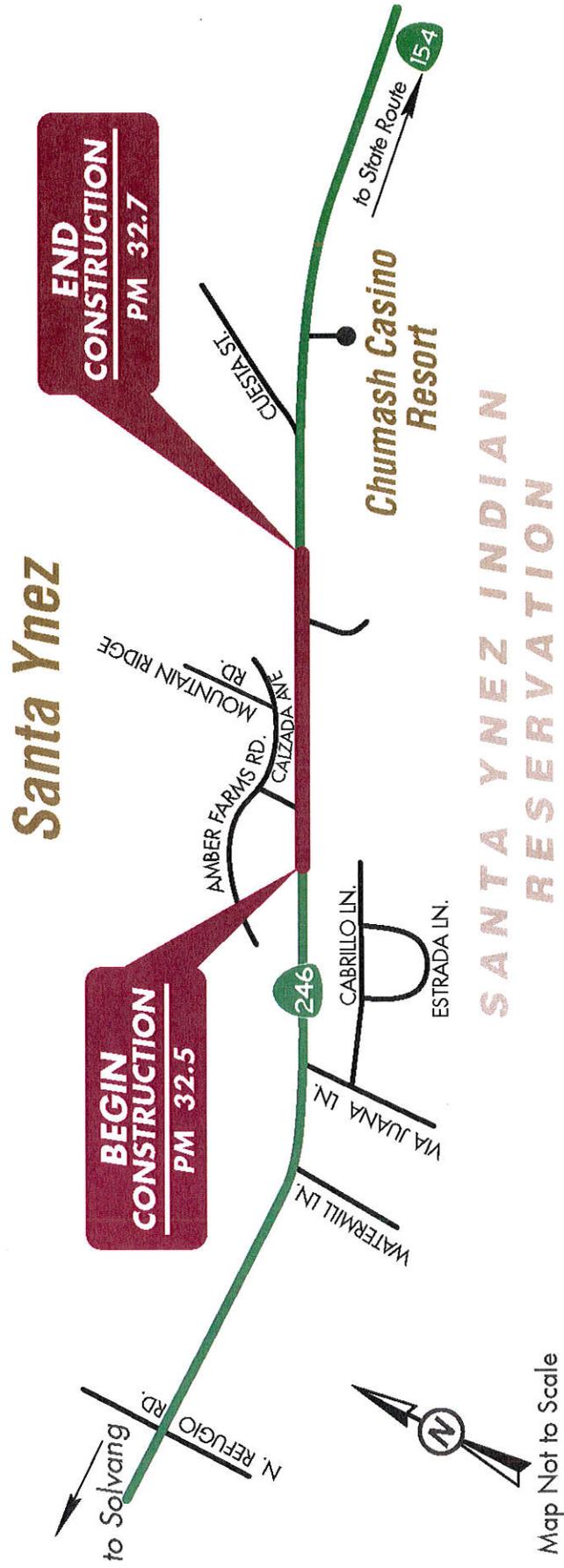


Figure 1-2 Project Location

Rock slope protection would be placed at both ends of the new culvert to dissipate hydraulic energy and reduce erosion. The rock slope protection at the inlet would be Light Class rock with an area of about 510 square feet and a thickness of 2.5 feet. The rock slope protection at the outlet would be a 3.3-foot-thick Light Class/one-quarter-ton Class rock channel, about 100 feet long and 5 feet deep. The existing 20-foot-long 42-inch corrugated steel pipe downdrain near the inlet of the existing culvert would be replaced with a 50-foot-long 30-inch corrugated steel pipe downdrain. The pipe angle with respect to the direction of travel would be decreased from 48 degrees to about 24 degrees. The entrance taper leading to the new downdrain would be wider and extend farther to accommodate the shoulder spread width. A new dike would be constructed on State Route 246's edge of shoulder, extending from the end of the new entrance taper north around the corner to Amber Farms Road. The eroded slopes at this location would be stabilized and reconstructed.

At the eastern side of the project (at post mile 32.6), the existing concrete rock-lined ditch at the outlet of the double cross culvert would be removed. A 5-foot-deep by 26.5-foot-wide trapezoidal rock slope protection channel would extend from the double culvert outlet about 250 feet downstream to protect the degrading channel and embankment slope of State Route 246. The rock slope protection channel would have a 3.4-foot-thick/one-half-ton Class rock slope protection layer with a 1.8-foot-thick Backing Class #1 (Facing) base layer along with rock slope protection Fabric (Type B). The roadway embankment at this location would be restored at a slope of no steeper than 1.5:1. An existing 205-foot-long 18-inch corrugated steel pipe parallel to the double cross culvert would be abandoned with either sand or slurry cement backfill.

#### **1.4.2 No-Build (No-Action) Alternative**

The No-Build Alternative would leave the existing drainage system, embankment slopes, and channels in place as they are, with no modifications. This alternative does not meet the proposed project's purpose and need because without corrective action, soil destabilization would continue and the roadway would be undermined to the point of collapse.

After the environmental document's public circulation period, all comments will be considered, and Caltrans will select a preferred alternative and make the final determination of the project's effect on the environment. Under the California Environmental Quality Act (CEQA), if no unmitigable significant adverse impacts are identified, Caltrans will prepare a Mitigated Negative Declaration.

## **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.

- Existing and future land use – Santa Barbara County Comprehensive Plan - Santa Ynez Valley Community Plan dated October 2009. This drainage repair project would not affect any existing land uses and is compatible with future uses.
- Consistency with state, regional, and local plans and programs - Santa Barbara County Comprehensive Plan - Santa Ynez Valley Community Plan dated October 2009. This drainage repair project is consistent with state, regional, and local plans and programs.
- Plant species (Biology) - A Natural Environment Study was prepared in July 2014. No special-status plant species were observed during appropriately timed surveys. Botanical surveys were conducted in April, May, and July 2012. No impacts are anticipated as a result of the proposed project.
- Coastal zone - Santa Barbara County Comprehensive Plan - Santa Ynez Valley Community Plan dated October 2009 and Coastal Zone Map. The project is not in the coastal zone.
- Wild and scenic rivers - Santa Barbara County Comprehensive Plan - Santa Ynez Valley Community Plan dated October 2009. No wild and scenic rivers are in the project area
- Parks and recreational facilities - Santa Barbara County Comprehensive Plan - Santa Ynez Valley Community Plan dated October 2009. No parks and recreational facilities are in the project area.
- Growth— Santa Barbara County Comprehensive Plan - Santa Ynez Valley Community Plan dated October 2009. Based on the scope of the work, this drainage improvement project would not affect growth.
- Farmlands/Timberlands— Santa Barbara County Comprehensive Plan - Santa Ynez Valley Community Plan dated October 6, 2009. There are no farmlands/timberlands in the project area
- Hydrology and floodplain - Federal Emergency Management Agency Flood Insurance Rate Map, panel 1077 of 1835. The project would not constitute a significant floodplain encroachment as defined in 23 CFR, Section 650.105(q).
- Community Impacts - Santa Barbara County Comprehensive Plan - Santa Ynez Valley Community Plan dated October 2009. This drainage repair project would not have any community impacts.

