

State Route 26 Slope Stabilization

On State Route 26 in Calaveras County
from about 5.4 miles west of Ridge Road to the Amador County Line

10-CAL-26-21.4/38.31
10-OV480/1013000264

Initial Study with Proposed Mitigated Negative Declaration



Prepared by the
State of California Department of Transportation

April 2020



General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in Calaveras County in California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). A Categorical Exclusion will be prepared for NEPA compliance. The document explains why the project is being proposed, the alternatives being considered for the project, the existing environment that could be affected by the project, potential impacts of each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. If you would like a printed version or CD of this document, please contact Phong Duong at 559-445-6479, or at phong.duong@dot.ca.gov. The document can also be downloaded at the following website: <http://www.dot.ca.gov/caltrans-districts-near-me/district-10>.
- Tell us what you think. If you have any comments regarding the proposed project, please send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to: Jennifer Lugo, Senior Environmental Planner, Central Region Environmental, California Department of Transportation, 855 M Street, Suite 200, Fresno, California 93721.
- Submit comments via email to: jennifer.lugo@dot.ca.gov.
- Submit comments by the deadline: November 8, 2020.

What happens next:

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

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Stabilize deteriorating slopes and improve drainage systems on both sides of State Route 26 in Calaveras County from about 5.4 miles west of Ridge Road to the Amador County Line, from post miles 21.4 to 38.31.

INITIAL STUDY with Proposed Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

Philip Vallejo

Philip Vallejo
Environmental Office Chief, North
California Department of Transportation
CEQA Lead Agency

4/13/2020

Date

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DRAFT
Proposed Mitigated Negative Declaration
Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to stabilize deteriorating slopes and improve drainage on both sides of State Route 26 at eight locations in Calaveras County from about 5.4 miles west of Ridge Road to the Amador County line (post miles 21.4 to 38.31). The total length of the project is approximately 16.9 miles. The project would also upgrade drainage systems, stabilize slopes, and construct retaining walls in certain locations.

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 project would have no effect on land use, coastal zones, wild and scenic rivers, park and recreational facilities, growth, community character and cohesion, environmental justice, traffic and transportation/pedestrian and bicycle facilities, visual/aesthetics, cultural resources, hydrology and floodplain, water quality, geology, paleontology, hazardous waste and materials, air quality, noise, vibration and natural communities.

The project would have no significant effect on greenhouse gas emissions, farmland and timberland, relocations and real property acquisition, utilities and emergency services, wildfires, and invasive species.

The project would have no significant adverse effect on animal species, plant species, threatened and endangered species, and U.S. waters and wetlands because the following mitigation measures would reduce potential effects to a level of insignificance:

- Various avoidance and minimization measures such as surveys, erosion control measures, and preconstruction training would be implemented for threatened and endangered species.
- Oak woodland would be replanted or compensated for at an off-site location.
- Compensatory mitigation for wetland impacts would be a minimum 1 to 1 ratio.

Philip Vallejo, Environmental Office Chief, North
California Department of Transportation
CEQA Lead Agency

Date

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Chapter 1 **Proposed Project**

1.1 Introduction

The California Department of Transportation (Caltrans) proposes to stabilize deteriorating slopes and improve drainage on both sides of State Route 26 in Calaveras County from 5.4 miles west of Ridge Road to the Amador County line (post miles 21.4 to 38.31). See Figure 1-1 for the project vicinity map and Figure 1-2 for the project location map. The project's length is approximately 16.9 miles. The project would upgrade drainage systems, stabilize slopes, and construct retaining walls in certain locations.

Caltrans is the lead agency under the California Environmental Quality Act (known as CEQA) and the lead agency under the National Environmental Policy Act (known as NEPA). A Categorical Exclusion will be prepared for NEPA compliance. California participated in the "Surface Transportation Project Delivery Pilot Program" (Pilot Program) pursuant to 23 U.S. Code 327, for more than five years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Barack Obama on July 6, 2012, amended 23 U.S. Code 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, Caltrans entered into a Memorandum of Understanding pursuant to 23 U.S. Code 327 (NEPA Assignment MOU) with the Federal Highway Administration. The NEPA Assignment MOU became effective October 1, 2012 and was renewed on December 23, 2016, for a five-year term.

In summary, Caltrans continues to assume the Federal Highway Administration's responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, the Federal Highway Administration assigned, and Caltrans assumed all the U.S. Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the state highway system. The assignment also includes local assistance projects off the state highway system within the State of California except for certain categorical exclusions that the Federal Highway Administration assigned to Caltrans under the 23 U.S. Code 326 CE Assignment MOU.

State Route 26 serves mostly interregional and commuter traffic between the cities of Stockton and Linden. The route also provides access to New Hogan Reservoir as well as the Rancho Calaveras and La Contenta residential developments near Valley Springs. The project portion of State Route 26 serves the small communities of Mokelumne Hill, Glencoe, and West Point. The roadway is the main commuter route between local residences in Calaveras County and nearby communities and job centers in Stockton.

Within the project area, State Route 26 is a two-lane conventional highway with shoulder widths ranging from 0 to 2 feet on each side of the roadway. Numerous slopes within the project limits have eroded or collapsed because the original retaining walls that supported them have crumbled or deteriorated over time. This slope deterioration, along with the discharge of sediment-laden, highway stormwater runoff and pollutants, threatens to damage nearby rivers and receiving water bodies. The project would upgrade drainage systems and stabilize slopes. The project would also construct retaining walls in certain locations. Under consideration for the project are a Build Alternative and a No-Build Alternative.

For funding, this project is included in the 2018 State Highway Operation and Protection Program (SHOPP) for Major Damage Program Code 20.20.201.131 (Permanent Restoration). The project's estimated cost is \$10,941,000. Construction is expected to begin in 2023 and end in 2026.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is to alleviate slope erosion that cause slope failure and slope erosion along the embankment of the eastbound and westbound lanes of State Route 26.

1.2.2 Need

The rugged topography, limited state right-of-way, and environmental sensitivity of the Calaveras corridor pose challenges for Caltrans crews to keep this area maintained. Slope failures and soil erosion have occurred in the embankment of the eastbound and westbound lanes of State Route 26 over the last few years. Numerous maintenance tasks have been performed in the past decade to control erosion and improve slope stability and drainage along this corridor. The project is needed to protect the roadway's numerous slopes within the project limits from continually eroding and collapsing.

1.3 Project Description

Caltrans proposes to stabilize deteriorating slopes and improve drainage on both sides of State Route 26 at eight locations in Calaveras County from about 5.4 miles west of Ridge Road to about the Amador County line (post miles 21.4 to 38.31). The project would upgrade drainage in the project area with a combination of geotechnical, hydraulic, and landscape measures such as flattening cut slopes, refilling slopes that are collapsing, and stabilizing shoulders with a bonded fiber matrix of hydroseed and fiber roll. In addition, retaining walls would be constructed at five locations (Locations 2-6).

This project has two alternatives—a Build Alternative and a No-Build Alternative)—that are being considered.

Figure 1-1 Project Vicinity Map

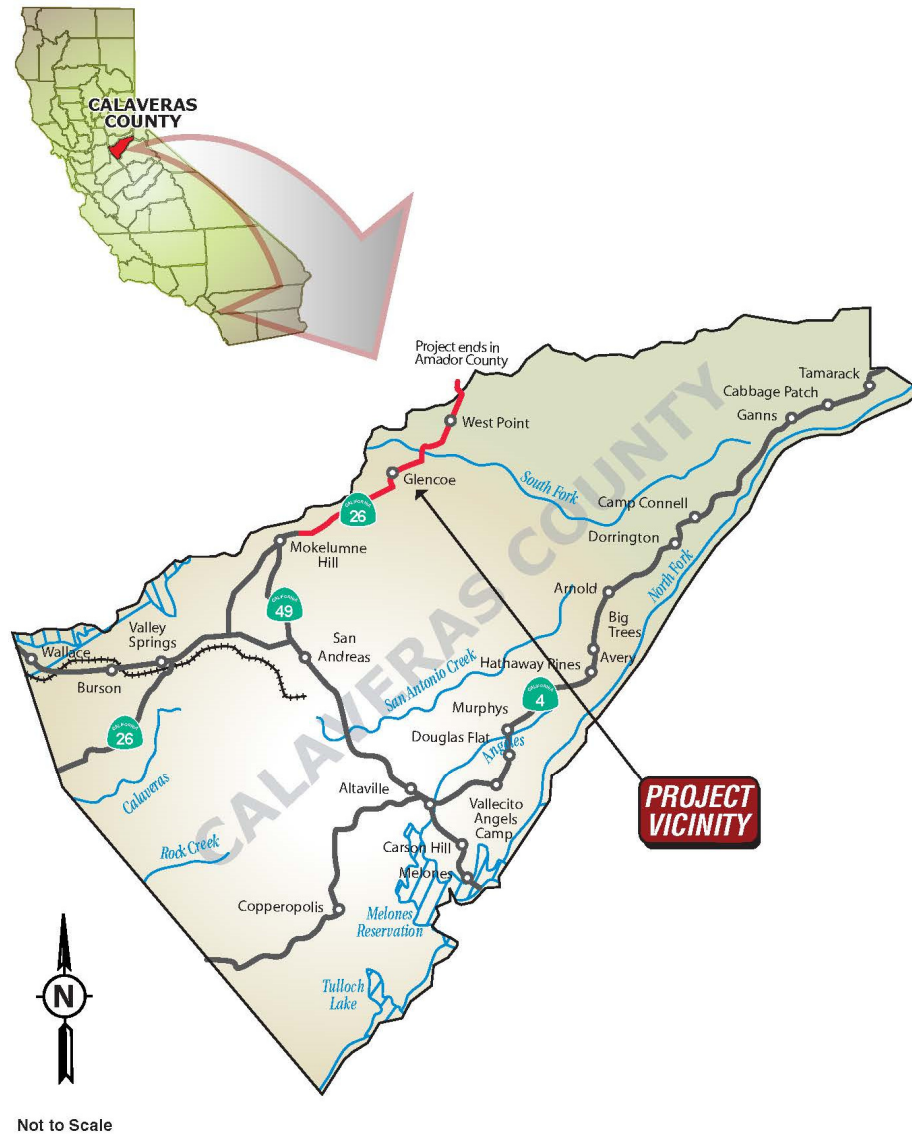
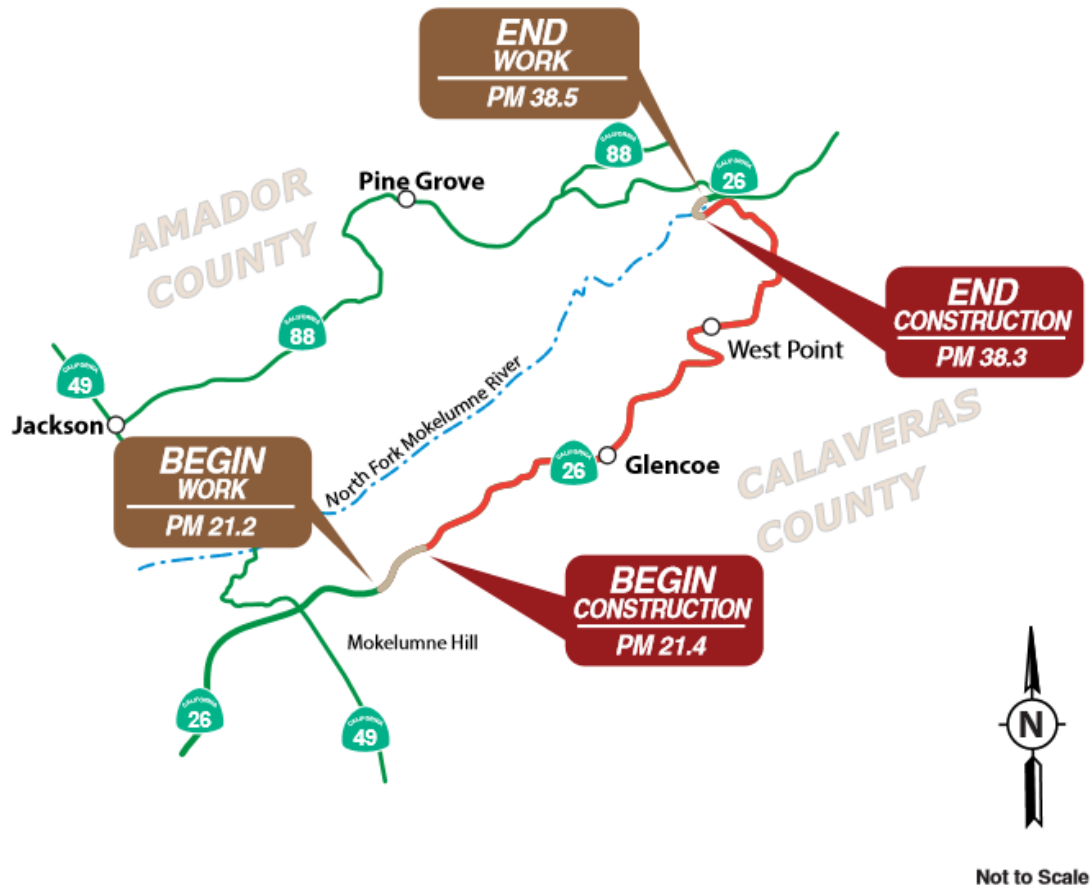


Figure 1-2 Project Location Map



1.4 Project Alternatives

Two alternatives are under consideration: the Build Alternative and the No-Build Alternative.

1.4.1 Build Alternative

The Build Alternative includes slope stabilization drainage improvements. New retaining walls would provide support for reconstructed and stabilized slopes at five locations. The following landscaping mitigation measures would be used: rolled erosion control, fiber rolls, bonded fiber matrix with hydroseed, and compost and overside drainage with rock slope protection at the outlets.

The following describes the work at each project location (Locations 1-8):

- Location 1 (post mile 21.75): This location would receive hydraulic and landscape treatments such as asphalt concrete dikes and overside drains with rock slope protection at the outlets. Compost, bonded fiber matrix, and fiber rolls would be constructed at the slope's upper half.
- Location 2 (post mile 22.33): A retaining wall would be added at this location.
- Location 3 (post mile 22.50): A retaining wall would be added at this location.
- Location 4 (post mile 22.58): A retaining wall would be added at this location.
- Location 5 (post mile 22.70): A retaining wall would be added at this location.
- Location 6 (post mile 22.75): A retaining wall would be added at this location.
- Location 7 (post mile 30.16): This location would receive hydraulic and landscape treatments such as asphalt concrete dikes and overside drains with rock slope protection at the outlets. Compost, bonded fiber matrix, and fiber rolls would be constructed at the slope's upper half.
- Location 8 (post mile 30.25): This location would receive treatment from hydraulic and landscape treatments such as asphalt concrete dikes and overside drains with rock slope protection at the outlets. Compost, bonded fiber matrix, and fiber rolls would be constructed at the slope's upper half.

1.4.2 No-Build (No-Action) Alternative

The No-Build (No-Action) Alternative would leave the roadway as is. No slope stabilization or drainage improvements would be made. This alternative is not viable as it would cause slopes within the project limits to deteriorate further. This would damage the highway and cause potential closures for motorists on State Route 26.

