

Panoche Capital Preventative Maintenance

On Interstate 5 in Fresno County from 1.9 miles north of Three Rocks
Road undercrossing to 0.2 mile south of Panoche Road
6-FRE-5- PM 37.20/48.80
06-0X270/0618000048
SCH Number: 2020070309

Initial Study with Mitigated Negative Declaration

Volume 1 of 2



Prepared by the
State of California Department of Transportation

November 2020



General Information About This Document

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Pavement Rehabilitation on Interstate 5 from post miles 37.20 to 48.80 in
Fresno County

**INITIAL STUDY
with Mitigated Negative Declaration**

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

THE STATE OF CALIFORNIA
Department of Transportation



Juergen Vespermann
Acting Office Chief
Southern San Joaquin Valley Environmental Office
California Department of Transportation

11-02-2020

Date

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Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes a Capital Preventative Maintenance Project on Interstate 5 beginning 1.9 miles north of Three Rocks Road undercrossing to 0.2 mile south of Panoche Road overcrossing, specifically from post mile 37.20 to post mile 48.80. This project will resurface and rehabilitate the northbound and southbound mainline, shoulders and on-ramps and off-ramps. In addition, the project will install rumble strips and upgrade the following: guardrail systems, 109 drainage systems, dikes, and road signs. Lighting and intelligent transportation system elements will be rehabilitated.

Determination

Caltrans has prepared an Initial Study for this project and, following public review, has determined 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: aesthetics, agriculture and forest resources, air quality, cultural resources, energy, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire.

The project would have less than significant impact on greenhouse gas emissions.

The project would have no significantly adverse effect on biological resources, other waters and geology and soils (paleontological resources) because the following mitigation measures would reduce potential effects to insignificance:

- The biological impacts would be mitigated by the purchase of conservation bank credits for the San Joaquin antelope squirrel.
- Impacts to other waters would be compensated through the purchase of credits.
- Where excavations extend into the undisturbed materials of Tulare Formation, paleontological monitoring and mitigation will be required.

Juergen Vespermann

Juergen Vespermann
Acting Office Chief
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California Department of Transportation

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Chapter 1 Proposed Project

1.1 Introduction

1.1.1 Purpose

The purpose of this project is to extend the life of existing pavement on the northbound and southbound lanes on Interstate 5 beginning 1.9 miles north of Three Rocks Road undercrossing to 0.2 mile south of Panoche Road overcrossing.