### **Affected Environment**

A Scenic Resource Evaluation and Visual Assessment for this project was prepared in August 2013.

The project setting is suburban-rural. The project sits in a location where landscape of the developed Santa Ynez community central business district transitions into the open space and agricultural landscape to the east. The Santa Ynez Valley landscape is generally flat to gently rolling, with scattered oak trees and riparian corridors visible throughout the area. The overall topography trends down to the Santa Ynez River south of the project, and the coastal mountains create a dramatic visual backdrop to the south and east.

Land uses surrounding the project include medium- to low-density residential, light service commercial, and recreational. The Chumash Casino and Resort sits nearby and can be seen from State Route 246 just east of the project (see Figure 2-1). Open space and agriculture are part of the landscape southeast of the project site beyond the casino and a small residential area.

The visual quality of the project setting is moderately high, based mainly on the partially rural character, rolling terrain and mountains, well-vegetated roadside, and scattered native trees visible throughout the landscape. Zanja de Cota Creek passes right next to the project site, adding to the visual quality of the area.

Viewer sensitivity to visual changes at the project site is expected to be moderately high. State Route 246 is one of the main transportation routes in the region and serves as the “Main Street” for the communities of Santa Ynez and Solvang. The Santa Ynez Valley is a popular tourist destination, and recreational activities such as bicycling, walking, jogging, and equestrian activities are common throughout the area. The natural and rural beauty of the area, combined with the quaint architecture and character of the valley’s community areas create a heightened expectation for visual quality and an increased sensitivity to the aesthetic environment.

### **Environmental Consequences**

A review of the project site and project plans indicated that the project would result in a minor change to the visual setting, based mainly on the removal of existing vegetation and introduction of more noticeable built elements.

Scenic vistas in the project vicinity include distant views of the hills to the south, open space, and natural stands of oak trees. The project does not propose any changes that would reduce or affect the availability of views to these landscape features.

The existing visual character of the region is based mainly on the rural landscape resulting from open space and agricultural land uses on gently rolling terrain. Within the communities, the visual character is also defined somewhat by well-vegetated streets and roadsides. The project proposes the removal of several mature trees and other vegetation. Although some of this vegetation is located down-slope away from the highway, trees and shrubs would also be removed from along the highway’s edge. This vegetation removal, along with the introduction of concrete headwalls and rock slope protection/channels would degrade the visual character of the project site to some degree. Because of the remaining existing trees and vegetation, visibility of the rock-lined channels and headwalls south of the highway would be limited. However, the headwall and rock slope protection north of the highway near post mile 32.5 would be easily

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet the National Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

### **Affected Environment**

A Historic Property Survey Report (HPSR) was prepared for this project in June 2013. The Historic Property Survey Report documents that the requirements of 36 CFR 800 have been fulfilled, in accordance with Section 106 Part 800.16 (d) of the Nation Historic Preservation Act, as amended. As assigned by the Federal Highway Administration (FHWA) pursuant to U.S. Code 326, Caltrans has determined a Finding of No Historic Properties Affected, and no further studies are warranted.

The Chumash Drainage Repair Project sits on State Route 246 between post miles 32.5 and 32.7, about two-tenths of a mile in length with the area of potential effect (APE) encompassing about 7 acres. North of the highway, in the project area, is private property; south of the highway is tribal land of the Santa Ynez Band of Chumash Indians. This portion of the highway sits in an area of “cut and fill,” where the land was excavated and filled in with fill material. No Section 4(f) resources are located within the project area.

### **Environmental Consequences**

Archival research included a records search at the Central Coast Information Center in January 2011. No previously recorded cultural resources or historic properties were noted in the area of potential effect for the project. However, a previous survey of the area of potential effect did find one isolate, a small bowl mortar fragment found in highway fill at the edge of the pavement. Caltrans initiated consultation with the Santa Ynez Band of Chumash Indians with a field visit and meeting on October 27, 2011. A surface survey of the area of potential effect was conducted on April 17, 2013, with negative results. No concerns were identified by the Santa Ynez Band of Chumash Indians nor were any cultural resources identified during the field visit. However, in June 2013, a Tribal Elders Council member notified Caltrans to report that he had knowledge of cultural materials in the project area. He had found several chert flakes in the area of potential effect. He subsequently reburied those flakes at a location south of where he originally found them. Neither location will be disturbed by project activities.

Caltrans personnel walked and surveyed the area, but no other cultural material was identified. Extensive research into the construction history of the highway and associated culverts determined that the area contained redeposited archaeological material that had been brought into the area with highway fill in the 1950s. At the request of the Santa Ynez Band of Chumash Indians, Caltrans has designated both the locations, the original find area and the reburial area, as environmentally sensitive areas (ESAs) and has developed an Action Plan for the ESAs, which would ensure that no ground-disturbing activities occur in those areas.

### **Annual Grassland**

The annual grassland habitat is found throughout the valleys and foothills of California below 3,000 feet in elevation. Dominant species include bromes (*Bromus spp.*) and wild oats (*Avena spp.*). About 55,756 square feet (1.28 acres) of annual grassland habitat sit within the Area of Potential Impact.

### **Coast Live Oak Woodland**

The coast live oak (*Quercus agrifolia*) is the dominant tree in this woodland. Distinguishing characteristics are a tree canopy cover of 25-60 percent, a poorly developed shrub layer and a well-developed herbaceous understory of annual grassland and introduced annual herbs. About 102,802 square feet (2.36 acres) of coast live oak woodland sit within the Area of Potential Impact.

### **Coastal Scrub**

The coastal scrub plant community within the Area of Potential Impact corresponds to the *Artemisia californica* Shrubland Alliance. Coastal scrub within the Area of Potential Impact is dominated by coyote brush and California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), and poison oak. About 9,147 square feet (0.21 acre) of coastal scrub habitat sit within the Area of Potential Impact.