1.5 Alternatives Considered but Eliminated from Further Discussion

Three locations—originally numbered 7, 8 and 11, at post miles 29.60, 30.03 and 30.48, respectively—were removed from the project during the project development process. These locations were completed by two previously completed Caltrans projects. After the locations were removed from the project, the locations originally labeled 9 and 10 were renumbered as Locations 7 and 8 that were discussed previously in the project description.

1.6 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications (PLACs) are required for project construction.

Agency	Permit/Approval	Status
U.S. Fish and Wildlife Service	Section 7 Informal Consultation of Federally Endangered Species	A Letter of Concurrence will be obtained before completing the final environmental document
U.S. Army Corps of Engineers	Clean Water Act Section 404 Nationwide Permit	Application to be submitted during the project's final design phase
U.S. Army Corps of Engineers	Preliminary Jurisdictional Determination	To be obtained before completing the final environmental document
Regional Water Quality Control Board	Clean Water Act Section 401 Water Quality Certification	Application to be submitted during the project's final design phase
California Department of Fish and Wildlife	California Fish and Game Code 1602 Lake and Streamed Alteration Agreement	Application to be submitted during the project's final design phase

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. There is no further discussion of these issues in this document.

- Existing and Future Land Use—The project complies with current land use plans and would have no effect on future land use. (Draft Environmental Impact Report Calaveras County Draft General Plan, June 2018)
- Consistency with State, Regional, and Local Plans and Programs—The project is consistent with the Calaveras County Transportation and Circulation elements. (2018 Calaveras County General Plan)
- Coastal Zone—The project area is not within the coastal zone. It is about 80 miles from the Bay Area and about 115 miles inland from the Pacific Ocean. (2018 LandVision Digital Map)
- Wild and Scenic Rivers—There are no protected wild and scenic rivers within the project limits. (National Wild and Scenic Rivers System webpage, May 2019)
- Parks and Recreational Facilities—Public park facilities such as CB Hobbs Field in Mokelumne Hill, Sandy Gulch Field Baseball Park, and Mokelumne Coast to Crest Trail, occur within the project vicinity. However, the project would not impact these areas or require right-of-way from these lands. Therefore, there are no impacts to park or recreation areas. (Field visit, April 2019)
- Farmland/Timberland—The project would require a small amount of right-of-way (a total of 2.088 acres) from all eight locations to construct retaining walls and drainage systems. A Farmland Conversion Impact Form was evaluated by the United States Department of Agriculture on April 8, 2020. The form showed an impact of less than 160 points. None of the locations contain Prime, Unique, or Statewide or Locally important farmland. Therefore, the Farmland Protection Policy Act does not apply to this project.
- Growth—The project would not promote growth because it is not a capacity-increasing project. The project would stabilize failing and eroded slopes on both sides of State Route 26 and minimize discharge into nearby water bodies. (Supplemental Project Report, May 2017)

- **Community Character and Cohesion**—Because the project would upgrade existing drainage systems and stabilize slopes, it would neither disrupt the existing community character or cohesion, nor would it result in any new impacts to businesses or residences in the project area.
- **Environmental Justice**—No minority or low-income populations that would be adversely affected by the proposed project have been identified. Therefore, this project is not subject to the provisions of Executive Order 12898.
- **Traffic and Transportation/Pedestrian and Bicycle Facilities**—Caltrans would always maintain access to all businesses, residences, and public services. During construction, the project would use one-lane traffic control. The Caltrans Public Information Office would notify affected communities and users such as pedestrians, bicyclists, people in the county's transit and rideshare programs, and visitors through media releases. (Transportation Management Plan, September 2014)
- **Visual/Aesthetics**—The project would not result in large adverse impacts to the surrounding area's visual character. The project would require removing vegetation—mainly brush and chaparral—on the failing slopes. A combination of bonded fiber matrix with seed, fiber rolls and some rock slope protection would improve existing drainage features. All proposed landscape applications would be consistent with the existing scenic setting within the project limits; therefore, the overall visual character would not change from the area's existing visual resources. (Visual Impact Assessment Report, June 2019)
- **Cultural Resources**—The project would not impact any archaeological resources, historic properties, historical resources, or California historical landmarks. A Native American discussion was initiated with the Native American Heritage Commission and Wilton Rancheria tribe; however, Caltrans received no comments from the tribe to date. (Section 106 Compliance Memorandum, June 2019)
- **Hydrology and Floodplain**—The project does not consist of a longitudinal encroachment or a significant encroachment on the base floodplain. Project locations are in Zone X, which is outside of the flood zone. (Preliminary Location Hydraulic/Floodplain Study, October 2018)
- **Water Quality and Stormwater Runoff**—No long-term water quality impacts are expected. All short-term water quality impacts would be addressed in the design and construction phases of the project through use of Best Management Practices. (Water Quality Assessment Report, March 2019)
- **Geology, Soils, Seismicity and Topography**—The project would not present a significant risk to life or property or a significant adverse impact on the natural geology, soil, seismicity or topography. (Calaveras County Draft General Plan, June 2018)

- **Paleontology**—Because excavation for the project would be of limited depth and localized to single-point areas instead of widespread vertical and lateral excavation, there is a low probability of encountering significant paleontological finds. (Paleontological Identification Report, January 2019)
- **Hazardous Waste and Materials**—There are no leaking underground storage tank cases within the project area. Therefore, the potential to encounter contaminated soil is minimal. There is potential to encounter non-hazardous concentrations of aerially deposited lead while working in unpaved areas within the project limits. The Caltrans Standard Special Provision pertaining to Earth Material Containing Lead, 7-1.02K(6)(j)(iii), would be added to the construction contract. A lead compliance plan is required, and all soil must remain on-site. There would be no structure involvement with this project; therefore, the potential to encounter asbestos-containing material is minimal. A Preliminary Site Investigation is not required for this project. (Initial Site Assessment, March 2019)
- **Air Quality**—The project would not adversely affect air quality. The project is exempt from all project-level conformity requirements per 40 Code of Federal Regulations 93.126, Table 2-Shoulder Improvements. (Air Quality Compliance Memorandum, November 2018)
- **Noise**—The project is not considered a Type 1 project (construction of a highway on a new location or the physical alteration of an existing highway where there is either a substantial horizontal or substantial vertical alteration or capacity increased) and is not subject to the Caltrans Traffic Noise Analysis Protocol. No adverse noise impacts from construction are expected because construction would be conducted in accordance with Caltrans Standard Specifications Section 14-8.02 and applicable local noise standards. (Noise Compliance Study, March 2019)
- **Natural Communities**—No natural communities exist within the project area. (Natural Environment Study, December 2019)
- **Fish Species**—This project is within National Marine Fisheries Service jurisdiction. However, no Essential Fish Habitat exists within or near the project area. Therefore, Caltrans determined that resource agency discussion is not required. (Natural Environment Study, December 2019)

2.1 Human Environment

2.1.1 Relocations and Real Property Acquisition

Regulatory Setting

The National Environmental Policy Act of 1969, as amended, established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 U.S. Code 4331[b][2]). The Federal Highway Administration in its implementation of the National Environmental Policy Act (23 U.S. Code

109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires considering adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act, an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then the social or economic change may be considered in determining whether the physical change is significant. Since this project would result in a physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

Affected Environment

A Right-of-Way Data Sheet was completed for this project. The land surrounding State Route 26 within the project area consists of privately-owned parcels in a rural setting.

Environmental Consequences

The project would require additional right-of-way to construct retaining walls and drainage systems at all locations. Minor right-of-way acquisition for five parcels would be required for the project. Some parcels encompass more than one location. No residential displacement is required. Partial acquisitions are described below.

- Location 1 (post mile 21.75): 0.243 acre is required for hydraulic and landscape treatments.
- Location 2 (post mile 22.33): 0.119 acre is required to construct a retaining wall.
- Location 3 (post mile 22.50): 0.504 acre is required to construct a retaining wall.
- Location 4 (post mile 22.58): 0.267 acre is required to construct a retaining wall.
- Location 5 (post mile 22.70): 0.168 acre is required to construct a retaining wall.
- Location 6 (post mile 22.75): 0.167 acre is required to construct a retaining wall.
- Location 7 (post mile 30.16): 0.210 acre is required for hydraulic and landscaping treatments.
- Location 8 (post mile 30.25): 0.410 acre is required for hydraulic and landscaping treatments.

The total amount of partial right-of-way acquisition for all locations is 2.088 acres.

Caltrans right-of-way agents would work directly with property owners per the requirements of the Uniform Relocation Assistance and Real Property Acquisition Act of 1970.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures are proposed.

2.1.2 Utilities and Emergency Services

Affected Environment

Fire Protection and Police Services

Fire protection and police services in the project area are provided by the following agencies:

- California Highway Patrol, 749 Mountain Ranch Road, San Andreas, California 95249.
- Calaveras County Sheriff's Department, 891 Mountain Ranch Road, San Andreas, California 95249.
- California Department of Forestry and Fire Protection Emergency Command Center, 785 Mountain Ranch Road, San Andreas, California 95249.
- West Point Fire Protection District, P.O. Box 417, West Point, California 95255.

Hospital Emergency Care Services

- Air Ambulance Providers, PHI Air Medical, 801-D Airport, Modesto, California 95354.
- California Shock Trauma Air Rescue, 12151 Airport Road, Jackson, California 95642.
- Mark Twain Medical Center, 768 Mountain Ranch Road, San Andreas, California 95249.
- Sonora Regional Medical Center, 1000 Greenley Road, Sonora, California 95370.

Utilities

Several above- and below-ground utilities throughout the project area such as water, wastewater, internet and telephone service, and electricity serve the needs of the surrounding communities. The following utility companies provide public service for Calaveras County:

- Calaveras Public Utilities District (serves San Andreas and Mokelumne Hill)
- Calaveras County Water District (serves West Point and part of Valley Springs)
- Mokelumne Hill Sanitary District (provides wastewater service)
- Pacific Gas and Electric Company (the main provider of natural gas and electric service countywide)
- American Telephone and Telegraph Corporation (also known as AT&T Corporation), Volcano Telephone Company, Comcast, Calaveras Telephone Company, American Online (also known as AOL), EarthLink (provides landline and internet services)

Several underground utilities occur in the project area, including gas, fiber optics, communications, oil, cable, sewer and water. Potholing would be done to determine underground conflicts.

Environmental Consequences

The project would be constructed with one-lane traffic control and night work.

The Transportation Management Plan would minimize temporary traffic delays during construction. Access to businesses and residences would be maintained throughout construction. Portable changeable message signs would be used, and Caltrans' Public Information Office would notify impacted groups of upcoming construction.

There are about 15 utility poles within the project limits that may be impacted. The level of impact to utilities, and other details, would be available in the Plans, Specifications, and Estimates phase of the project.

Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures are proposed.

2.2 Biological Environment

A Natural Environment Study was prepared for the project in December 2019.

Within the project limits, State Route 26 is very curvy and is mostly on side slopes. The elevation at the western end of the project area is approximately 1,425 feet above sea level; the elevation at the eastern end of the project area is approximately 2,076 feet above sea level. The project area's land is mainly used for forest-based recreation, including camping, hiking, hunting, birding, wildlife-viewing, and horseback riding. Off-highway vehicles are also used.

The entire project area is next to the Stanislaus National Forest of western Calaveras County. The terrain is generally mountainous with habitat transitioning from oak woodlands to yellow pines. State Route 26 is a curvy, two-lane road linking recreational mountain destinations with the Stockton metro area, which is about 50 miles to the southwest. The unincorporated town of Glencoe represents the only built-up area within the project area.

The project area within the eight locations consists of the project footprint—where actual project work will take place—and a 200-foot buffer. The project area was developed in two ways. One was by considering potential effects of the project and the land use types surrounding the project site, and the other was by making a conservative estimate of how far project-related noise and activity might potentially disturb special-status species.

2.2.1 Wetlands and Other Waters

Regulatory Setting

Wetlands and other waters are protected under several laws and regulations. The Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (33 U.S. Code 1344), is the main law that regulates wetlands and surface waters. One purpose of the Clean Water Act is to regulate the discharge of dredged or fill material into U.S. waters such as wetlands. U.S. waters include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. The lateral limits of jurisdiction over nontidal water bodies extend to the ordinary high-water mark in the absence of nearby wetlands. When nearby wetlands are present, the Clean Water Act's jurisdiction extends beyond the ordinary high-water mark to limits of the nearby wetlands.

The three-parameter approach that is used to categorize wetlands for the Clean Water Act includes the presence of: hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils—soils formed during saturation and 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 states that discharge of dredged or fill material cannot be allowed if a workable 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. The two types of 404 permits that the U.S. Army Corps of Engineers issues include General and Individual permits. The two types of General permits include Regional and Nationwide permits. The U.S. Army Corps of Engineers issues Regional permits for a general category of activities when they are similar in nature and cause

minimal environmental effects. The U.S. Army Corps of Engineers issues Nationwide permits to allow a variety of minor project activities with no more than minimal effects.

Usually, projects that do not meet the criteria for a Regional or Nationwide permit may be allowed under one of the U.S. Army Corps of Engineers' Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. The U.S. Army Corps of Engineers considers two factors before approving Individual permits. The first is whether projects comply with the U.S. Environmental Protection Agency's Section 404(b)(1) Guidelines (40 Code of Federal Regulations 230). The other is based on whether approving an Individual permit is in the public's best interest. The Section 404 (b)(1) Guidelines were developed by the U.S. Environmental Protection Agency with the U.S. Army Corps of Engineers. The guidelines allow the discharge of dredged or fill material into the aquatic system (U.S. waters) only if there is no workable alternative that would have less adverse effects. The guidelines state that the U.S. Army Corps of Engineers may not issue a permit if there is a "least environmentally damaging practicable alternative" to the proposed discharge that would have lesser effects on U.S. waters, and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (Executive Order 11990) also regulates the activities of federal agencies regarding wetlands. Essentially, Executive Order 11990 states that a federal agency, such as the Federal Highway Administration and/or Caltrans, as assigned, cannot undertake or aid with new construction in wetlands unless the head of the agency finds that there is no workable alternative to the construction, and that the proposed project includes all workable measures to minimize harm. A Wetlands Only Practicable Alternative Finding must be made.

At the state level, wetlands and waters are regulated mostly by the State Water Resources Control Board, the Regional Water Quality Control Boards, and the California Department of Fish and Wildlife. In certain situations, the California Coastal Commission, the San Francisco Bay Conservation and Development Commission, or the Tahoe Regional Planning Agency may also get involved.

Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that would significantly distract or block the natural flow of a river, stream, or lake to notify the California Department of Fish and Wildlife before beginning construction. Agencies must also report if a project would significantly change the bed or bank of a river, stream, or lake. If the California Department of Fish and Wildlife determines that the project may significantly and adversely affect fish or wildlife resources, a Lake and Streambed Alteration Agreement would be required.