### **Riparian Scrub**

Riparian scrub generally occurs next to stream channels, within seasonally flooded arroyos, and in topographic depressions close to groundwater. This community consists of scrubby stream-side thickets, varying from open to closed canopies. Riparian scrub within the Area of Potential Impact corresponds to the *Baccharis salicifolia* Shrubland Alliance. Riparian scrub seen in the Area of Potential Impact occurs along the banks and channel of the tributaries to Zanja de Cota Creek. About 24,215 square feet (0.55 acres) of riparian habitat sit within the Area of Potential Impact.

### **Other Sensitive Natural Communities/Habitats of Concern**

No portion of the Area of Potential Impact or Biological Study Area occurs within federally designated critical habitat for federally listed species.

## **Environmental Consequences**

Impacts to natural communities/habitats within the project Biological Study Area have been quantified based on ground disturbance, disturbed vegetation, tree removal, and such. These impact areas are represented as the Area of Potential Impact, which was overlain with habitat mapping. The Area of Potential Impact includes potential disturbance areas for both permanent and temporary impacts. Estimated impacts to vegetation communities are quantified in Table 2.1. The dominant vegetation communities present within the Area of Potential Impact are ruderal/disturbed, annual grassland, coast live oak woodland, riparian scrub, and coastal scrub.

Sources of temporary impacts would be mainly from the use of construction equipment, cut/fill, installation of temporary access roads, jacking and receiving pits, and associated worker foot traffic. Permanent impacts would consist mostly of rock slope protection placement in the drainage channels.

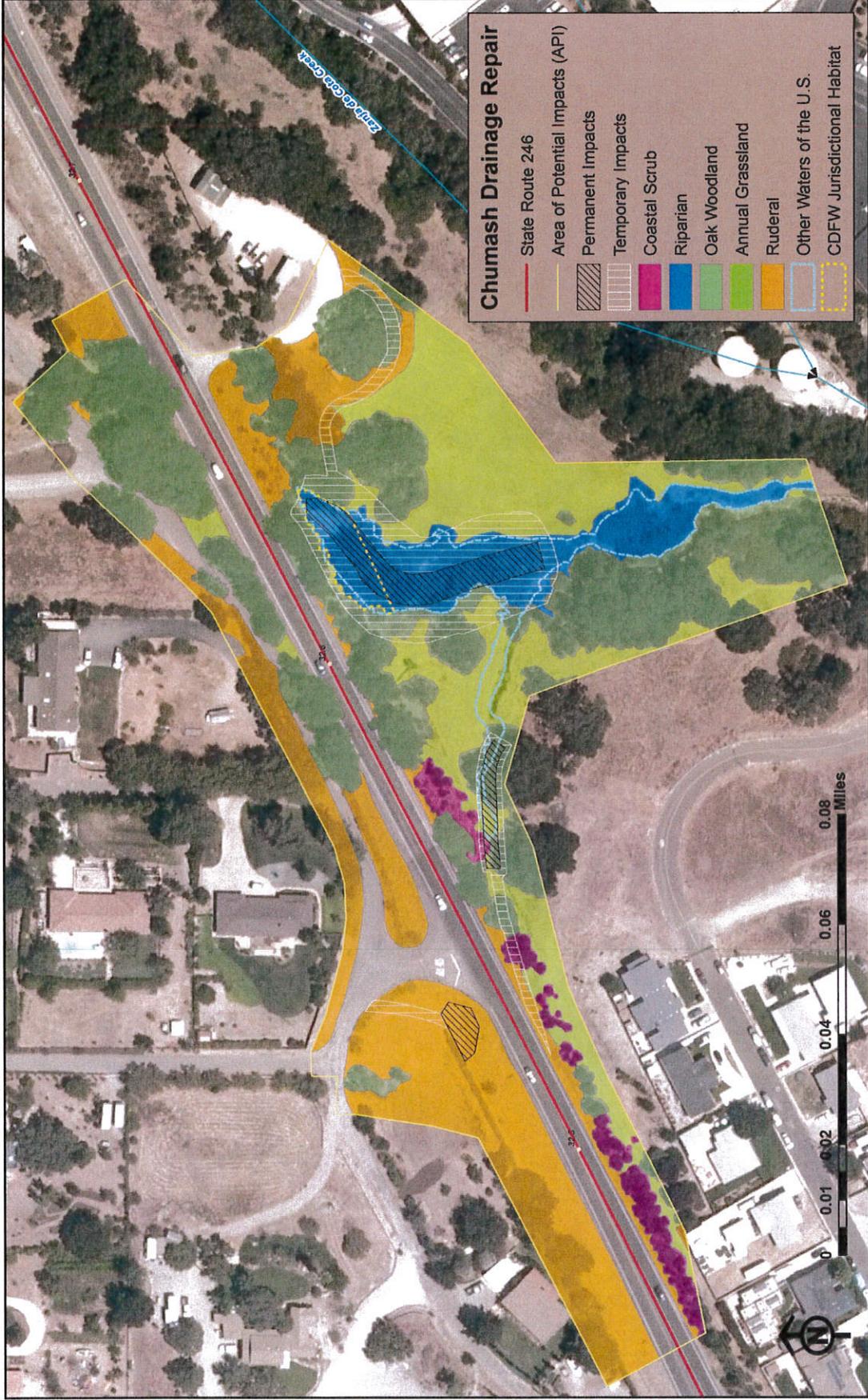


Figure 2-1 Potential Impacts to Natural Communities/Waters Map

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

- Environmentally sensitive area (ESA) fencing would be installed to limit construction activities and protect habitats of concern, including trees to be avoided.
- Special Provisions for the installation of ESA fencing and silt fencing shall be included in the construction contract for this project and will be identified on the project plans.
- Prior to the start of construction activities, ESAs will be delineated in the field and will be approved by the Caltrans Environmental Division.
- Trees to be removed will be noted on design plans. Prior to any ground-disturbing activities, ESA fencing will be installed around the drip line of trees to be protected within project limits.
- Impacts to native oak trees greater than 6 inches in diameter at breast height (DBH) would be offset by replacement planting within the project limits. Replacement plantings would be achieved using a minimum 10:1 ratio for each oak tree removed (this is satisfied by the Visual/Aesthetics requirement to plant and maintain 50 oak trees south of State Route 246). Replacement plantings will be detailed in Caltrans' Landscape Architecture Landscape Planting Plan, in coordination with a biologist, with developed planting specifications to assure survival of the replacement trees.
- A minimum one-year plant establishment period will be required. Oak tree replacement areas will be delineated on project plans.

### **2.2.2 Wetlands and Other Waters**

#### **Regulatory Setting**

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 (CWA) (33 U.S. Code [USC] 1344), is the main law regulating wetlands and surface waters. One purpose of the Clean Water Act is to regulate 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 a regulatory program that provides that 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 Corps of Engineers with oversight by the U.S. Environmental Protection Agency (U.S. EPA).

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

implemented through a review process that is conducted by the U.S. Environmental Protection Agency (EPA), and is triggered by the Section 404 permitting process. Since a Clean Water Act Section 404 permit from U.S. Army Corps of Engineers would likely be necessary for this project, an EPA Section 401 Water Quality Certification would also likely be required.

### **Affected Environment**

The information in this section is based on the Natural Environment Study (NES) prepared for this project, completed in July 2014. The Natural Environment Study also included wetlands studies.

The drainage channels where the project work is proposed are tributaries to Zanja de Cota, which has connectivity to the Santa Ynez River (see Figure 2-1, Potential Impacts to Natural Communities/Waters Map). The drainage channels are therefore considered to be Other Waters of the U.S. with U.S. Army Corps of Engineers jurisdiction. The California Department of Fish and Wildlife does not have jurisdiction over the riparian areas on the Santa Ynez Band of Chumash Indians reservation lands, but is expected to claim jurisdiction over the small portion of the project with riparian vegetation that is contained within the right-of-way. No state or federal jurisdictional wetlands were determined to occur due to a lack of the three wetland parameters (lack of hydrophytic vegetation, hydric soils, and wetland hydrology).

### **Environmental Consequences**

The impacts to jurisdictional waters would be of limited scale and would result from temporary impacts from construction equipment and permanent impacts due to placement of rock slope protection in-channel:

- Approximately 7,250 square feet (0.17 acre) of potential U.S. Army Corps of Engineers Other Waters of the U.S. would be permanently affected by placement of rock slope protection in the channels.
- Approximately 2,121 square feet (0.05 acre) of California Department of Fish and Wildlife jurisdictional habitat would be permanently affected by placement of rock slope protection in the channels, and approximately 2,178 square feet (0.05 acre) of California Department of Fish and Wildlife jurisdictional habitat would be temporarily affected by equipment access and grading.

The drainage repairs proposed for this project, when considered in a cumulative effects context, are not anticipated to result in adverse cumulative impacts to wetlands/other waters because the project would be small in scale, would result in mostly temporary impacts, and compensatory mitigation would be implemented to offset impacts to vegetation. In addition, repair of the existing drainage system should result in beneficial cumulative effects by enhancing bank stability and reducing future scour and erosion.

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

- Compensatory mitigation for impacts to state and federal jurisdictional waters is proposed at a 2:1 ratio for permanent impacts, and at a 1:1 ratio for temporary impacts.
- Where impacts to riparian vegetation will occur, the impacts will be offset primarily by restoration (re-establishment) and supplemented with enhancement.

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**

Information in this section is based on the Natural Environment Study (NES) prepared for this project, completed in July 2014.

Four special-status animal species (federally listed, state-listed, California Fully Protected, Species of Special Concern, California Natural Diversity Database [CNDDB] Special Animals, protected by the Migratory Bird Treaty Act [MBTA], and/or California Fish and Game Code) are shown as occurring within the area. The federal species list for the vicinity of the project area generated by U.S. Fish and Wildlife Service included two federally endangered species. The names and legal status of each of these special-status species are identified in Table 2.2 along with a general description of the habitat requirements for each, whether suitable habitat is present or absent in the Area of Potential Impact, and the potential for each to occur within the Area of Potential Impact or be affected by the project.

As shown in Table 2.2, the American badger is the only species with the potential to occur in the area. The American badger is listed as a regional animal species of special concern by the California Department of Fish and Wildlife. Suitable habitat for badgers is characterized by grasslands and other open habitats. Badgers dig burrows in crumbly soil for cover and frequently reuse old burrows. Dens are typically greater than 6 inches in diameter and horizontally oval-shaped, occasionally with claw marks along the inner surface. Although the species may be in the area, no potential badger dens were found during survey transects. No dirt piles, prey remains, claw marks inside burrows, or other sign of badgers were found within the Area of Potential Impact.

### **Environmental Consequences**

American badgers could be entombed during grading or injured by construction equipment, resulting in the adverse effects of injury or death. Noise and disturbance associated with construction could adversely affect foraging and dispersal behaviors; however, this would be unlikely as construction activities would likely occur during daylight hours when American badgers are typically inactive and residing in dens.

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

Caltrans proposes to implement avoidance and minimization measures for the American badger, as adapted from the U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 2011):

- No less than 14 days and no more than 30 days prior to any construction activities or any project activity likely to impact the American badger, a preconstruction survey shall be conducted for the American badger. The survey shall identify American badger habitat features on the project site, evaluate use by American badger and, if possible, assess the potential impacts to the American badger by the proposed activity. The status of all dens should be determined and mapped. Known dens, if found occurring within the footprint of

Table 2.2 Animal Species of Regional Concern

Common Name	Scientific Name	Status	Habitat Type	Potential Habitat Present/Absent	Rationale
<b>INVERTEBRATES</b>					
Vernal pool fairy shrimp (vernal pool branchiopods)	<i>Branchinecta lynchi</i>	FT	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Absent	<ul style="list-style-type: none"> <li>Potential habitat absent in API.</li> <li>No vernal or depressional pools within project area.</li> <li>No further studies recommended.</li> </ul>
<b>FISH</b>					
Southern steelhead trout (Southern California ESU)	<i>Oncorhynchus mykiss irideus</i> S. Ca. ESU	FE, SSC, CH	Optimally, clear, cool water with abundant instream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	Absent	<ul style="list-style-type: none"> <li>No suitable aquatic habitat for this species occurs within the API.</li> <li>Not expected to occur within the API.</li> <li>No further studies recommended.</li> </ul>
<b>AMPHIBIANS</b>					
California red-legged frog	<i>Rana draytonii</i>	FT, SSC	Aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of fairly sturdy underwater supports such as cattails.	Absent	<ul style="list-style-type: none"> <li>No suitable breeding habitat for this species occurs within the API.</li> <li>Species was not observed during surveys..</li> <li>Not expected to occur within the API.</li> <li>Protocol surveys have been conducted adjacent to API and had negative findings.</li> <li>No further studies recommended.</li> </ul>
California tiger salamander	<i>Ambystoma californiense</i>	FT, ST	Vernal pools, small lakes, and stock ponds surrounded by grassland or grassy understory of valley-foothill hardwood habitats	Absent	<ul style="list-style-type: none"> <li>No suitable aquatic habitat for this species occurs within the API.</li> <li>No known or potential breeding ponds within 1.3 miles of project site.</li> <li>Not expected to occur within the API.</li> <li>No further studies recommended.</li> </ul>