The California Department of Fish and Wildlife's jurisdictional limits are usually defined by the tops of a stream or lake bank, or the outer edge of riparian vegetation—whichever is wider. Wetlands under the U.S. Army Corps of Engineers' jurisdiction may or may not be included in the area covered by a Streambed Alteration Agreement from the California Department of Fish and Wildlife.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are allowed by Waste Discharge Requirements. Discharges under the act may also be required even when the discharge is already allowed or exempt under the Clean Water Act. In compliance with Section 401 of the Clean Water Act, the Regional Water Quality Control Boards also issue water quality certifications for activities that may result in a discharge to U.S. waters. This is most frequently required in tandem with a Section 404 permit request. See the Water Quality Assessment Report, March 2019 for more details.

Affected Environment

A Natural Environment Study was prepared for the project in December 2019. A Jurisdictional Determination would be prepared to confirm the presence, boundaries, and impacts to any U.S. waters and submitted to the U.S. Army Corps of Engineers.

An aquatic resource description performed by Caltrans' biologists documented potential wetlands and other waters in the project area following guidance in the 1987 Corps of Engineers Wetland Delineation Manual, and the Regional Supplements to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Regions (Version 2.0). There was evidence of wetlands at most sites; however, most wetlands were outside the Caltrans right-of-way, and were either too heavily vegetated to walk and record Geographical Positioning System (GPS) data, and/or too steep to safely access. Aerial imagery and field notes were used to determine the ordinary high-water mark and potential wetland boundaries.

Wetlands and Unnamed Creek/Drainage Ditch (Locations 1-6)

Four small wetlands lie between Locations 1-6. These small wetlands were unable to be defined because they were inaccessible, which was due to safety hazards such as slope steepness and an abundance of poison oak.

A small, unnamed creek/drainage ditch that flows parallel to the roadway on the east side of State Route 26 should be avoided during construction. This waterway does not appear to be a tributary to any other body of water. This small unnamed creek/drainage ditch is presumed to be a California Department of Fish and Wildlife jurisdictional waterway. The roadway culverts and hillside runoff are potential tributaries to the unnamed creek/drainage ditch and are not under California Department of Fish and Wildlife jurisdiction.

North Fork Mokelumne River (Locations 7-8)

One main waterway runs west of the project area. Portions of the North Fork Mokelumne River system—the main creek that supplies Pardee Reservoir and Camanche Reservoir—is inside the project footprint on the western half of the project area. This river system lies within a canyon that is about 2 miles west of the project area. Additional, smaller tributaries outside the project area include Calaveras Public Utility Ditch, North Fork Calaveras River—tributary to New Hogan Lake—and the South Fork Mokelumne River—tributary to the North Fork Mokelumne River.

The general direction of runoff in this region is toward the North Fork Mokelumne River canyon to the west of the project area. The North Fork Mokelumne River is presumed to be a California Department of Fish and Wildlife jurisdictional waterway.

Oak Woodland

An oak woodland is a plant community with a tree canopy dominated by oaks (*Quercus* spp.). In terms of canopy closure, oak woodlands are intermediate between oak savanna, which is more open, and oak forest, which is more closed. Although the community is named for the dominance of oak trees, the understory vegetation is often diverse and includes many species of grasses, sedges, forbs, ferns, shrubs, and other plants. There are about 8 trees within the 1600 jurisdictional area of the California Department of Fish and Wildlife within the project area.

Environmental Consequences

The project would result in minor impacts to wetlands and other waters under the U.S. Army Corps of Engineers' jurisdiction.

Direct impacts to wetlands and other waters may occur through soil disturbances from construction activities such as clearing, grubbing and grading, as well as placing fill material. Removing wetlands would also cause direct impacts to plant and wildlife species that depend on these aquatic features for food, shelter, reproduction and dispersal/migration.

Wetlands and Unnamed Creek/Drainage Ditch (Locations 1-6)

The project could impact all four wetlands within the project area. These small wetlands were estimated to be no larger than 9 square feet (4 wetlands times 36 square feet equals 0.0008 acre). A Jurisdictional Determination will be prepared to confirm the presence, boundaries and impacts to these wetlands.

The proposed soldier pile wall will still allow water to flow into the adjacent unnamed creek/drainage ditch that flows next to State Route 26, which will be avoided during construction. The culverts and hillside runoff associated with this area will not be impacted by the project and will still function as tributaries to the unnamed creek/drainage ditch.

North Fork Mokelumne River (Locations 7-8)

The North Fork Mokelumne River system will not be impacted by the project.

Oak Woodland

Some trees will need to be removed for the overside drain installations for this project, at Location 8 (post mile 30.25). The trees being removed at Location 8 are within 200 feet of the North Fork Mokelumne River and so they are within the 1600 jurisdictional area of the California Department of Fish and Wildlife.

The project would require the following permits:

- Sacramento District of the U.S. Army Corps of Engineers Section 404 Nationwide permit.
- Regional Water Quality Control Board Section 401 Water Quality Certification.
- California Department of Fish and Wildlife 1602 Streambed Alteration permit.

Coordination with regulatory agencies would take place during the permit application phase of the project's planning process.

Avoidance, Minimization, and/or Mitigation Measures

Compensatory mitigation for all unavoidable, permanent impacts to wetlands would be completed to ensure there is no net loss of these hydrologic resources. Though the method has not been determined at this time, it could include any of the following: creation, restoration, preservation or credit purchase at an approved conservation bank. The final compensation proposal will be coordinated with the California Department of Fish and Wildlife during the permit application phase.

The following avoidance and minimization measures would be implemented for wetlands and other waters:

- If feasible, wetlands would be avoided to the maximum extent possible.
- A Stormwater Pollution Prevention Plan would be prepared specifically for the project; it would include measures to reduce impacts to aquatic resources such as wetlands.
- The contractor would follow Best Management Practices specifically developed for the project. These may include:
 - Installing temporary erosion control features.
 - Using a Spill Prevention Plan with measures to minimize the risk of fluids or other materials used during construction—oils, transmission

and hydraulic fluids, cement, fuel—from entering aquatic resources and upland habitat.

- Installing measures to protect water quality.
- Installing temporary silt fencing within the project footprint to protect wetlands—an environmentally sensitive area—next to the project footprint from construction-related disturbances.

Oak Woodland

It is estimated that 8 trees will be removed for the project, mostly at Location 8 (post mile 30.25). Most of the trees to be removed are within the 1600 jurisdictional area of the California Department of Fish and Wildlife. Therefore, Caltrans would compensate for this impact most likely at an off-site location at a minimum 3:1 compensation ratio would be used.

2.2.2 Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife have regulatory responsibility for protecting special-status plant species. Special-status species are selected for protection because they are rare and/or are subject to population and habitat declines. “Special-status” is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Endangered Species Act of 1973 and/or the California Endangered Species Act. See the Threatened and Endangered Species section 2.2.4 in this document for information about these species.

This section of the document discusses all other special-status plant species, including the California Department of Fish and Wildlife’s species of special concern, the U.S. Fish and Wildlife Service’s candidate species, and the California Native Plant Society’s rare and endangered plants.

The regulatory requirements for the Endangered Species Act of 1973 can be found at 16 U.S. Code Section 1531, et seq., and at 50 Code of Federal Regulations Part 402. The regulatory requirements for the California Endangered Species Act can be found at the California Fish and Game Code, Section 2050, et seq. Caltrans’ projects are subject to the Native Plant Protection Act, which can be found at the California Fish and Game Code, Sections 1900-1913. Its projects are also subject to the California Environmental Quality Act and can be found at the California Public Resources Code, Sections 21000-21177.

Affected Environment

A Natural Environment Study was prepared for the project in December 2019. Botanical surveys were conducted within the project area for each of the locations in August 2018, March 2019, and May 2019. These were necessary to characterize as vegetation associations and habitat conditions, provide an inventory of plant species seen, and determine the presence or absence of special-status plant species.

The California Natural Diversity Database was reviewed to generate a list of sensitive natural vegetation communities and special-status plants in the project vicinity. An inquiry of the California Native Plant Society's Electronic Inventory was completed to provide information on additional special-status plants that may occur on the project site and surrounding vicinity.

The project area is mostly undisturbed and undeveloped except for the existing State Route 26. The project area's landscape contains California oak woodlands and montane shrubs, which transition to yellow pines.

The following special-status plants could occur in the project area:

Red Hills Soaproot

The Red Hills soaproot (*Chlorogalum grandiflorum*) is a species of a flowering plant known by the common name Red Hills soap plant. The Red Hills soaproot grows in chaparral, woodland, and forests. It is prevalent in the Sierra Nevada foothills, especially in Red Hills in Tuolumne County.

The California Native Plant Society and the California Natural Diversity Database records show that the Red Hills soaproot occurs in the project's related U.S. Geological Survey quadrangles. No Red Hills soaproot was found in the project area during botanical surveys.

Stanislaus Monkeyflower

The Stanislaus monkeyflower (*Erythranthe marmorata*) grows up to 31 inches tall, with large tubular yellow flowers and oval leaves up to about 4 inches long. The species is everlasting and spreads with runner branches or root shoots.

Records from the California Native Plant Society and the California Natural Diversity Database show that the Stanislaus monkeyflower occurs within the project's related U.S. Geological Survey quadrangles. No Stanislaus monkeyflowers were found in the project area during botanical surveys.

Parry's Horkelia

The Parry's horkelia (*Horkelia parryi*) is a flowering plant in the rose family. It is prevalent in California and grows in the chaparral of the Sierra Nevada foothills. This is a low, mat-forming, everlasting herb that grows in modest green patches on the ground. The leaves are 2 to 4 inches long and are each

made up of small, toothed, oval-shaped leaflets. The flower has five white petals.

Records from the California Native Plant Society and the California Natural Diversity Database show that the Parry's horkelia occurs within the project's related U.S. Geological Survey quadrangles. No Parry's horkelias were found in the project area during botanical surveys.

Dubious Pea

The dubious pea (*Lathyrus sulphureus* var. *argillaceus*) is a hairless, everlasting herb with leaves of many oval-shaped leaflets, each up to 1.5 inches long. The plant produces a dense grouping of up to 15 pea flowers, often arranged in a line down one side of the stem. The flowers range from light yellow to deep orange and become darker as they age.

Records from the California Native Plant Society show that the dubious pea occurs within the project's related U.S. Geological Survey quadrangles. No dubious peas were found in the project area during botanical surveys.

Environmental Consequences

There were no findings of the following special-status plants in the project area during botanical surveys:

- Red Hills soaproot
- Stanislaus monkeyflower
- Parry's horkelia
- Dubious pea

Project impacts are limited to a small area—estimated at about 0.10 acre or less per site—immediately next to the existing roadbed. Impacts at worksites that are not directly associated with riparian areas would most often occur on areas of road fill (down-slope side) or road cut (uphill side).

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures would be implemented for all plant species noted above:

- Pre-construction botanical surveys would be performed within the project area according to the California Department of Fish and Wildlife's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*.
- If any special-status species of plants seen within the project footprint during the preconstruction botanical surveys would be flagged and avoided if possible.

- If avoiding them is not possible, measures such as relocating or preserving topsoil may be implemented to minimize impacts to this species.

No compensatory mitigation is proposed.

2.2.3 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service, and the California Department of Fish and Wildlife are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed later in Section 2.2.4. All other special-status animal species are discussed here, including the California Department of Fish and Wildlife's fully protected species and species of special concern, and the U.S. Fish and Wildlife Service or the National Oceanic Atmospheric Administration Marine Fisheries Service's candidate species.

Federal laws and regulations relevant to wildlife include the following:

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

State laws and regulations relevant to wildlife include the following:

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

Affected Environment

A Natural Environment Study was prepared for the project in December 2019. Surveys were conducted within the area for each of the locations in August 2018, March 2019, and May 2019.

There is potential for nesting bird to be disturbed by construction activities.

Caltrans' biologists did wildlife surveys within the project area to determine the presence or absence of all special-status animal species that could potentially be found within the project area.

One special-status animal species could exist in the project area. The foothill yellow-legged frog is designated as a species of concern and is a candidate for the California Department of Fish and Wildlife's state threatened species list.

Foothill Yellow-Legged Frog

The foothill yellow-legged frog (*Rana boylii*) is a small—less than 4 inches long—frog from the genus *Rana* in the family Ranidae. It is a state candidate species and a state species of special concern. This species can be found in the coast ranges from northern Oregon, through California, and into Baja California, Mexico, as well as in the foothills of the Sierra Nevada and the southern Cascade Range in California. The foothill yellow-legged frog has a grey, brown, or reddish back. It is commonly spotted or mottled, but is occasionally plain-colored.

The species is found at elevations ranging from sea level to 6,700 feet in the Baja California Norte. In California, foothill yellow-legged frogs have been recorded in the Sierra as high as 6,000 feet near McKesick Peak and Plumas National Forest, and 6,365 feet at Snow Mountain in the boundaries of Lake and Colusa counties. They are found in flowing streams and rivers with either rocky beds or sunny banks.

No foothill yellow-legged frogs or signs of their occupancy were found in the project area during environmental surveys. The species could be present in the project area because appropriate coniferous forests and a deciduous-riparian habitat are present, and a suitable food source such as insects (including snails) exists.

The project area is slightly disturbed and consists of mostly montane vegetation. Suitable natural habitat exists in the project area, but routine road maintenance and the drainage of culverts may discourage the species from living in certain locations.

Environmental Consequences

There is a chance that individual foothill yellow-legged frogs could be directly affected by construction when vehicle and equipment traffic increase. Foothill yellow-legged frogs could be killed by vehicles or construction equipment because construction would occur during the warmer seasons—when no snow is present—when each species is active. Although no foothill yellow-legged frogs were detected, should they come to live near the project site, destruction or disturbance of the riparian habitat could injure or kill them. Slowing traffic along the project route during construction may reduce the threat to foothill yellow-legged frogs.

Foothill yellow-legged frogs could also be indirectly affected by construction activities. Spilling or leaking industrial chemicals, fuels, and lubricants could poison foothill yellow-legged frogs and contaminate their habitat. If chemicals

poison foothill yellow-legged frogs' prey, the frogs could also be poisoned by ingesting them.

No direct or indirect effects are expected after construction ends because the project would not increase the number of travel lanes, vehicle miles traveled, or the speed of traffic on State Route 26 over baseline conditions. The project is not expected to result in any permanent effects to foothill yellow-legged frogs' habitat. Project impacts are limited to a small area—estimated at about 0.10 acre or less per site—immediately next to the existing roadbed. Impacts at worksites that are not directly associated with riparian areas would most often occur on areas of road fill (down-slope side) or road cut (uphill side). Both habitats have already been changed so they are unlikely to be occupied by foothill yellow-legged frogs.

Temporary impacts are limited to a small degree of soil disturbance and compaction. Temporary impacts may also include trimming shrubby vegetation and seedling-to-sapling-sized conifer trees, and noise, vibration, and dust created by construction machinery and work personnel. In all cases, these impacts would be highly localized, low intensity, and of short duration. However, they would have the greatest effect at the project site during slope stabilization.

Indirect downstream effects to any suitable habitats nearby are not expected because the proposed alterations would not change existing flow patterns, stream channels, or runoff channels.