**Table 2.2 Animal Species of Regional Concern**

Common Name	Scientific Name	Status	Habitat Type	Potential Habitat Present/Absent	Rationale
Ferruginous hawk	<i>Buteo regalis</i>	MBTA	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinion-juniper habitats.	Absent	<ul style="list-style-type: none"> <li>No nesting habitat for this species occurs within the API.</li> <li>Species was not observed during surveys.</li> <li>Not expected to occur within the API.</li> <li>No further studies recommended.</li> </ul>
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE, CH, MBTA	Dense, low, shrubby vegetation, generally early successional stages in riparian areas, brushy fields, young second-growth forest or woodland, scrub oak, coastal chaparral, and mesquite brushlands, often near water in arid regions.	Absent	<ul style="list-style-type: none"> <li>Patchy riparian habitat within the API is poorly developed and lacking shrubby understory.</li> <li>Species was not observed during protocol-level surveys.</li> <li>Not expected to occur within the BSA/API.</li> <li>Avoidance and minimization measures recommended.</li> </ul>
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA, FP, WL, MBTA	General habitat includes rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons and large trees in open areas provide nesting habitat in most parts of its range.	Absent	<ul style="list-style-type: none"> <li>No nesting habitat for this species occurs within the API.</li> <li>Species was not observed during surveys.</li> <li>Not expected to occur within the API.</li> <li>No further studies recommended.</li> </ul>
Southwestern willow flycatcher	<i>Empidonax traillii eximius</i>	FE, MBTA	Dense riparian vegetation with standing water or saturated soil, often larger tree overstory.	Absent	<ul style="list-style-type: none"> <li>Patchy riparian habitat within the API is poorly developed and lacking shrubby understory.</li> <li>Species was not observed during surveys.</li> <li>Not expected to occur within the API.</li> <li>No further studies recommended.</li> </ul>

- Restoration and revegetation work associated with temporary impacts shall be done using California native plants appropriate for the location. To the maximum extent practicable, topsoil shall be removed, cached, and returned to the site according to successful restoration protocols. Loss of soil from runoff or erosion shall be prevented with straw bales, straw wattles, or similar means provided they do not entangle or block escape or dispersal routes of the American badger.
- The project construction area shall be delineated with high visibility temporary fencing, flagging, or other barrier to prevent encroachment of construction personnel and equipment onto any sensitive areas during project work activities. Such fencing shall be inspected and maintained daily until completion of the project and will be removed only when all construction equipment is removed from the site. No project activities shall occur outside the delineated project area.
- To protect migratory birds, any trimming/removal of trees and shrubs shall be scheduled to occur from September 1 to February 14, outside of the typical nesting bird season, to avoid potential impacts to nesting birds. Trimming/removal of trees and shrubs that must be scheduled to occur during the nesting season (February 15 to August 31) shall require a nesting bird survey by a qualified biologist at least two weeks prior to scheduled trimming/removal. If construction activities are proposed to occur within 100 feet of potential bird nesting habitat during the nesting season (February 15 to August 31) within the area, a nesting bird survey shall be conducted by a biologist determined qualified by Caltrans at least two weeks prior to construction. If active bird nests are found during required preconstruction surveys, readily visible exclusion zones where construction activity must be avoided shall be established by the District Biologist (using environmentally sensitive area (ESA) fencing, stakes and flagging, etc.) until it is determined that young birds have fledged.
- Active bird nests shall not be disturbed, and eggs or young birds covered by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code shall not be killed, destroyed, injured, or harassed at any time.

#### **2.2.4 Threatened and Endangered Species**

##### ***Regulatory Setting***

The main federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 U.S. Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later 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 (FHWA), are required to consult with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting, or authorizing actions 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 may include a Biological Opinion with an Incidental Take statement, a Letter of Concurrence and/or documentation of a No Effect finding. Section 3 of the Federal Endangered Species Act defines

The least Bell's vireo is a federal and state endangered species. Federal critical habitat has been designated for the species, but not within the biological study area. Least Bell's vireos require riparian areas to breed and typically inhabit structurally diverse woodlands along watercourses. They occur in a number of riparian habitat types, including cottonwood-willow woodlands/forests, oak woodlands, and mule fat scrub. Protocol surveys for least Bell's vireo were done during 2013 with negative findings. Habitat within the Area of Potential Impact is considered poor breeding habitat for least Bell's vireo. The species is not expected to be affected by the project.

### **Environmental Consequences**

Based on the above, no impacts to the southern steelhead, California red-legged frog, or least Bell's vireo will result from the proposed project alternatives. No further studies are required.

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

No avoidance and minimization efforts for southern steelhead or California red-legged frog are proposed.

*Although no effects are anticipated for the least Bell's vireo, Caltrans has agreed to implement the following measures to protect all nesting birds:*

- Prior to construction, vegetation removal shall be scheduled to occur from September 1 to February 14, outside of the typical nesting bird season if possible, to avoid potential impacts to nesting birds. If construction is proposed to occur within 100 feet of potential bird nesting habitat during the nesting season (February 15 to August 31) within the Area of Potential Impact, a nesting bird survey shall be conducted by a biologist determined qualified by Caltrans at least two weeks prior to construction.
- During construction, active bird nests shall not be disturbed and eggs or young of birds covered by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code shall not be killed, destroyed, injured, or harassed at any time. Readily visible exclusion zones where nests must be avoided within 100 feet of disturbance shall be established by a qualified biologist using ESA fencing. Work in exclusion zones shall be avoided until young birds have fledged (permanently left the nest) or the qualified biologist has determined that nesting activity has otherwise ceased.
- Trees to be removed shall be noted on design plans. Prior to any ground-disturbing activities, ESA fencing shall be installed around the drip line of trees to be protected within project limits.
- All clearing/grubbing and vegetation removal shall be monitored and documented by the biological monitor(s) regardless of time of year.
- If least Bell's vireo is observed within 100 feet of the Area of Potential Impact during the course of construction, a qualified biologist shall implement an exclusion zone and work shall be avoided within the exclusion zone until the least Bell's vireo is located greater than 100 feet from project-related disturbance. If an active least Bell's vireo nest is observed within 100 feet of the Area of Potential Impact, all project activities shall immediately cease and the U.S. Fish and Wildlife Service and Caltrans shall be contacted within 48 hours. Caltrans shall then reinitiate Federal Endangered Species Act Section 7 formal consultation

Of these species, both were found to be invasive or otherwise common within the Area of Potential Impact. Five plant species were found in the Area of Potential Impact with a Cal-IPC invasiveness rating of Moderate, and six species were found with an invasiveness rating of Limited.

### **Environmental Consequences**

None of the species on the California list of invasive species is 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**

- During construction, the biological monitor(s) will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.
- Only clean fill shall be imported. When practicable, invasive exotic plants in the project site will be removed and properly disposed. All vegetation removed from the construction site shall be taken to a certified landfill to prevent the spread of invasive species. If soil from weedy areas must be removed offsite, the top 6 inches containing the seed layer in areas with weedy species shall be disposed of at a certified landfill. Care shall be taken to avoid including any species that occurs on the Cal-IPC Invasive Plant Inventory in the Caltrans erosion control seed mix or landscaping plans for the project.
- Construction equipment shall be certified as “weed-free” by the biological monitor(s) before entering the construction site. If necessary, wash stations onsite shall be established for construction equipment under the guidance of the biological monitor(s) to avoid/minimize the spread of invasive plants and/or seed within the construction area.

## **2.3 Climate Change**

### **Regulatory Setting**

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 primarily concerned with the emissions of greenhouse gases generated by human activity including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF<sub>6</sub>), 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-

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 requires 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 their 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 a concern at the federal level, currently no regulations or legislation have 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.<sup>3</sup> 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.

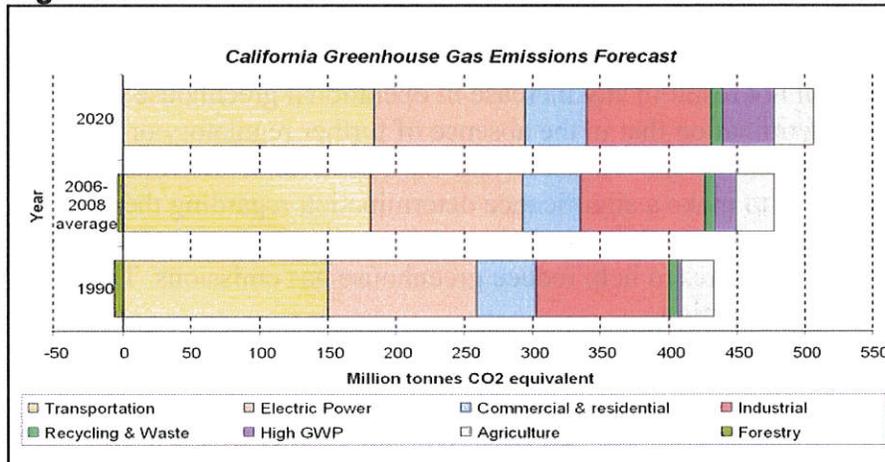
---

<sup>3</sup> 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.

assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130). For one 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 2-2. 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 2-2 California Greenhouse Gas Forecast**



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

The Department 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 greenhouse gas emissions are from transportation, the Department has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.<sup>6</sup>

Culvert/drainage projects such as this one have a low- to no-potential for an increase in greenhouse gas emissions during operations. Construction emissions will be unavoidable, but

(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).

<sup>6</sup> 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](http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf)

The Department 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. The Department works closely with local jurisdictions on planning activities, but does not have local land use planning authority. The Department assists efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; the Department is doing this by supporting ongoing research efforts at universities, by supporting legislative efforts to increase fuel economy, and by 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.

The Department 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 (SB) 375 (Steinberg 2008), SB 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 2.4 summarizes the Department and statewide efforts that the Department is implementing to reduce greenhouse gas emissions. More detailed information about each strategy is included in the Climate Action Program at Caltrans (December 2006).

In addition, 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)<sup>7</sup> provides a comprehensive overview of activities undertaken by Caltrans statewide to reduce greenhouse gas emissions resulting from agency operations.

---

<sup>7</sup> [http://www.dot.ca.gov/hq/tpp/offices/orip/climate\\_change/projects\\_and\\_studies.shtml](http://www.dot.ca.gov/hq/tpp/offices/orip/climate_change/projects_and_studies.shtml)

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

1. Landscaping reduces surface warming and, through photosynthesis, decreases CO<sub>2</sub>. The project proposes the planting and maintenance of 50 oak trees within the project limits south of the highway. The plants shall be planted in the most publicly visible locations possible considering safety requirements. The trees shall be planted in natural-appearing patterns that visually transition the project to the surrounding landscape. These trees will help offset any potential CO<sub>2</sub> emissions increase.
2. According to the Department's Standard Specifications, the contractor must comply with Santa Barbara Air Resources Board rules, ordinances, and regulations for air quality restrictions. The California Air Resources Board (ARB) regulation affects diesel-fueled commercial vehicles weighing more than 10,000 pounds that are operating in California, regardless of where they are registered.

### *Adaptation Strategies*

“Adaptation strategies” refer to how the Department 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.

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, 2011<sup>8</sup>, 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.

---

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

- The range of uncertainty in selected sea level rise projections.
- A 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.
- A 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 states 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. A Notice of Preparation for this project was not filed prior to the Executive Order nor has the project been programmed for construction prior to 2013. 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, the Department 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, the Department has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, the Department 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.

## **Chapter 3**      **Comments and Coordination**

---

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization and/or 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, including Project Development Team meetings, intergovernmental coordination meetings, and agency meetings. This chapter summarizes the results of the Department's efforts to identify, address, and resolve project-related issues through early and continuing coordination.

### ***Coordination—Santa Ynez Band of Chumash Indians***

**October 27, 2011:** Native American consultation with the Santa Ynez Band of Chumash Indians was initiated with a field visit meeting on October 27, 2011.

**November 13, 2013:** Caltrans staff met with the Chumash Business Committee to discuss the proposed project.

**November 20, 2013:** A letter was received from Vincent Armenta, Chumash Tribal Chairman, supporting the project.

### ***Coordination—State Historic Preservation Officer***

**June 9, 2014:** A Finding of No Adverse Effect with Non-Standard Conditions for the Chumash Drainage Repair Project was received from Carol Roland-Nawi, Ph.D., State Historic Preservation Officer.

### ***Coordination—Biology—Agency, Tribal, and Professional Contacts***

**November 13, 2012:** Paul Andreano (Caltrans Associate Biologist) submitted a request, via U.S. Mail, for an official U.S. Fish and Wildlife Service species list for the project area.