In addition, project construction may affect species covered by the Migratory Bird Treaty Act. Contract Standard Special Provisions for the species listed above and migratory birds would be required to minimize impacts to listed and protected species.

Avoidance, Minimization, and/or Mitigation Measures

No permanent impacts to foothill yellow-legged frogs are expected; no compensatory mitigation is proposed for the project.

The following avoidance and minimization measures would be implemented:

- Environmental awareness training would be provided by a Caltrans-approved biologist to all construction personnel before the start of construction.
- Pre-construction/pre-activity surveys would be conducted no less than 14 days and no more than 30 days before the beginning of ground disturbance and/or construction activities, or any project activity that is likely to impact the species.

- Surveys would be conducted within the proposed project boundary and within accessible areas up to 200 feet outside the project footprint to identify habitat features.
- Should pre-construction surveys find evidence of foothill yellow-legged frog occupancy, a qualified biologist would be present during initial project-related, ground-disturbing activities within 50 feet of the occurrence location.
- Food, trash and other garbage would be disposed of in closed containers and removed at the end of each workday. Feeding of any wildlife would not be allowed.
- Firearms—except those carried by qualified and permitted public safety agents—and pets would not be allowed on the work site.
- To the extent possible, a biologist would be available on-call during all construction periods when not present on-site.
- Erosion control measures would be implemented near any aquatic streams and/or ponds associated with work in the project area to minimize sediment from entering the waterways, and to potentially exclude listed semi-aquatic species from the project footprint.

2.2.4 Threatened and Endangered Species

Regulatory Setting

The main federal law that protects threatened and endangered species is the Endangered Species Act of 1973: 16 U.S. Code Section 1531, et seq. (Also see 50 Code of Federal Regulations 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 (and Caltrans as assigned), are required to consult with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the existence of listed species, or destroy or adversely change designated critical habitat. Critical habitat is defined as geographic locations that are critical to the existence of a threatened or endangered species. The outcome of a discussion under Section 7 may include a biological opinion with an incidental take statement or a concurrence letter. Section 3 of the Endangered Species Act of 1973 defines "take" as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or any attempt at such conduct."

California has enacted a similar law at the state level in the California Endangered Species Act and the California Fish and Game Code Section 2050, et seq. The California Endangered Species Act emphasizes early

discussion to avoid potential impacts to rare, endangered, and threatened species, and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife is the agency responsible for implementing the laws of the California Endangered Species Act.

Section 2080 of the California Fish and Game Code bans anyone from taking any species that is determined to be endangered or threatened. “Take” is defined in Section 86 of the California Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The California Endangered Species Act allows for a take incidental to otherwise lawful development projects. For these actions, an incidental take permit is issued by the California Department of Fish and Wildlife.

Species listed under the Endangered Species Act of 1973 and the California Endangered Species Act require a biological opinion under Section 7 of the Endangered Species Act of 1973. The California Department of Fish and Wildlife may also authorize impacts to species under the California Endangered Species Act by issuing a consistency determination under Section 2080.1 of the California Fish and Game Code.

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

Affected Environment

A Natural Environment Study was prepared for the project in December 2019. A Biological Assessment would be prepared to analyze and make determinations on project impacts on federally listed species that were found to have potential to occur on or near the project. Caltrans would initiate an informal consultation with the U.S. Fish and Wildlife Service about how the project may affect but is not likely to adversely affect these species (fisher, lone manzanita, California red-legged frog and California tiger salamander). Caltrans also expects to receive a concurrence letter in support of this determination. A 2081 Incidental Take Permit from the California Department of Fish and Wildlife Service will be not required.

A review of the literature and agency databases—the California Department of Fish and Wildlife, the California Natural Diversity Database, the U.S. Fish and Wildlife Service’s online Threatened and Endangered Species Critical

Habitat Designation Database/Mapper, and the National Marine Fisheries Service's species database quadrangle search—found that Delta smelt, California Central Valley steelhead trout, and Chinook salmon essential fish habitat have potential to be found within the project limits. However, there are no fish passages or appropriate aquatic habitat present in the project area. Therefore, Caltrans has determined that the project will not affect these species. Consultation with the National Marine Fisheries Service is not required.

The following state listed plant and animal species are also federally threatened and have the potential to occur within the project area.

Fisher

The fisher (*Pekania pennanti*) is a medium-sized mammal, comparable in size to the domestic cat. The fisher's body is long, thin and low to the ground. Fishers are predators. Although they mainly eat snowshoe hares and porcupines, they also eat insects, nuts, berries, and mushrooms.

Fishers are widespread throughout the northern forests of North America. Fishers are most active at dawn and dusk and are active year-round. They are often alone, associating with other fishers only for mating; males become more active during mating season.

Suitable natural habitat exists in the project area, but routine road maintenance and drainage of culverts may discourage the species from living in certain locations. The project area is slightly disturbed and consists of mostly montane vegetation such as patches of black and live oak, as well as ponderosa pine with scatterings of small wetlands and meadows. Fishers can forage in nearby aquatic and terrestrial habitats where they can find suitable prey. Therefore, with suitable habitat present, fishers could occur in or near the project area, but none were seen in the project area during wildlife surveys.

lone Manzanita

The lone manzanita (*Arctostaphylos myrtifolia*) is a federally threatened species listed by the U.S. Fish and Wildlife Service. This is a red-barked, bristly shrub that grows about 3 feet tall. The small, bright green leaves are less than ¾-inch long and are coated in tiny hairs that are shiny, but rough in texture. The flower cluster is a bloom of urn-shaped manzanita flowers on bright, red branches.

According to the California Natural Diversity Database and the U.S. Geological Survey, the closest lone manzanita occurred within the Mokelumne Hill's quadrangle in July 1973.

Manzanita shrubs were found in the project area at Locations 1 through 6, but most of them were white-leaf manzanita (*Arctostaphylos viscida*). Only a few

manzanita shrubs were not identified due to being inaccessible. This species typically grows on acidic, sandy, or clay soils, none of which are present in the project area. No lone manzanita plants were positively identified within the project during the botanical surveys.

Because construction of the project requires removing vegetation at the slope sites, there is little potential to impact this species.

California Red-Legged Frog

The California red-legged frog (*Rana draytonii*; formerly, *Rana aurora draytonii*) is the largest native frog in the western United States, growing up to 5.25 inches long. The California red-legged frog is a federally threatened species and state listed as a species of special concern.

From above, the California red-legged frog can appear brown, gray, olive, red, or orange, often with a pattern of dark flecks or spots. Its back is bordered on each side by a ridge running from the eye to the hip. Its hind legs are well-developed with large, webbed feet. A cream, white, or orange stripe usually extends along the upper lip from beneath the eye to the rear of the jaw. The undersides of adult California red-legged frogs are white, usually with patches of bright red or orange on the abdomen and hind legs.

No California red-legged frogs were seen in the project area during wildlife surveys, but the species could appear because the project area contains suitable habitat and provides many of its food sources. Natural aquatic and terrestrial habitats exist in the project area, but routine road maintenance and drainage of culverts may discourage the species from living in certain locations.

California Tiger Salamander

The California tiger salamander (*Ambystoma californiense*) is a federally threatened species and state listed as threatened and a species of special concern. It is a large stocky salamander, with a broad rounded snout. Its small eyes and black irises protrude from its head. Adult males are about 8 inches long; adult females are about 7 inches long. The name “tiger” comes from the white or yellow bars marking the California tiger salamanders. Their background color is black. Their belly varies from almost uniform white or pale yellow to a pattern of white or pale yellow and black.

Suitable natural habitat exists in the project area, but routine road maintenance and drainage of culverts may discourage the species from living in certain locations. The project area is slightly disturbed and consists of mostly montane vegetation. California tiger salamanders can forage in nearby aquatic and terrestrial habitats where they can find suitable prey. Therefore, with suitable habitat present, the California tiger salamander could occur within or near the project area. However, no California tiger salamanders were seen in the project area during wildlife surveys.

Environmental Consequences

Table 2.1 shows the Endangered Species Act's determinations for the seven species included in the U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration Fisheries species list that was generated for the project. Of these, three species were considered absent from the project area based on a lack of suitable habitat. The following codes are used in the table: FT means Federally Threatened, FPT means Federally Proposed Threatened, and EFH means Essential Fish Habitat.

Table 2.1 Endangered Species Act Determinations

Species	Status	Determination	Rationale
Fisher	FPT	<i>May affect, not likely to adversely affect</i>	Unlikely to occur on-site due to routine road maintenance and drainage of culverts may discourage the species from living in that habitat.
lone manzanita	FT	<i>May affect, not likely to adversely affect</i>	Suitable habitat is present, but species have not been seen on-site.
Delta smelt	FT	<i>No effect</i>	No appropriate aquatic habitat is present within the project area.
California tiger salamander	FT	<i>May affect, not likely to adversely affect</i>	There is suitable aquatic and deciduous-riparian habitat present in the project area. No California tiger salamanders were seen on-site during surveys.
California Central Valley steelhead trout	FT	<i>No effect</i>	No appropriate aquatic habitat present.
California red-legged frog	FT	<i>May affect, not likely to adversely affect</i>	Suitable aquatic habitat is present within the project area. However, routine road maintenance and drainage of culverts may discourage the species from living in that habitat. No California red-legged frogs were seen within the project area during surveys.
Chinook salmon	EFH	<i>No effect</i>	No appropriate aquatic habitat present.

Fisher

It is Caltrans' determination that the project *may affect, but is not likely to adversely affect* the fisher, which was not seen on-site. Caltrans would initiate an informal consultation with the U.S. Fish and Wildlife Service and expects to receive a concurrence letter in support of this determination.

There is a chance that individual fishers could be directly affected by construction if vehicle and equipment traffic increase. Fishers could be killed by vehicles or construction equipment because construction would occur during the warmer seasons—when no snow is present—when the species is active.

Potential impacts to the fishers are expected to be minimal, temporary, and discountable, with no loss of habitat. Proposed avoidance and minimization efforts would prevent take and minimize disturbance to any fishers near work activities.

lone Manzanita

Caltrans has determined that the project *may affect but is not likely to adversely affect* the lone manzanita. Caltrans would initiate an informal consultation with the U.S. Fish and Wildlife Service and expects to receive a concurrence letter in support of this determination.

There are records that show the lone manzanita occurring within the project limits, but no lone manzanita plants were seen in the project area during surveys.

Construction of this project requires removing vegetation at the slope sites. Disturbing the soil could provide a way through ecological succession dynamics for the lone manzanita to grow in the newly disturbed soil of the project area. Potential impacts to the fishers are expected to be minimal, temporary, and discountable, with no loss of habitat. Proposed avoidance and minimization efforts would prevent take and minimize disturbance to the lone manzanita near work activities.

California Tiger Salamander and California Red-Legged Frog

Caltrans has determined that the project *may affect but is not likely to adversely affect* both species. Caltrans would initiate an informal consultation with the U.S. Fish and Wildlife Service and expects to receive a Letter of Concurrence in support of this determination.

California tiger salamanders could be directly affected by construction if vehicle and equipment traffic increase. California tiger salamanders and California red-legged frogs could be killed by vehicles or construction equipment because construction would occur during the warmer seasons—when no snow is present—when the species are active. Although no California tiger salamanders and California red-legged frogs were detected, if they were to occupy the project site, destruction or disturbance of the riparian habitat could injure or kill them. These potential effects would be limited in duration.

During construction periods, slowing of traffic along the project route may reduce the threat posed by traffic. Spillage or leakage of industrial chemicals,

fuels, and lubricants could poison California tiger salamanders and California red-legged frogs or contaminate their habitat. If chemicals poison their prey, California tiger salamanders and California red-legged frogs could be poisoned by ingesting them.

No direct or indirect effects are expected after the end of construction because the project would not increase the number of travel lanes, vehicle miles traveled, or the speed of traffic on State Route 26 over baseline conditions. This project is not expected to result in any permanent effects to California tiger salamander and California red-legged frog habitat. Project impacts are limited to a very small area—estimated at about 0.10 acre or less per site—immediately next to the existing roadbed. Impacts at worksites, which are not close to riparian areas, would most often occur on areas of road fill (downslope side) or road cut (uphill side). Both areas have already been changed and are unlikely to be occupied by California tiger salamanders and California red-legged frogs.

Temporary impacts would include disturbing and compacting soil and trimming shrubby vegetation and seedling-to-sapling-sized conifer trees. Construction machinery and work personnel would also contribute to temporary impacts through noise, vibration and dust. These impacts would have the greatest impact at the project site during slope stabilization.

Indirect downstream effects to any suitable habitats nearby are not expected because the proposed alterations would not change existing flow patterns, stream channels, or runoff channels.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures would be implemented for the following:

Fisher

No permanent impacts to the fishers are anticipated; no compensatory mitigation is proposed for this project.

California Tiger Salamander

No permanent impacts to California tiger salamanders are anticipated; no compensatory mitigation is proposed for this project.

California Red-Legged Frogs

No permanent impacts to California red-legged frogs are anticipated; no compensatory mitigation is proposed for this project.

Lone Manzanita

No permanent impacts to the lone manzanita are anticipated; no compensatory mitigation is proposed.

The avoidance and minimization measures below would be implemented to reduce the threat of direct and indirect impacts to the fisher, California tiger salamander, California red-legged frog, and lone manzanita within the project limits:

- Environmental awareness training would be provided by a Caltrans-approved biologist to all construction personnel before construction starts.
- Pre-construction/pre-activity surveys would be conducted no less than 14 days and no more than 30 days before the beginning of ground disturbance and/or construction activities.
- Surveys would be conducted within the project's boundary and within accessible areas up to 200 feet outside the project footprint to identify habitat features.
- Should pre-construction surveys find evidence of recent species occupancy, a qualified biologist would be present during initial project-related, ground-disturbing activities within 50 feet of the occurrence location.
- Food, trash and other garbage would be disposed of in closed containers and removed at the end of each work period. Feeding of any wildlife would not be allowed.
- Firearms—except those carried by qualified and permitted public safety agents—and pets would not be allowed on the work site.
- To the extent possible, a biologist would be available on-call during all construction periods when not present on-site.
- Erosion control measures would be implemented near any aquatic streams and/or ponds associated with work in the project area to minimize sediment from entering the waterways and to potentially exclude listed semi-aquatic species from the project area.
- Standard Special Provision 14-6.02 Species Protection (buffers, work stoppage areas)
- Standard Special Provision 14-1.02 Environmentally Sensitive Area.

2.2.5 Invasive Species

Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.”

The Federal Highway Administration issued guidance on August 10, 1999, to direct the use of the state's invasive species list, which is maintained by the California Invasive Species Council. The guidance's purpose was to define the invasive species that must be considered as part of the National Environmental Policy Act analysis for a proposed project.

Affected Environment

A Natural Environment Study was prepared for the project in December 2019.

Some of the invasive species found growing within the project area are listed below:

- Himalayan blackberry (*Rubus armeniacus*)
- Tree of heaven (*Ailanthus altissima*)
- Yellow star thistle (*Centaurea solstitialis*)
- Milk thistle (*Silybum marianum*)
- English plantain (*Plantago lanceolata*)

According to the Cal WeedMapper web application, the Russian knapweed (*Acroptilon repens*) is the only invasive plant species listed as occurring within the Mokelumne Hill, West Point, and/or the U.S. Geological Survey's Rail Road Flat quadrangles, where the project is located.

No Russian knapweed was found in the project's study limits during biological surveys.

State Route 26 is a main route for invasive plant infestation because vehicles from other areas can accidentally transport seeds into the nearby national forest to the west, and bare road shoulders provide a bed where invasive plant species can become established. Higher elevation areas tend to have fewer invasive species than areas in the foothills.

Environmental Consequences

The project would neither promote the spread of invasive species nor change the surrounding habitat to encourage arrival of invasive species to the site. To prevent the introduction and spread of invasive species, Caltrans has issued policy guidelines that provide a framework for addressing roadside vegetation management issues for construction activities and maintenance.

Avoidance, Minimization, and/or Mitigation Measures

No compensatory mitigation is proposed. Noxious weed Standard Special Provisions (SSPs) would be added to the contract, including the following:

1. Standard Special Provisions 21-2.02 F Seed (Prohibits noxious weed seed).
2. Standard Special Provisions 13-4.03E (3) Vehicle and Equipment Cleaning: limits vehicle and equipment cleaning or washing at the job site except for protecting the equipment, as well as using as little water as possible.

The following minimization measures would screen for noxious weeds:

3. To minimize the risk of introducing additional, non-native species into the area, weed-free erosion control applications would be used. No dry-farmed straw would be used. Certified weed-free straw would be required where erosion control straw is used. Hydroseed mulch, or any other erosion control application, must also be certified weed-free. Any revegetation seed mix used must also be certified weed-free and contain native species appropriate for the project area.
4. All off-road construction equipment would be inspected and cleaned of potential noxious weed sources before entering the project area to prevent noxious weed introduction. The contractor would employ cleaning methods—typically with the use of a high-pressure water hose—to ensure that equipment is free of noxious weeds.

Implementing any Standard Special Provision would depend on specific project circumstances and/or contractual requirements—such as those listed in various environmental permits—which may or may not be applicable to this project.

Chapter 3 CEQA Evaluation

3.1 Determining Significance under CEQA

The project is a joint project by the California Department of Transportation (Caltrans) and the Federal Highway Administration and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (known as CEQA) and the National Environmental Policy Act (known as NEPA). The Federal Highway Administration's responsibility for environmental review, consultation, and any other actions required by applicable federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S. Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016 and executed by the Federal Highway Administration and Caltrans. Caltrans is the lead agency under CEQA and NEPA.

One of the main differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an Environmental Impact Statement, or a lower level of documentation, will be required. NEPA requires that an Environmental Impact Statement be prepared when the proposed federal action (the project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an Environmental Impact Statement, it is the magnitude of the impact that is evaluated, and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental document.

CEQA, on the other hand, does require Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an Environmental Impact Report must be prepared. Each and every significant effect on the environment must be disclosed in the Environmental Impact Report and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an Environmental Impact Report. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.2 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant With Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The words “significant” and “significance” used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 to provide you with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

3.2.1 Aesthetics

CEQA Significance Determinations for Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

No Impact—No qualifying scenic resources, as defined by Section 15300.2(d) of the California Environmental Quality Act, Implementation Guidelines, would be affected by the project.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact—No qualifying scenic resources, as defined by Section 15300.2(d) of the California Environmental Quality Act, Implementation Guidelines, would be affected by the project.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are

those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact—The project would not substantially degrade the existing visual character or quality of the site and its surroundings. A Visual Impact Assessment prepared in June 2019 determined that the project would result in a negligible visual impact.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact—The project would not include lighting elements in an area where currently there is no lighting.

3.2.2 Agriculture and Forest Resources

CEQA Significance Determinations for Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department 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?

Less Than Significant Impact —The project would not convert any prime and unique farmland under the California Land Conservation Act of 1965.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less Than Significant Impact—The project would not impact Williamson Act parcels. Partial acquisition of parcels zoned miscellaneous agricultural is

required. However, the amount of right-of-way required is less than a half an acre for each parcel and would not result in conflicts with existing zoning for agricultural use.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact—The project would not conflict with existing zoning for, or cause rezoning of, forest land since the project would upgrade an existing drainage system in the project area.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact—There are no forests or timberlands impacted by the project.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact—The project would not involve other changes in the existing environment which, due to their location or nature, could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

3.2.3 Air Quality

CEQA Significance Determinations for Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact—The project would not conflict with or obstruct implementation of the applicable air quality plan for the Mountain Counties Air Basin and the Calaveras County Air Pollution Control District.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

No Impact—There would be no cumulatively considerable net increase of any criteria pollutant because of the project. The project would upgrade

drainage in the project area with a combination of geotechnical, hydraulic and landscape measures such as flattening cut slopes, refilling slopes that are collapsing, and stabilizing shoulders with a bonded fiber matrix of hydroseed and fiber roll. In addition, retaining walls would be constructed at some locations. Short-term air quality and pollutants would be temporary during construction.

c) Expose sensitive receptors to substantial pollutant concentrations?

No Impact—The project would not expose sensitive receptors to substantial pollutant concentrations. During construction, the project would generate air pollutants: temporary exhaust from construction equipment containing hydrocarbons, oxides of nitrogen, carbon monoxide, suspended particulate matter, and odors. The contractor would be required to comply with construction mitigation methods listed in the Caltrans Standards Specifications for Dust Control, which requires compliance with local air district pollution control requirements.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No Impact—The project would not create objectionable odors that would affect a substantial number of people because the land in the project area is rural. The land also has a mountainous terrain with unincorporated small towns and a few residents. The project may temporarily generate air pollutants from construction equipment. The impacts would vary each day as construction progresses, and some residences close to the right-of-way may encounter dust and odors. The inclusion of Caltrans Standard Specifications pertaining to dust control and dust palliative requirements for all construction contracts would effectively reduce and control emission impacts during construction.

3.2.4 Biological Resources

CEQA Significance Determinations for Biological Resources

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated—As discussed in the Threatened and Endangered Species section in Chapter 2 of this document, Caltrans determined that the project *may affect, but not likely to adversely affect* the fisher, lone manzanita, California tiger salamander, and California red-legged frog. Caltrans determined that the project would have “no effect”

on the Delta smelt and its critical habitat. Proposed avoidance, minimization, and mitigation measures would reduce the project's impacts to below significance.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated—There would be some tree removal of black oak (*Quercus kelloggii*) and interior live oak (*Quercus wislizeni*). Most of the trees that would be removed are within the 1600 jurisdictional area. Caltrans will compensate for this impact at an off-site location. Therefore, there will not be a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Caltrans determined that the project “*may affect but not likely to adversely affect*” this critical habitat, and avoidance, minimization, and mitigation measures would reduce the impacts to below significance.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact—There was evidence of wetlands at most sites; however, most wetlands were outside the Caltrans right-of-way and were either too heavily vegetated to walk and record Geographical Positioning System (GPS) data and/or too steep to safely access. Aerial imagery and field notes were used to determine the high-water mark instead. A jurisdictional determination would be submitted to the U.S. Army Corps of Engineers. No coordination for wetlands and other waters' regulatory agencies has taken place. A 404 permit from the Sacramento District of the U.S. Army Corps of Engineers, and a 401 Water Quality Certification from the Central Valley Regional Water Quality Control Board would be required. A 1602 Streambed Alteration Permit from the California Department of Fish and Wildlife will be required. Coordination with these regulatory agencies will take place during the permit application phase of the project's planning process. Implementation of avoidance, minimization, and mitigation measures will reduce the impacts to below significance. Compensatory mitigation for all unavoidable and permanent impacts to wetlands will be completed to ensure there is no net loss of these hydrologic resources. The specific mitigation ratios would be determined before construction starts, but a minimum 1 to 1 compensation ratio would be used. Though the method has not been determined at this time, it could include any of the following: creation, restoration, preservation or credit purchase at an approved conservation

bank. The final compensation proposal will be coordinated with the California Department of Fish and Wildlife during the permit application phase.

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?

No Impact—There are no fish passages or fish habitat within the project limits; therefore, the project would not 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.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact—The project does not conflict with any local policy or ordinance protecting biological resources, such as a tree preservation policy or ordinance.

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?

No Impact—There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans that would be impacted with construction of the project.

3.2.5 Cultural Resources

CEQA Significance Determinations for Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact—There were seven previously recorded reports or surveys, as well as 12 studies and 10 cultural resources, identified within a half mile of the project limits. No previously recorded cultural resources were located within the project area; therefore, the project was determined to have negative resource findings. It was determined that the proposed work has no potential to impact any architectural or engineering features. Caltrans, per Section 106 Programmatic Agreement Stipulation IX.A, and as applicable to the Public Resources Code 5024 Memorandum of Understanding Stipulation IX.A.2, has determined a Finding of No Historic Properties Affected is appropriate for this project because there are no historic properties within the area of potential effects. According to CEQA Guidelines 15064.5(a), Caltrans has determined

that there are no historic resources within the project's area of potential effects on June 14, 2019 (Section 106 Compliance-Screened Undertaking Memo, June 2019).

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

No Impact—There are no known prehistoric or historic archaeological resources within the archaeological study area. No new architectural historic resources were identified during the archaeological survey for this project (Rhoades 2019; Pedestrian Archaeological Survey, January 2019).

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

No Impact—The project would not disturb any human remains, including those interred outside of dedicated cemeteries. If previously unidentified cultural materials are discovered during construction, it is Caltrans' policy to stop work in that area until a qualified archaeologist can assess the significance of the find. If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities must stop in any area or nearby area suspected to lie on top of remains, and to contact the local coroner. Per California Public Resources Section 5097.98, if the remains are thought to be Native American, the coroner would notify the California Native American Heritage Commission, which would then notify the Most Likely Descendent.

3.2.6 Energy

CEQA Significance Determinations for Energy

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Impact—The project would not add any energy-consuming resources such as lights. Per Caltrans' Best Management Practices, new or well-maintained equipment that is more energy-efficient will be used during construction. The amount of energy used by construction equipment during the project will be negligible.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact—There will be no impact to state or local plans for renewable energy or energy efficiency.

3.2.7 Geology and Soils

CEQA Significance Determinations for Geology and Soils

Would the project:

a) Directly or indirectly cause potential, substantial adverse effects, including the risk of loss, injury, or death involving i, ii, iii and iv?

No Impact—The project would not expose people or structures to potential, substantial adverse effects, including the risk of loss, injury or death involving i, ii, iii and iv. Sources for this response included the California Geological Survey webpage, Faulting in California, the Calaveras County General Plan webpage, and the California Conservation webpage's data viewer.

There is no potential for surface fault rupture to occur in the project area.

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?

No Impact—There would be no impact according to the geologic map of the Sacramento quadrangle, California Division of Mines and Geology, Regional Geologic Map 1A, scale 1:250,000; no faults were identified in the project area.

ii) Strong seismic ground shaking?

No Impact—No seismic hazards activities are in the project limits.

iii) Seismic-related ground failure, including liquefaction?

No Impact—No fault or seismic-related ground failures are within the project area.

iv) Landslides?

No Impact—Seasonal storms are deteriorating slopes within the project area. However, treatment methods such as constructing overside drains with rock slope protection at the outlets and stabilizing shoulders with a bonded fiber matrix with hydroseed and fiber rolls will be applied. In addition, some locations will contain retaining structures.

b) Result in substantial soil erosion or the loss of topsoil?

No Impact—The project would not result in substantial soil erosion or the loss of topsoil. Construction would use a cut-and-fill method as well as landscape

planting to reduce any soil erosion. Compost and fiber rolls will be used to reduce any soil erosion.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact—The project is not in a geologic unit or soil that is unstable, or that would become unstable because of the project.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact—The project is not on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), that would create substantial risks to life or property.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact—The project would not impact soils used for septic tanks or alternate wastewater disposal systems.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact—The project would not directly or indirectly destroy any paleontological resources or sites. The potential for paleontological resources is low, and no sensitivity has been found within the project area. No mitigation is recommended.

3.2.8 Greenhouse Gas Emissions

CEQA Significance Determinations for Greenhouse Gas Emissions

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact—While the project would result in greenhouse gas emissions during construction, it is anticipated that the project would not result in any increase in operational greenhouse gas emissions.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact—The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

3.2.9 Hazards and Hazardous Materials

CEQA Significance Determinations for Hazards and Hazardous Materials

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Impact—The Caltrans Standard Special Provision pertaining to Earth Material Containing Lead (ADL) would be added to the construction contract. If the scope of work changes to impact structures, additional studies for asbestos-containing material would be required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

No Impact—The scope of the project does not have any structure involvement; therefore, no hazardous materials would be accidentally released into the environment or into the public. If hazardous materials occur, special handling would be required during construction.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact—West Point Elementary School and Mokelumne Hill Elementary School are within a quarter-mile of the project area. However, the proposed scope of work would not impact any structures or generate excess soil; all soil would remain on-site. Caltrans Standard Specifications, Section 14-9.02 Air Pollution Control and Section 10-5 Dust Control, are required for all construction contracts to reduce and control emission impacts during construction.

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?

No Impact—There are no Cortese List sites or open leaking underground storage tanks in the project area.

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 or excessive noise for people residing or working in the project area?

No Impact—The project does not lie within the Calaveras County Airport's land use plan. The nearest airport—the Calaveras County Airport/Maury Rasmussen Field—is the only public and general use aviation airport and is about 8 miles south of Mokelumne Hill. The project, at spot locations in rural areas, would extend rock slope protection, reconstruct overside drains, and install retaining walls. The project would not result in a safety hazard for people residing or working in the project area.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact—The project would not impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. During construction, at least one through traffic lane would always be open for use by both directions of travel (Transportation Management Plan Checklist, August 2014).

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact—The project would not expose people or structures to a significant wildland fire. The project area's land uses are forest-based recreation, including camping, hiking, hunting, birding, wildlife-viewing, and horseback riding. The area is also used by off-highway vehicles. The project extends rock slope protection, constructs overside drainage, and adds retaining walls at some locations. By using Best Management Practices during construction phases, the project would prevent any potential wildland fire.

3.2.10 Hydrology and Water Quality

CEQA Significance Determinations for Hydrology and Water Quality

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

No Impact—The project would not violate any water quality standards or waste discharge requirements because Caltrans is required to reduce potential water quality impacts in the project's design and construction phases. With use of Best Management Practices, water quality would be protected, and the risk for accidental releases of oil, grease, and chemical pollutants would be reduced.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact—The project would extend rock slope protection, reconstruct overside drainage, and construct retaining walls at some locations. It would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge to the point where there would be a net deficit in aquifer volume or a decrease to the local groundwater table level.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site;

No Impact—The project would not result in substantial erosion or siltation because the project would improve drainage patterns with treatment methods such as constructing overside drains with rock slope protection at the outlets, and stabilizing shoulders with a bonded fiber matrix with hydroseed and fiber rolls. Some locations would have retaining structures.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

No Impact—The project would construct overside drains with rock slope protection at the outlets and stabilize shoulders with a bonded fiber matrix with hydroseed and fiber rolls. Some locations would have retaining structures. The project would require additional right-of-way at all locations; however, these are partial acquisition of parcels required to construct retaining walls and drainage systems structures; it would not increase surface area so there would be no change in the exiting rate or amount of surface runoff.

iii) 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; or

No Impact—The project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The project would not increase the volume of traffic on State Route 26, so the existing runoff conditions would not change. Best Management Practices with Caltrans' Standard Provisions would help lessen impacts to runoff water during construction. The Caltrans Stormwater Unit would provide appropriate Best Management Practices for all stormwater concerns.

iv) Impede or redirect flood flows?