**December 13, 2012:** Paul Andreano received via U.S. Mail an official species list for the project area from the U.S. Fish and Wildlife Service Ventura office.

**December 17, 2012:** Paul Andreano contacted Joshua Simmons (Environmental Director, Santa Ynez Band of Chumash Indians) via telephone and requested any background information on the project site. Mr. Simmons later emailed Mr. Andreano copies of a 2010 protocol survey for the California red-legged frog and a 2010 least Bell's vireo habitat assessment that were conducted for the tribe in advance of a proposed bank stabilization project.

**January 9, 2013:** Paul Andreano met with Joshua Simmons, Kari Bhana (Caltrans Project Engineer) and Ben Erchul (Caltrans Hydrologist) at the project site to discuss project alternatives and to walk the proposed construction area. Mr. Simmons stated

## **Chapter 4**      **List of Preparers**

---

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

Paul Andreano, Associate Environmental Planner/Biologist. B.S., Ecology and Systematic Biology, California Polytechnic State University, San Luis Obispo; 12 years of experience as a field biologist and environmental planner. Contribution: Natural Environment Study (NES) and permit process.

Kari Bhana, Transportation Engineer (Civil) – Range D. B.S., Civil Engineering, California Polytechnic State University, San Luis Obispo; 12 years of project development experience. Contribution: Project Engineer.

Robert Carr, Associate Landscape Architect PLA#3473. B.S., Landscape Architecture, California Polytechnic State University, San Luis Obispo; 25 years of landscape architectural and visual assessment experience. Contribution: Wrote Visual/Aesthetics Assessment.

Abdulrahim N. Chafi, Ph.D., PE, INCE Registered Civil Engineer in the states of California and Nevada. Ph.D., Environmental Engineering, California Coast University; 16 years of environmental engineering analysis experience at Caltrans. Contribution: Air Quality.

Matt C. Fowler, Senior Environmental Planner. B.A., Geographic Analysis, San Diego State University; 13 years of experience in environmental planning. Contribution: Oversaw preparation of Initial Study/Proposed Mitigated Negative Declaration.

Kirsten Helton, Senior Environmental Planner. B.A., Economics, California State University, Fresno; more than 20 years of environmental planning experience. Contribution: Oversaw Initial Study/Proposed Mitigated Negative Declaration.

Mike Jacob, Associate Environmental Planner. B.A., Environmental Studies, Urban Planning emphasis, San Jose State University; A.A., Geography, Foothill College, Los Altos Hills; 7 years of Caltrans environmental planning experience, 8 years of Caltrans transportation planning experience, and 13 years of combined urban/environmental planning experience. Contribution: Coordinated and wrote environmental document.

Ron Kraemer, Senior Transportation Engineer. B.S., Civil Engineering, California Polytechnic State University; 26 years with Project Development. Contribution: Design Review and Selection.

Isaac Leyva, Engineering Geologist. B.S., Geology, California State University, Bakersfield; 3 years of Petroleum Geology experience, 2 years of Environmental Consulting, 12 Geotechnical experience, and 10 years of

## **Chapter 5**      **Distribution List**

---

Vincent Armenta, Tribal Chairman  
Santa Ynez Band of Chumash Indians  
PO Box 517  
Santa Ynez, CA 93460

William Wyatt, Tribal Administrator  
Santa Ynez Band of Chumash Indians  
PO Box 517  
Santa Ynez, CA 93460

Kelly Ferguson, Environmental Director  
Santa Ynez Band of Chumash Indians  
PO Box 517  
Santa Ynez, CA 93460

Doreen Farr, Supervisor  
Santa Barbara Board of Supervisors, 3rd District  
105 East Anapamu Street  
Santa Barbara, CA 93101

Hannah-Beth Jackson, State Senator  
19th Senate District  
225 East Carrillo, Suite 302  
Santa Barbara, CA 93101

Das Williams, Assemblymember  
37th Assembly District  
101 West Anapamu Street, Suite A  
Santa Barbara, CA 93101

Lois Capps, Congresswoman  
301 East Carrillo, Suite A  
Santa Barbara, CA 92101

Jim Richardson, Mayor  
City of Solvang  
1644 Oak Street  
Solvang, CA 93463

John Connolly, Mayor  
City of Buellton  
107 West Highway 246  
Buellton, CA 93427

James L Callahan IV  
3291 Old Highway 246  
Santa Ynez, CA 93460

Thanasis Tom & Stephanie Gogonis  
1525 Acorn Way #3  
Solvang, CA 93463

# Appendix A California Environmental Quality Act Checklist

## CEQA Environmental Checklist

05-SB-246

32.5/32.7

05-1A170

Dist.-Co.-Rte.

P.M/P.M.

E.A.

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where 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
<b>I. AESTHETICS:</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>
<b>II. AGRICULTURE AND FOREST RESOURCES:</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California 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 type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

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

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

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned 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"/>

	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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**  
OFFICE OF THE DIRECTOR  
P.O. BOX 942873, MS-49  
SACRAMENTO, CA 94273-0001  
PHONE (916) 654-5266  
FAX (916) 654-6608  
TTY 711  
www.dot.ca.gov



*Flex your power!  
Be energy efficient!*

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](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 14<sup>th</sup> 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** Glossary of Technical Terms

---

AB	Assembly Bill
APE	Area of Potential Effect
API	Area of Potential Impact
ARB	Air Resources Board
BMP	Best Management Practice
BSA	Biological Study Area
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CTP	California Transportation Plan
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CERFA	Community Environmental Response Facilitation Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO-CAT	Coastal Ocean Climate Action Team
CRLF	California red-legged frog
CSP	Corrugated steel pipe
CTP	California Transportation Plan
CWA	Clean Water Act
DBH	Diameter at breast height
DP	Director's Policy
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
GHG	Greenhouse gas
HMMP	Habitat Mitigation and Monitoring Plan
IPaC	Information, Planning, and Conservation System
IPCC	Intergovernmental Panel on Climate Change
LBV	Least Bell's vireo
LEDPA	Least Environmentally Damaging Practicable Alternative
MBTA	Migratory Bird Treaty Act
MPO	Metropolitan Planning Organization