No Impact—The project would not take place within a 100-year flood hazard area or involve structures that would impede or redirect flood flows. The project activities would not significantly impact the floodway opening because the project would improve drainage systems and not reduce the flow in the rivers and receiving water bodies.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact—The project would not cause inundation by seiche, tsunami, or mudflow because it is not near any major bodies of water. The project area is outside the coastal zone and not in an area subject to sea-level rise.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact—The project would not interfere with implementation of a water quality control plan or sustainable groundwater management plan. Any runoff water during construction will be minimized with the implementation of Best Management Practices and Caltrans' Standard Provisions.

3.2.11 Land Use and Planning

CEQA Significance Determinations for Land Use and Planning

Would the project:

a) Physically divide an established community?

No Impact—The project would not physically divide an established community.

The project area consists of privately-owned miscellaneous agricultural parcels in a rural setting. Partial acquisition of parcels is required to construct retaining walls and drainage systems structures but there are no established community characters or building within these acquired parcels.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact—The project would improve drainage patterns with treatment methods such as constructing overside drains with rock slope protection at the outlets and stabilizing shoulders with a bonded fiber matrix with hydroseed and fiber rolls. Some locations would have retaining structures. The project would remove some trees to install the slope stabilization measures. It is estimated that 8 trees would be removed, mostly at Location

8. Most of the trees that would be removed are within the 1600 jurisdictional area, so Caltrans would compensate for this impact most likely at an off-site location. Therefore, the project would minimize impacts on any existing habitat conservation plan or a natural conservation plan with proper replanting measures.

3.2.12 Mineral Resources

CEQA Significance Determinations for Mineral Resources

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact—The project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact—The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. See answer “a” above.

3.2.13 Noise

CEQA Significance Determinations for Noise

Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

No Impact—The project would not cause a substantial permanent or temporary increase in ambient noise levels in the project vicinity. No adverse noise impacts from construction are anticipated. Construction noise would be short term, intermittent, and overshadowed by local traffic noise. Under Caltrans Noise Section 14-8.02 “Noise Control,” noise levels generated during construction should not exceed 86 decibels at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m. Noise would be monitored and controlled from the construction area. All equipment would have sound control devices that are no less effective than provided on the original equipment. No equipment would have an unmuffled exhaust. The project is not expected to expose persons to or generate noise levels in excess of noise standards. The

degree of construction noise impacts may vary for different areas within the project limits and vary depending on the construction activity. Caltrans, along with the contractor, would implement measures to minimize the temporary noise impacts from construction. Temporary noise impacts during construction would be handled by Caltrans Standard Specifications Section 14-8.02 Noise Control.

b) Generation of excessive groundborne vibration or groundborne noise levels?

No Impact—The project would not generate excessive groundborne vibration or groundborne noise levels. As directed by Caltrans, the contractor would implement the appropriate additional noise mitigation measures such as turning off idling equipment, rescheduling construction activity, and installing acoustic barrier around stationary construction noise sources.

c) For a project located within the vicinity of a private airstrip or 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?

No Impact—The project is not within the Calaveras County Airport's land use plan. Three airports surround the project area. The nearest airport—Calaveras County Airport/Maury Rasmussen Field—is about 8 miles south of the first location's improvement area. The Placerville Airport-PVF 1 and the Columbia Airport are farther north and south from the project limits. The project would not expose people residing or working in the project area to excess noise levels.

3.2.14 Population and Housing

CEQA Significance Determinations for Population and Housing

Would the project:

a) Induce substantial unplanned 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)?

No Impact—The project would not induce substantial population growth in an area, either directly or indirectly. The project would improve drainage throughout the project limits and is not a capacity-increasing project.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact—The project would not displace substantial numbers of existing people or housing units, necessitating the construction of replacement

housing areas. Partial acquisition of parcels is required to construct retaining walls and drainage systems structures for all locations. These acquired parcels are vacant or miscellaneous agricultural parcels and do not contain housing units.

3.2.15 Public Services

CEQA Significance Determinations for Public Services

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

No Impact—Prior to construction, Caltrans and the contractor would, per Caltrans Standard Specifications, carefully plan any necessary lane closures and use proper traffic control devices throughout the duration of construction.

Police protection?

No Impact—During construction, the project would be constructed using one-lane traffic control and night work, according to the Transportation Management Plan. Access to businesses and residences would be maintained throughout construction. Therefore, agencies that provide emergency services such as police, ambulance, hospital and fire protection, and hospital care would not be impacted by the project.

Schools?

Less Than Significant Impact—The project would be constructed using one-lane traffic control, which could create some temporary delays for school buses during weekdays. However, traffic delay would be minimized by the Transportation Management Plan. Access to businesses and residences would be maintained throughout construction. Portable changeable message signs would be used, and impacted groups would be notified and informed of upcoming construction by Caltrans' Public Information Office.

Parks?

No Impact—Caltrans' Public Information Office would notify impacted groups such as bicyclists, tourists, pedestrians with disabilities, and others via media releases.

Other public facilities?

Less Than Significant Impact—The project would not trigger the need for new or modified public facilities of any type. According to the Transportation Management Plan Checklist prepared by Caltrans, the contractor would maintain access to all businesses, residences, and public services at all times. With the standard specifications and lane closures strategy, the project would not affect government facilities or public response services within the project area.

3.2.16 Recreation

CEQA Significance Determinations for Recreation

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact—The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. No park or recreational facility would be impacted as a result of the project.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact—The project does not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. The project is a drainage and slope protection improvement project focusing on slopes and drainages, installing rock slope protection with overside drainage, and constructing retaining walls at some locations.

3.2.17 Transportation

CEQA Significance Determinations for Transportation

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Impact—The project would not conflict with any traffic circulation plan or policy. The project would require additional right-of-way to construct retaining walls and upgraded drainage on an existing system. No modified or divert existing traffic pattern is required. Prior to construction, Caltrans and the contractor would, per Caltrans Standard Specifications, carefully plan any necessary lane closures and use proper traffic control devices throughout the duration of construction.

b) Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact—The project will have no impact on vehicle miles traveled and is consistent with CEQA Guidelines Section 15064.3, subdivision (b). It is not a capacity-increasing project.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact—The project would not increase hazards due to a design feature. The project is a drainage and slope improvement project focusing on slope protection with bonded fiber matrix of hydroseed and fiber roll, installing overside drainage, and constructing retaining walls at some locations.

d) Result in inadequate emergency access?

No Impact—The project would not result in inadequate emergency access. The project would be constructed using one-lane traffic control. There would be some night work for some aspects of the project. During the construction phase, Caltrans would implement a Traffic Management Plan with Best Management Practices with the contractor. The public would be informed ahead of construction by Caltrans' Public Information Office.

3.2.18 Tribal Cultural Resources

CEQA Significance Determinations for Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

No Impact—Caltrans determined that there are no resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1,

the lead agency shall consider the significance of the resource to a California Native American tribe.

No Impact—Consultation with the Native American Heritage Commission was initiated, by letter, on October 8, 2018, to determine if any cultural properties were known to exist within or next to the project area. In response, the Native American Heritage Commission stated that its files failed to indicate the presence of Native American cultural resources within or next to the project. The Native American Heritage Commission provided a list of tribal contacts who might be interested in the project. Native American tribes were consulted by letter in late October 2018, and follow-up letters were sent on March 12, 2019, in accordance with Assembly Bill Number 52 of the California Environmental Quality Act. Eleven of 13 Native American contacts responded to Caltrans' consultation letters. One of the Native American contacts requested final documentation, and another contact requested to be informed of the progress of studies. According to the Section 106 Compliance Screened Memorandum, June 14, 2019, the project has no potential impact to any known prehistoric or historic archaeological resources within the project limits.

3.2.19 Utilities and Service Systems

CEQA Significance Determinations for Utilities and Service Systems

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact—The project would not require a new or additional discharge of water, so it would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. The project would have no impact on wastewater treatment facilities. The project would improve an existing drainage, provide slope protection with bonded fiber matrix of hydroseed and fiber roll, install overside drains, and construct retaining walls at some locations, but this work would not cause significant environmental effects.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact—The project would have no effect on the need for water supplies.

c) 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?

No Impact—The project would have no impact on wastewater treatment needs.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact—The project would not generate solid waste in excess of state or local standards.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact—The project would comply with all solid waste regulations.

3.2.20 Wildfire

CEQA Significance Determinations for Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact—The Calaveras County Office of Emergency Services states in its Emergency Operations Plan that an evacuation plan is arranged based on the location of the disaster, field response, and its proximity to hospitals in areas/regions not impacted by a disaster. The proposed project could cause a temporary delay because of a one-lane closure, but the project would not adversely affect emergency services because, during construction, Caltrans would ensure access to all businesses, residences and emergency services at all times.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact—The project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Construction site best management practices would prevent wildfire with proper recommendations.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities)

that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact—The project would not require the installation or maintenance of any associated infrastructure and would not exacerbate fire risk.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact—Slopes within the project area do not pose a risk to people or structures as a result of landslides because the slopes along the sides will be improved with bonded fiber matrix with hydroseed, fiber rolls and retaining walls at some locations. The project slope structures are not near any residences.

3.2.21 Mandatory Findings of Significance

CEQA Significance Determinations for Mandatory Findings of Significance

a) Does the project have the potential to substantially 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?

Less Than Significant Impact with Mitigation Incorporated—The project would not 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. Impacts to wetlands and other waters, threatened and endangered species, and oak woodlands would be mitigated below significance. See Chapter 2, Biological Environment.

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.)

No Impact—There would be no cumulative impacts as a result of the project.

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

No Impact—The project would not have any environmental impacts that would cause substantial adverse effects on human beings, either directly or indirectly.

3.3 Wildfire

Regulatory Setting

Senate Bill 1241 required the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection to develop amendments to the “CEQA Checklist” for the inclusion of questions related to fire hazard impacts for projects located on lands classified as Very High Fire Hazard Severity Zones. The 2018 updates to the CEQA Guidelines expanded this to include projects “near” these Very High Fire Hazard Severity Zones.

Affected Environment

The project limits are in a Very High Fire Hazard Severity Zone in state responsibility as identified by the California Department of Forestry and Fire Protection (CalFire). There are small, unincorporated communities such as Mokelumne Hill and West Point in the project limits. The Mokelumne Hill Fire Protection District and the West Point Fire Protection District provide structure fire protection, vehicle and wildland fire suppression, basic life support response to medical emergencies, fire prevention, and education to the community and the surrounding area.

Environmental Consequences

The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. There would be no revisions to either fire district’s emergency plan because of the project’s scope of work. The project would upgrade drainage in the project area with a combination of geotechnical, hydraulic and landscape measures such as flattening cut slopes, refilling slopes that are collapsing, and stabilizing shoulders with a bonded fiber matrix of hydroseed and fiber roll. In addition, retaining walls would be constructed at some locations. Therefore, the project would not impair or physically interfere with the current emergency response or evacuation plan designed by the fire districts. During construction, Caltrans would ensure access to all businesses, residences and emergency services at all times. In addition, the project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage change. Therefore, impacts would be less than significant, and no mitigation is required.

Avoidance, Minimization, and/or Mitigation Measures

During the construction, a traffic management plan and construction site best management practices would help to reduce traffic delays and accidents. Standard Caltrans construction practices include providing portable changeable message signs, lane and road closures, advance warning signs, and a traffic contingency plan for unforeseen circumstances to prevent any road clogs in case of an emergency due to a wildfire or other natural disaster events.

3.4 Climate Change

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

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change by the United Nations and World Meteorological Organization in 1988 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, methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, and various hydrofluorocarbons. Carbon dioxide is the most abundant greenhouse gas; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated carbon dioxide.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing greenhouse gas emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

3.4.1 Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce greenhouse gas emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source greenhouse gas reduction targets, nor have any regulations or

legislation been enacted specifically to address climate change and greenhouse gas emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 U.S. Code Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. The Federal Highway Administration therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—“the triple bottom line of sustainability” (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 U.S. Code Section 6201) and Corporate Average Fuel Economy Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the Corporate Average Fuel Economy program based on each manufacturer’s average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. Environmental Protection Agency in conjunction with the National Highway Traffic Safety Administration is responsible for setting greenhouse gas emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence greenhouse gas emissions.

State

California has been innovative and proactive in addressing greenhouse gas emissions and climate change by passing multiple Senate and Assembly bills and executive orders including, but not limited to, the following:

Executive Order S-3-05 (June 1, 2005): The goal of this order is to reduce California's greenhouse gas emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill 32 in 2006 and Senate Bill 32 in 2016.

Assembly Bill 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: Assembly Bill 32 codified the 2020 greenhouse gas emissions reduction goals outlined in Executive Order S-3-05, while further mandating that the California Air Resources Board create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020 (Health and Safety Code Section 38551(b)). The law requires the California Air Resources Board to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas reductions.

Executive Order S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard for California. Under this Executive Order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. The California Air Resources Board re-adopted the low carbon fuel standard regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 greenhouse gas reduction goals.

Senate Bill 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the California Air Resources Board to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization for each region must then develop a "Sustainable Communities Strategy" that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

Senate Bill 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under Assembly Bill 32.

Executive Order B-16-12 (March 2012) orders State entities under the direction of the Governor, including the California Air Resources Board, the California Energy Commission, and the Public Utilities Commission, to

support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

Executive Order B-30-15 (April 2015) establishes an interim statewide greenhouse gas emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of greenhouse gas emissions to implement measures, pursuant to statutory authority, to achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets. It also directs the California Air Resources Board to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent. [Greenhouse gases differ in how much heat each trap in the atmosphere (global warming potential). Carbon dioxide is the most important greenhouse gas, so amounts of other gases are expressed relative to carbon dioxide, using a metric called “carbon dioxide equivalent.” The global warming potential of carbon dioxide is assigned a value of 1, and the global warming potential of other gases is assessed as multiples of carbon dioxide.] Finally, Executive Order B-30-15 requires the Natural Resources Agency to update the state’s climate adaptation strategy, *Safeguarding California*, every three years, and to ensure that its provisions are fully implemented.

Senate Bill 32, Chapter 249, 2016, codifies the greenhouse gas reduction targets established in Executive Order B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

Senate Bill 1386, Chapter 545, 2016, declared “it to be the policy of the state that the protection and management of natural and working lands ... is an important strategy in meeting the state’s greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands.”

Assembly Bill 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

Senate Bill 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles travelled, to promote the state’s goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

Senate Bill 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires the California Air Resources Board to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

Executive Order B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing greenhouse gas emissions.