# Appendix D Minimization and/or Mitigation Summary

---

## ***Visual/Aesthetics***

- Plant and maintain 50 oak trees and appropriate riparian trees with a minimum one-year plant establishment period within the project limits south of the highway. The plants shall be planted in the most publicly visible locations possible considering safety requirements. The trees shall be planted in natural-appearing patterns that visually transition the project to the surrounding landscape.
- The new headwall at work location post mile 32.5 shall include architectural treatment to make it appear more natural and less noticeable from public viewing areas. The specific type of architectural treatment shall be developed in conjunction with a Caltrans Landscape Architecture representative.
- If safety railing is required as part of the headwall, the railing shall be designed to minimize the number of corner, cross, and end braces as much as possible. All visible metal and cable components of the railing shall be darkened to visually recede and reduce noticeability.
- Preserve as much existing vegetation as possible. Use prescriptive clearing and grubbing and grading techniques that save the most existing vegetation possible.
- All disturbed slopes shall be re-seeded with native and horticulturally appropriate seed mix following construction.
- All disturbed construction access roads, staging areas and other temporary uses shall be restored to a natural-looking condition after construction. These areas should be re-contoured and re-seeded to match the surrounding landscape. If these temporary uses impact landscaping placed for aesthetic purposes, the aesthetic plantings shall be replaced and maintained until established.
- The 50-foot-long 30-inch-diameter corrugated steel pipe downdrain near work location post mile 32.5 shall be placed underground to the greatest extent possible.

## ***Cultural***

- An environmentally sensitive area (ESA) shall be established to protect an area containing redeposited archaeological materials.
- A qualified archaeologist shall supervise the establishment of the ESA location; monitoring of the ESA will occur during construction.
- A Native American monitor will be present during construction activities that occur near the ESA location.
- In the event cultural material is encountered during construction, work shall cease until a qualified archaeologist can assess the unanticipated discovery in

- Replacement planting plans will be detailed in Caltrans' Landscape Architecture Landscape Planting Plan and the final Habitat Mitigation and Monitoring Plan, in coordination with a biologist determined qualified by Caltrans.
- Prior to any ground-disturbing activities, environmentally sensitive area (ESA) fencing and/or flagging shall be installed around jurisdictional waters, and the drip line of trees to be protected within project limits. Caltrans-defined ESAs shall be noted on design plans.
- During construction, activities in jurisdictional waters shall be timed to occur between June 1 and October 15 in any given year, or as otherwise directed by the regulatory agencies, when the surface water is likely to be dry or at seasonal minimum. Deviations from this work window will be made only with permission from the relevant regulatory agencies.
- During construction, all project-related hazardous materials spills shall be cleaned up immediately. Readily accessible spill prevention and cleanup materials shall be kept by the contractor onsite at all times.
- During construction, erosion control measures shall be implemented. Silt fencing, fiber rolls, and barriers shall be installed as needed between the project site and adjacent waters. At a minimum, erosion controls shall be maintained by the contractor on a daily basis throughout the construction period.
- During construction, the cleaning and refueling of equipment and vehicles shall occur only within a designated staging area and at least 60 feet from Other Waters of the U.S., or other aquatic areas. The staging areas shall conform to Best Management Practices (BMPs) applicable to attaining zero discharge of storm water runoff. At a minimum, all equipment and vehicles shall be checked and maintained by the contractor on a daily basis to ensure proper operation and avoid potential leaks or spills.
- After construction, stream contours shall be restored as close as possible to original condition.

### *Animal Species*

- No less than 14 days and no more than 30 days prior to any construction activities or any project activity likely to affect the American badger, a preconstruction survey shall be conducted for American badger. The survey shall identify American badger habitat features on the project site, evaluate use by American badger and, if possible, assess the potential impacts to the American badger by the proposed activity. The status of all dens should be determined and mapped. Known dens, if found occurring within the footprint of the activity, shall be monitored for three days with tracking medium to determine the current use. If no American badger activity is observed during this period, the den shall be destroyed immediately to preclude subsequent use. If American badger activity is observed at the den during this period, the den shall 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. Only when the den is determined to be unoccupied shall the den be excavated under the direction of the biologist.

nesting habitat during the nesting season (February 15 to August 31) within the area, a nesting bird survey shall be conducted by a biologist determined qualified by Caltrans at least two weeks prior to construction. If active bird nests are found during required preconstruction surveys, readily visible exclusion zones where construction activity must be avoided shall be established by the District Biologist (using environmentally sensitive area (ESA) fencing, stakes and flagging, etc.) until it is determined that young birds have fledged.

- Active bird nests shall not be disturbed, and eggs or young birds covered by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code shall not be killed, destroyed, injured, or harassed at any time.

### *Threatened and Endangered Species*

Although no effects are anticipated for the least Bell's vireo, Caltrans has agreed to implement the following measures to protect all nesting birds:

- Trees to be removed shall be noted on design plans. Prior to any ground-disturbing activities, ESA fencing shall be installed around the drip line of trees to be protected within project limits.
- All clearing/grubbing and vegetation removal shall be monitored and documented by the biological monitor(s) regardless of time of year.
- If least Bell's vireo is observed within 100 feet of the Area of Potential Impact during the course of construction, a qualified biologist shall implement an exclusion zone and work shall be avoided within the exclusion zone until the least Bell's vireo is located greater than 100 feet from project-related disturbance. If an active least Bell's vireo nest is observed within 100 feet of the Area of Potential Impact, all project activities shall immediately cease and the U.S. Fish and Wildlife Service and Caltrans shall be contacted within 48 hours. Caltrans shall then reinitiate Federal Endangered Species Act Section 7 formal consultation with the U.S. Fish and Wildlife Service for the least Bell's vireo nest and implement additional avoidance/minimization measures as necessary.

### *Invasive Species*

- During construction, the biological monitor(s) will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.
- Only clean fill shall be imported. When practicable, invasive exotic plants in the project site will be removed and properly disposed. All vegetation removed from the construction site shall be taken to a certified landfill to prevent the spread of invasive species. If soil from weedy areas must be removed offsite, the top 6 inches containing the seed layer in areas with weedy species shall be disposed of at a certified landfill. Care shall be taken to avoid including any species that occurs on the Cal-IPC Invasive Plant Inventory in the Caltrans erosion control seed mix or landscaping plans for the project.

## **List of Technical Studies**

Air Quality Report, January 30, 2013

Noise Study Report, February 7, 2013 and November 6, 2013

Water Quality Report, August 13, 2013

Natural Environment Study, July 2014

Historical Property Survey Report, April 30, 2014

Hazardous Waste Report - Initial Site Assessment, November 13, 2012

Scenic Resource Evaluation and Visual Assessment, August 6, 2013

Paleontology Review, August 29, 2012

Geotechnical Memo, October 14, 2013