Executive Order N-19-19 (September 2019) advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce greenhouse gas emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This Executive Order also directs the California Air Resources Board to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

3.4.2 Environmental Setting

State Route 26 serves mostly interregional and commuter traffic between the cities of Stockton and Linden. The project portion of State Route 26 winds through a rugged rural landscape with residential, recreational and undeveloped land uses. The route provides access to the New Hogan Reservoir and the Rancho Calaveras and La Contenta residential developments near Valley Springs. The project segment serves the small communities of Mokelumne Hill, Glencoe, and West Point with access to nearby communities and job centers in Stockton. The Calaveras Council of Governments' Regional Transportation Plan guides transportation development in the county. The updated General Plan (2019) Transportation and Circulation element and Conservation and Open Space element (2016) contain goals and policies related to greenhouse gases in the project area.

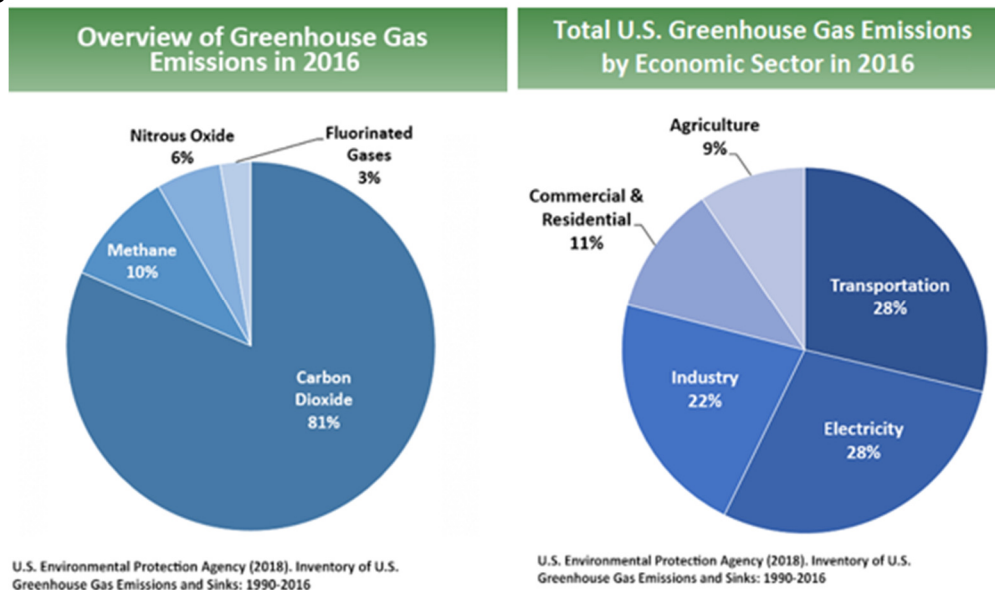
A greenhouse gas emissions inventory estimates the amount of greenhouse gases discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual greenhouse gas emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. The U.S. Environmental Protection Agency is responsible for documenting greenhouse gas emissions nationwide, and the California Air Resources Board does so for the state, as required by Health and Safety Code Section 39607.4.

National Greenhouse Gas Inventory

The U.S. Environmental Protection Agency prepares a national greenhouse gas inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of greenhouse gases in the United States, reporting emissions of carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride. It also accounts for emissions of carbon dioxide that are removed from the atmosphere by “sinks” such as forests, vegetation, and soils that uptake and store carbon dioxide (carbon sequestration).

The 1990–2016 inventory found that of 6,511 million metric tons of carbon dioxide equivalent greenhouse gas emissions in 2016, 81 percent consist of carbon dioxide, 10 percent are methane, and six percent are nitrous oxide; the balance consists of fluorinated gases (EPA 2018a). In 2016, greenhouse gas emissions from the transportation sector accounted for nearly 28.5 percent of U.S. greenhouse gas emissions. See Figure 2-1.

Figure 2-1 U.S. 2016 Greenhouse Gas Emissions



State Greenhouse Gas Inventory

The California Air Resources Board collects greenhouse gas emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state’s progress in meeting its greenhouse gas reduction goals. The 2019 edition of the

greenhouse gas emissions inventory found total California emissions of 424.1 million metric tons of carbon dioxide equivalent for 2017, with the transportation sector responsible for 41 percent of total greenhouse gases. It also found that overall statewide greenhouse gas emissions declined from 2000 to 2017 despite growth in population and state economic output (ARB 2019a). See Figures 2-2 and 2-3.

Figure 2-2 California 2017 Greenhouse Gas Emissions

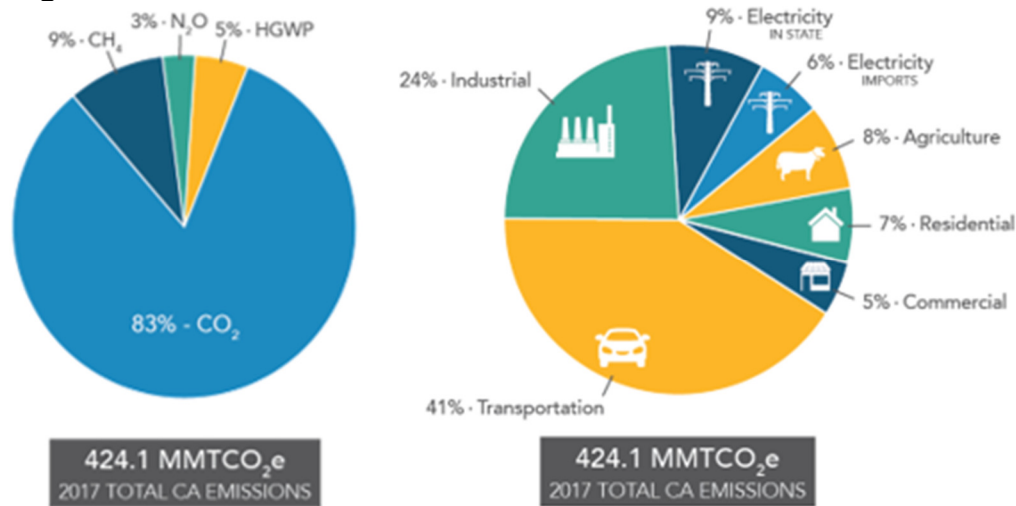
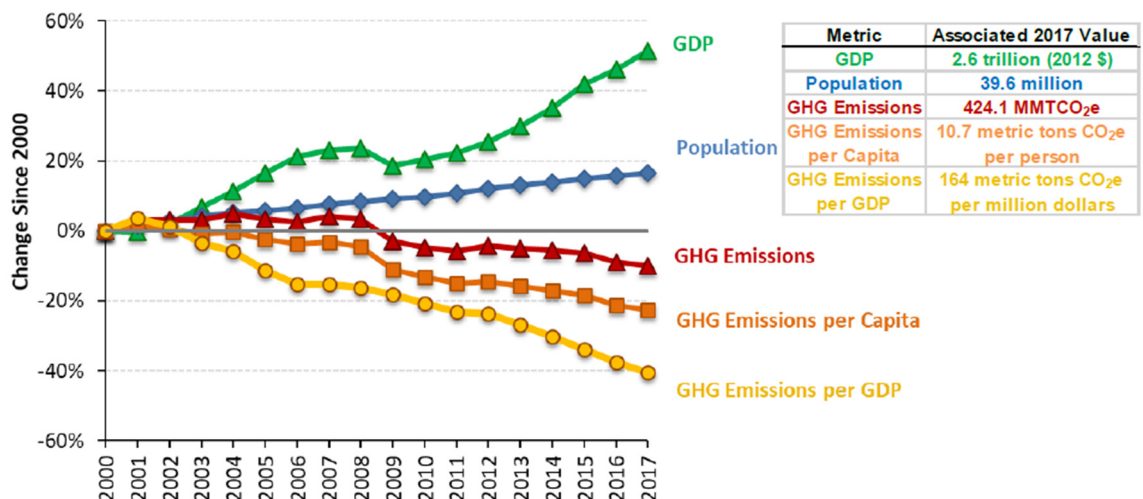


Figure 2-3 Change in California Gross Domestic Product, Population, and Greenhouse Gas Emissions since 2000 (Source: Air Resources Board 2019b)



Assembly Bill 32 required the California Air Resources Board to develop a Scoping Plan that describes the approach California will take to achieve the

goal of reducing greenhouse gas emissions to 1990 levels by 2020, and to update it every five years. The California Air Resources Board adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in Executive Order B-30-15 and Senate Bill 32. The Assembly Bill 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce greenhouse gas emissions.

Regional Plans

The California Air Resources Board sets regional targets for California's 18 Metropolitan Planning Organizations to use in their Regional Transportation Plan/Sustainable Communities Strategy to plan future projects that will cumulatively achieve greenhouse gas reduction goals. Targets are set at a percent reduction of passenger vehicle greenhouse gas emissions per person from 2005 levels. Calaveras County is not a Metropolitan Planning Organization and therefore does not have a regional target established and is not required to produce a Sustainable Communities Strategy under Senate Bill 375. The proposed project is within the jurisdiction of the Calaveras County Regional Transportation Planning Agency (RTPA). The Calaveras Council of Governments published a Regional Transportation Plan (RTP) and General Plan Circulation Element on May 22, 2019 that contained goals and policies such as Circulation Element (C)1.3, 2.6, 3.4 and 5.1 related to reducing greenhouse gas emissions.

- C 1.3 Prioritize funding and construction of projects that reduce vehicle miles traveled.
- C 2.6 To promote efficient travel for all modes, require all new residential, commercial, or mixed-use development that proposes or is required to construct or extend streets to develop a transportation network that is well connected, both internally and to off-site network.
- C 3.4 Encourage the use of public transit, as well as ridesharing, and vanpools.
- C 5.1 Bicycle and pedestrian access and circulation shall be designed into new development projects where applicable to enhance internal circulation and interconnectivity with surrounding land uses and to implement any adopted bicycle and/or pedestrian plan.

The 2017 Regional Transportation Plan identifies and developed regional goals such as Goal 3: Enhance sensitivity to the environment in all transportation decisions. Within this Goal 3-Objective 3B aims to support climate change awareness with grant funding projects and better land-use with zoning ordinances that encourage non-auto mode of transportation.

3.4.3 Project Analysis

Greenhouse gas emissions from transportation projects can be divided into those produced during operation of the state highway system and those produced during construction. The primary greenhouse gases produced by the transportation sector are carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons. Carbon dioxide emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of methane and nitrous oxide are emitted during fuel combustion. In addition, a small amount of hydrofluorocarbon emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Public Resources Code, Section 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project’s contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions

The purpose of the project is to lessen slope erosion that causes slope failure along the embankment of the eastbound and westbound lanes of State Route 26. The project would need protect the roadway’s numerous slopes within the project limits from continually eroding and collapsing. The project would not add lanes to the roadway, add vehicle capacity, or increase vehicle miles traveled. Accordingly, it is not expected to cause any increase in operational greenhouse gas emissions.

Construction Emissions

Construction greenhouse gas emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the greenhouse gas emissions

produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Construction greenhouse gas emissions for the project were calculated using the Caltrans Construction Emissions Tool spreadsheet (CAL-CET). The estimated construction emissions would be about 101 tons of carbon dioxide over the 100 working days estimated to complete the project.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all the California Air Resources Board emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce greenhouse gas emissions.

The project will also implement Caltrans standardized measures (such as construction best management practice) that apply to most or all Caltrans projects. Certain common regulations, such as equipment idling restrictions and development and implementation of a traffic control plan that reduce construction vehicle emissions also help reduce greenhouse gas emissions.

CEQA Conclusion

While the proposed project will result in greenhouse gas emissions during construction, it is expected that the project will not result in any increase in operational greenhouse gas emissions. The project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction greenhouse gas-reduction measures, the impact would be less than significant.

Caltrans is firmly committed to implementing measures to help reduce greenhouse gas emissions. These measures are outlined in the following section.

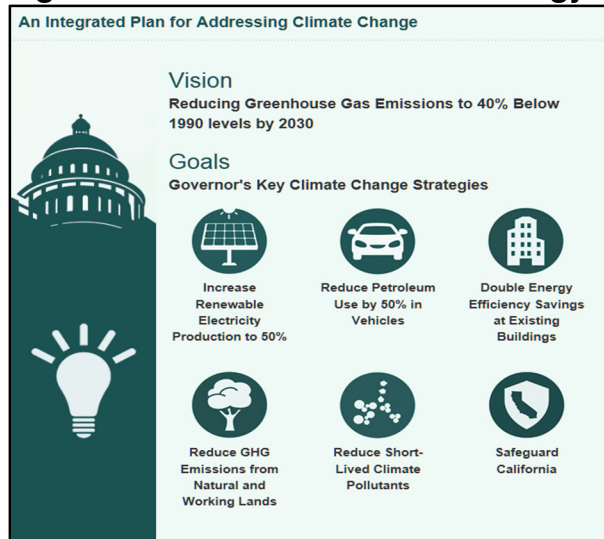
3.4.4 Greenhouse Gas Reduction Strategies

Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 greenhouse gas emissions targets. Former Governor Edmund G. Brown promoted greenhouse gas reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4)

reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, Safeguarding California. See Figure 2-4.

Figure 2-4 California Climate Strategy



The transportation sector is integral to the people and economy of California. To achieve greenhouse gas emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. Greenhouse gas emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled. A key state goal for reducing greenhouse gas emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030 (State of California 2019).

In addition, Senate Bill 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above-ground and below-ground matter.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the California Air Resources Board works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in Assembly Bill 32. Executive Order B-30-15, issued in April 2015, and Senate Bill 32 (2016), set an interim target to cut greenhouse gas emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

California Transportation Plan (CTP 2040)

The California Transportation Plan is a statewide, long-range transportation plan to meet our future mobility needs and reduce greenhouse gas emissions. In 2016, Caltrans completed the *California Transportation Plan 2040*, which establishes a new model for developing ground transportation systems, consistent with carbon dioxide reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

Senate Bill 391 (Liu 2009) requires the California Transportation Plan to meet California's climate change goals under Assembly Bill 32. Accordingly, the California Transportation Plan 2040 identifies the statewide transportation system needed to achieve maximum feasible greenhouse gas emission reductions while meeting the state's transportation needs. While Metropolitan Planning Organizations have primary responsibility for identifying land use patterns to help reduce greenhouse gas emissions, California Transportation Plan 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

Caltrans Strategic Management Plan

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce greenhouse gas emissions, among other goals. Specific performance targets in the plan that will help to reduce greenhouse gas emissions include:

- Increasing percentage of non-auto mode share
- Reducing vehicle miles traveled
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) greenhouse gas emissions

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce greenhouse gas emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's Regional Transportation Plan/Sustainable Communities Strategy; contribute to the State's greenhouse gas reduction targets and advance transportation-related greenhouse gas emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 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) provides a comprehensive overview of Caltrans' statewide activities to reduce greenhouse gas emissions resulting from agency operations.

Project-Level Greenhouse Gas Reduction Strategies

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

- Caltrans Standard Specification 14-9.02 requires contractors to comply with all state, local, Air Resources Board, and air district rules, regulations, ordinances, and statutes. Measures that reduce construction vehicle emissions, such as idling restrictions and ensuring engines are properly tuned and maintained, may also help reduce greenhouse gas emissions.
- A transportation management plan will be developed and implemented to minimize traffic delays and associated idling emissions resulting from periods of one-way traffic control during construction.
- Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.
- Truck trips will be outside of peak morning and evening commute hours.
- Reduce construction waste and maximize the use of recycled materials (reduces consumption of raw materials, reduces landfill waste, and encourages cost savings).
- Incorporate measures to reduce consumption of potable water.
- Use construction equipment with new technologies to improve fuel efficiency and safety.
- Construction Environmental Training: Supplement existing training with information regarding methods to reduce greenhouse gas emissions related to construction.
- Salvage large removed trees for lumber or similar on-site beneficial uses other than standard wood-chipping. (e.g., use in roadside landscape projects or green infrastructure components).
- Earthwork Balance: Reduce the need for transport of earthen materials by balancing cut and fill quantities.

3.4.5 Adaptation

Reducing greenhouse gas emissions is only one part of an approach to addressing climate change. Caltrans must 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 their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and Federal Highway Administration NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program delivers a report to Congress and the president every four years, in accordance with the Global Change Research Act of 1990 (15 U.S. Code Chapter 56A Section 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the “human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways.” Chapter 12, “Transportation,” presents a key discussion of vulnerability assessments. It notes that “asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime” (USGCRP 2018).

The U.S. Department of Transportation Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to “integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of the U.S. Department of Transportation in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions” (U.S. DOT 2011).

Federal Highway Administration order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*, December 15, 2014) established Federal Highway Administration

policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. The Federal Highway Administration has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (2018) is the state's effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- *Resilience* is the "capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience". Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

Executive Order S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

Executive Order S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate “sea-level rise (SLR) projections into planning and decision making for projects in California” in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California—An Update on Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.

Executive Order B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This Executive Order recognizes that effects of climate change other than sea-level rise also threaten California’s infrastructure. At the direction of Executive Order B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

Assembly Bill 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans is conducting climate change vulnerability assessments to identify segments of the state highway system vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise.

The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure*—Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence*—Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization*—Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the state highway system, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

Project Adaptation Analysis

Sea-Level Rise

The project is outside the coastal zone and not in an area subject to sea-level rise. Accordingly, direct impacts to transportation facilities due to projected sea-level rise are not expected.

Floodplains Analysis

The project's Preliminary Location Hydraulic/Floodplain Study (2018) notes the presence of several 100-year floodplain crossings (bridges and culverts) within project limits, but that project work locations are not in 100-year floodplain. The drainage systems within the project locations are designed for 25-year storm as design standards. The project's purpose is to stabilize slopes and improve drainage in the project corridor. Project features (flattened slopes, retaining walls, erosion control, rock slope protection) would better control erosion and protect the roadway from runoff compared to existing conditions.

Wildfire

The project limits on State Route 26 cross a very high fire hazard severity zone (California Department of Forestry and Fire Protection 2007).

The project would not require the installation or maintenance of any associated infrastructure and will not exacerbate fire risk because it is only stabilizing slopes and repairing or replacing existing drainage on both sides of an existing state highway.

The following are recommended construction site best management practices to prevent fire:

- On-site vehicle and equipment fueling will only be used where it's impractical to send vehicles and equipment off-site for fueling.
- Vehicles and equipment will be inspected on each day of use for leaks. Leaks will be repaired immediately, or problem vehicles or equipment will be removed from the project site.
- Entering and existing construction areas will be clear with no construction debris to prevent any spills or accidentally manmade sparks.
- Construction materials, equipment storage, and parking areas will be located where they will not cause damage to vegetation, especially during the dry weather when hot exhaust systems can kindle fire in dry grass.
- Local Cal Fire and West Point Fire departments will be consulted throughout construction window. Other agencies which may need to be advised include, but are not limited to, the Calaveras County Sheriff, the California High Patrol and the Calaveras Public Works Department.
- Temporary storage sheds will need to meet building and fire code requirements and will be located away from vehicles traffic.
- Fires will not be permitted within 100 feet of the drip line of any retained trees.
- Portable fuel canisters will be kept in a flammable cabinet when not in use.

Chapter 4 **Comments and Coordination**

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

Native American Heritage Commission and Native American Tribal Coordination

October 1, 2018—Caltrans Cultural Resources staff sent AB 52 project notifications (letters with maps) to Steve Hutchason and Wilton Rancheria.

October 8, 2018—Native American consultation was initiated through written correspondence with the Native American Heritage Commission (NAHC) requesting a search of its files to determine if any cultural properties were known to exist within or adjacent to the project area. The names of Native American individuals or group representatives who may be interested in the project were also requested.

October 11, 2018—The Native American Heritage Commission responded to Caltrans' request stating that "Sacred Sites were identified in West Point and Mokelumne Hill project areas provided," and a list attached to the letter provided a list of contacts of individuals and tribes who may be interested in the project and/or who may be able to provide information regarding cultural resources in the project area.

May 2, 2019—Ruth Rhoades of the Caltrans Cultural Resources Branch sent Sharaya Souza of the Native American Heritage Commission an email requesting that they send the documentation of sacred sites that were identified, such as any sacred land records that were identified within the project area.

March 12, 2019—Caltrans Cultural Resources staff sent five non-AB 52 project notification letters to three tribes. No responses have been received.

U.S. Department of Agriculture Natural Resources Conservation Service

Caltrans consulted with the Natural Resources Conservation Service for potential impacts to farmland in the project area on April 6, 2020. On April

8,2020, staff replied the Farmland Impact Rating Form showed that there is no Prime, Unique, or Statewide or Locally important farmland within the project area. Therefore, the Farmland Protection Policy Act does not apply to this project.

U.S. Fish and Wildlife Service

July 22, 2019—An official species list of federally endangered or threatened species that may be affected by the project was requested from the U.S. Fish and Wildlife Service using the Information for Planning and Conservation website.

U.S. Bureau of Land Management

July 11, 2019—Caltrans Biologist Dane Dettloff emailed the U.S. Bureau of Land Management Wildlife Biologist Jeff Jones inquiring about jurisdiction and wildlife concerns. Mr. Jones stated he does not have any wildlife concerns associated with this Caltrans project.

U.S. Forest Service

May 25, 2018—A letter was mailed to the U.S. Fish and Wildlife Service in Sacramento advising the agency of Caltrans' project. Kim Forrest, U.S. Fish and Wildlife Service Preserve Manager, responded on June 1, 2018. A teleconference was held between federal and state agencies regarding Section 4(f) evaluations. As the project progressed, Caltrans reduced the scale of the project at Location 3 by removing the culvert replacement component and performing only guardrail work so no encroachment onto the preserve would occur. Kim Forrest was made aware of the project change.

December 21, 2018—Caltrans Biology staff updated the official species list using the Information for Planning and Conservation Tool.

March 2019—A Biological Assessment was submitted to Jen Schofield of the U.S. Fish and Wildlife Service.

California Department of Fish and Wildlife

September 12, 2018—Caltrans Biology staff contacted California Department of Fish and Wildlife liaison Steven Hulbert via email to ask which culverts may be under jurisdiction by the California Department of Fish and Wildlife.

September 18, 2018—Mr. Hulbert replied stating that the Department would take jurisdiction over Locations 3, 4, 5, 6, 9, 11, and 13.

National Marine Fisheries Service

November 26, 2018—Caltrans Biology staff acquired an official species list from the National Marine Fisheries Service.

Chapter 5 List of Preparers

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

Dane Dettloff, Associate Environmental Planner (Natural Sciences). B.S., Environmental Science – Environmental Resource Management, Oakland University, Rochester, MI; 10 years of combined experience in zoological, ecological, biological, veterinary, and environmental sciences. Contribution: Natural Environment Study and Biological Assessment.

Phong Duong, Associate Environmental Planner. B.S., Environmental/Health Science, California State University, Fresno; 6 years of transportation planning experience and 12 years of environmental planning experience. Contribution: Prepared Initial Study with Proposed Mitigation Negative Declaration.

Nathaniel Heilmann, Environmental Planner (Architectural Historian). B.A., History, California State University, Fresno; 3 years of experience in architectural history, 1 year of experience in historic preservation. Contribution: Architectural History.

Maya Hildebrand, Associate Environmental Planner (Air Quality Coordinator). B.S., Geology, Utah State University; 5 years of air quality analysis and 4 years of combined geological and environmental hazards experience. Contribution: Air Quality Report.

Joseph Llanos, Graphic Designer III. B.A., Graphic Design, California State University, Fresno; 20 years of visual design and public participation experience. Contribution: Graphic Designer of project maps.

Jennifer Lugo, Senior Environmental Planner. M.A., History, California State University, Fresno; B.A., History, Minor in Political Science, California State University, Fresno; 15 years of environmental planning experience. Contribution: Environmental Branch Chief.

Ruth Rhoades, Associate Environmental Planner. Registered Professional Archaeologist (RPA). M.A., Cultural Resources Management, California State University, Sonoma; Professionally Qualified Staff: Lead Archaeological Surveyor, Historical Archaeology; 18 years of archaeological and cultural resources management experience, including 2 years with Caltrans. Contribution: Cultural resources compliance documents.

Jane Sellers, Associate Environmental Planner. B.A., Journalism, California State University, Fresno; 19.5 years of environmental compliance experience, focusing on quality assurance and reviewing and editing NEPA and CEQA environmental documents; 2.5 years of environmental planning (generalist) experience. Contribution: Technical Editor of the draft document.

Richard C. Stewart, Engineering Geologist, P.G. B.S., Geology, California State University, Fresno; more than 30 years of hazardous waste and water quality experience; 17 years of paleontology and geology experience. Contribution: Paleontological Identification Report.

Vladimir Timofei, Transportation Engineer. M.S., Civil Engineering, California State University, Fullerton; 18 years of environmental technical studies experience. Contribution: Water Quality Assessment and Noise Study.

Appendix A Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION

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*Making Conservation
a California Way of Life.*

November 2019

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page:
<https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi>.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

A blue ink signature of Toks Omishakin, consisting of a stylized 'T' and 'O' followed by a horizontal line.

Toks Omishakin
Director

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Appendix B Avoidance, Minimization and/or Mitigation Summary

To ensure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record that follows) would be implemented. During project design, avoidance, minimization, and/or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in the Environmental Commitments Record are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. Because the following Environmental Commitments Record is a draft, some fields have not been completed; they will be filled out as each of the measures is implemented.

Note: Some measures may apply to more than one resource area. Duplicated or redundant measures have not been included in this Environmental Commitments Record.

Biological Resources

Wetlands and Other Waters

The following permits would be acquired for the project:

- A 1602 Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife would be needed.
- A Clean Water Act Section 401 Water Quality Certification from the Regional Water Quality Control Board and a Clean Water Act Section 404 Nationwide Permit from the U.S. Army Corps of Engineers would be required.

A Jurisdictional Determination would be prepared to confirm the presence, boundaries, and impacts to any waters of the U.S. on the project area. Compensatory mitigation for all unavoidable permanent impacts to wetlands would be completed to ensure there is no net loss of these hydrologic resources. The specific mitigation ratios would be determined prior to the start of construction, but a minimum 3:1 compensation ratio would be used. Although the method has not been determined at this time, it could include any of the following: creation, restoration, or preservation, and may include the purchase of credits at an approved conservation bank.

The following avoidance and minimization measures would be implemented for the project:

1. If feasible, wetlands will be avoided to the maximum extent possible.
2. A Stormwater Pollution Prevention Plan will be prepared specifically for the project. It will include measures to reduce impacts to aquatic resources, which include wetlands.
3. Best Management Practices specifically developed for the project will be followed by the contractor. These may include:
 - Installation of temporary erosion control features.
 - Use of a Spill Prevention Plan with measures to minimize the risk of fluids or other materials used during construction (e.g., oils, transmission and hydraulic fluids, cement, fuel) from entering aquatic resources and upland habitat.
 - Installation of measures to ensure water quality is protected.
4. Temporary silt fencing will be installed within the project footprint to protect wetlands (“Environmentally Sensitive Areas”) adjacent to the project footprint from construction-related disturbance.

Plant Species

The following measures would be implemented for all plant species discussed in Chapter 2:

- Pre-construction botanical surveys will be performed within the project area according to the California Department of Fish and Wildlife *Protocols for surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*.
- If any federal, state-listed, or special-status species of plants seen within the project footprint during the preconstruction botanical surveys will be flagged and avoided if possible.
- If avoidance is not possible measures such as relocation or preservation of topsoil may be implemented to minimize impacts to this species.
- Standard Special Provision 14-6.02 Species Protection (buffers, work stoppage areas)
- Standard Special Provision 14-1.02 Environmentally Sensitive Area.

Oak Woodland

The project would remove some trees to install the slope stabilization measures. It is estimated that 8 trees will be removed for the project, mostly at Location 8 (post mile 30.25). Most of the trees to be removed are within the 1600 jurisdictional area of the California Department of Fish and Wildlife. Therefore, Caltrans would compensate for this impact most likely at an off-site location.

Threatened and Endangered Species

The measures below would be implemented to reduce the threat of direct and indirect impacts to the fisher, California tiger salamander, California red-legged frog and lone manzanita within the project limits:

- Environmental Awareness Training would be provided by a Caltrans-approved biologist to all construction personnel prior to the start of construction.
- Pre-construction/pre-activity surveys would be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities.
- Surveys would be conducted within the proposed project boundary and within accessible areas up to 200 feet outside the project footprint to identify habitat features.
- Should pre-construction surveys find evidence of recent species occupancy, a qualified biologist would be present during initial project-related ground-disturbing activities within 50 feet of the occurrence location.
- Food, trash and other garbage would be disposed of in closed containers and removed at the end of each work period. Feeding of any wildlife would be prohibited.
- Firearms (except those carried by qualified and permitted public safety agents) and pets would not be permitted on the work site.
- To the extent possible, a biologist would be available on-call during all construction periods when not present on-site.
- Erosion control measures will be implemented near any aquatic streams and/or ponds associated with work in project area to minimize sediment from entering the waterways and potentially exclude listed semi-aquatic species from project area.
- Standard Special Provision 14-6.02 Species Protection (buffers, work stoppage areas)
- Standard Special Provision 14-1.02 Environmentally Sensitive Area.

List of Technical Studies Bound Separately

Air Quality Memorandum

Noise Study Memorandum

Water Quality Study Memorandum

Natural Environment Study

Floodplain Study Memorandum

Section 106 Compliance Screening Memorandum

Hazardous Waste Initial Site Assessment

Visual Assessment Memorandum

Paleontological Identification Memorandum

To obtain a copy of one or more technical studies/reports or the Initial Study, please send your request to the following email address:
phong.duong@dot.ca.gov

Please indicate the project name and project identifying code (under the project name on the cover of this document) and specify the technical report or document you would like a copy of. Provide your name and email address or U.S. postal service mailing address (street address, city, state and zip code).