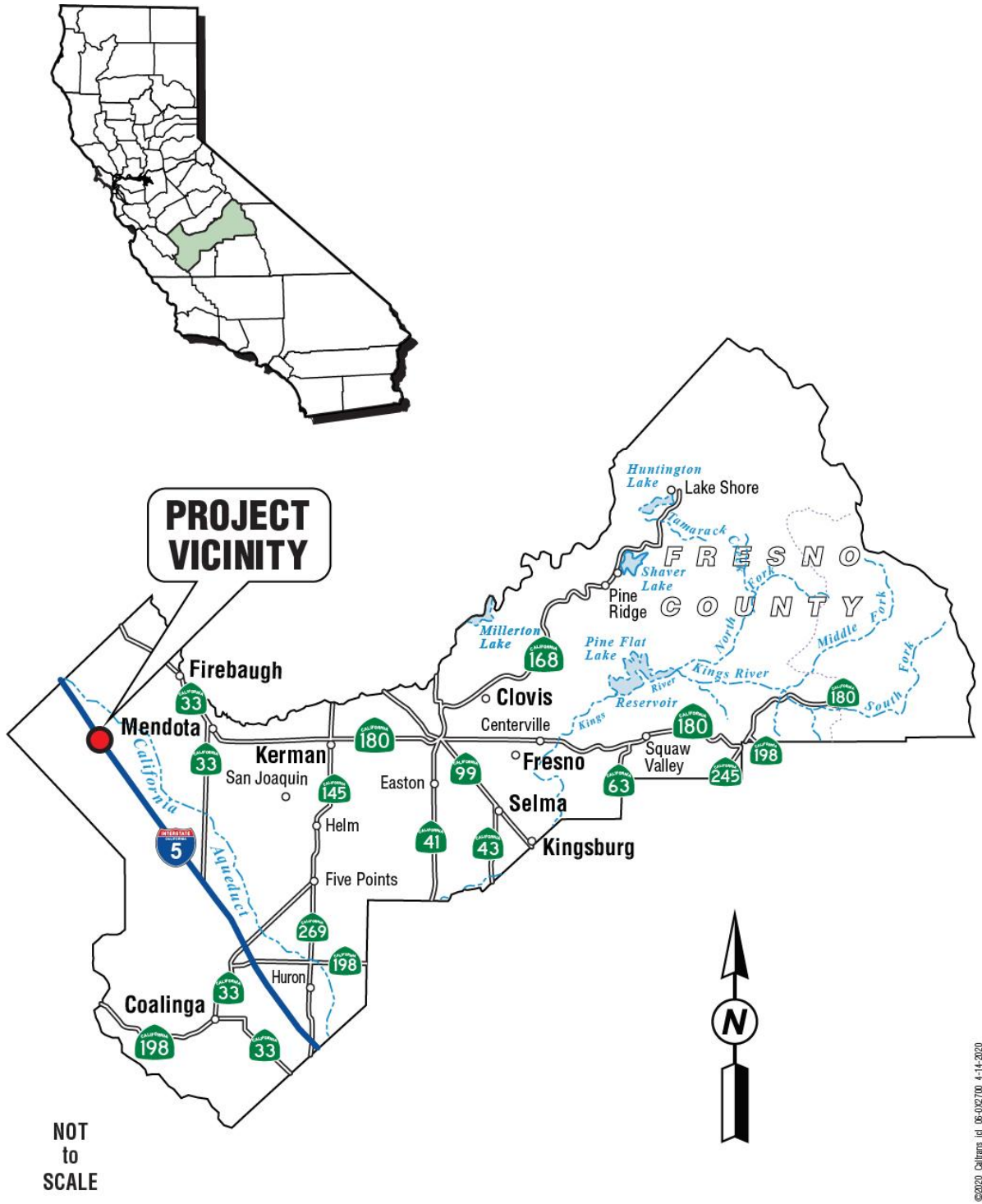
1.1.2 Need

There is a considerable amount of distress on the existing pavement, cracking along and across the pavement has deteriorated the pavement to the extent that rehabilitation is needed. Due to previous pavement overlays, hydraulic capacity of the existing asphalt concrete dikes within the project limits have been significantly reduced. Therefore, asphalt concrete dikes and asphalt concrete spillways will be removed and replaced.

1.2 Project Description

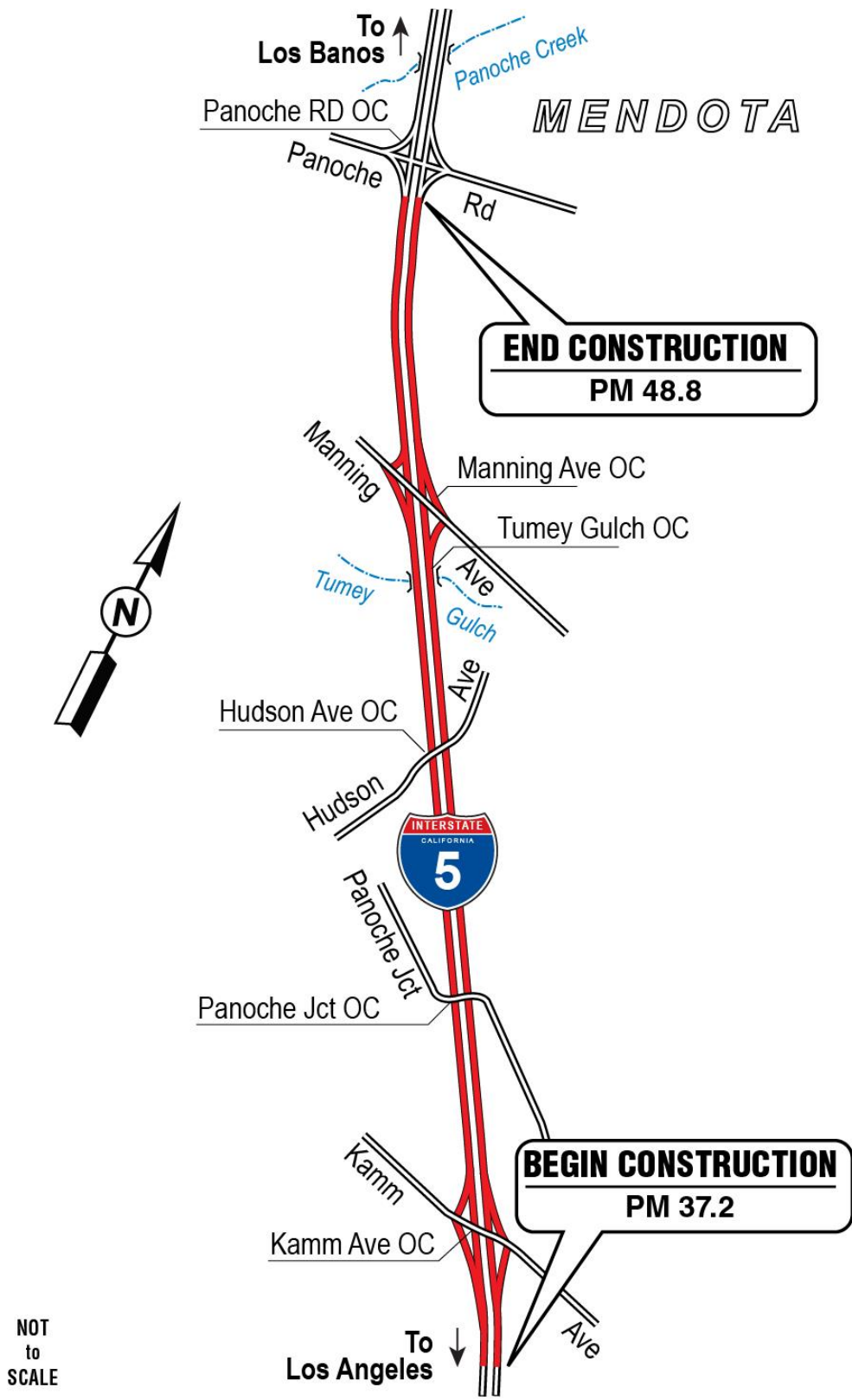
The California Department of Transportation (Caltrans) proposes a Capital Preventative Maintenance Project on Interstate 5 beginning 1.9 miles north of Three Rocks Road undercrossing to 0.2 mile south of Panoche Road overcrossing, specifically from post mile 37.2 to post mile 48.8, where construction would occur. The actual project limits begin at post mile 37.0 and end at post mile 49.2. Within the project limits, Interstate 5 is a four-lane divided freeway located in rural Fresno county. The project occurs in a relatively flat terrain with a primarily horizontal alignment. The land use through these limits is primarily agricultural and the project area is roughly parallel to the foothills of the Panoche Hills located to the west. The construction of this project is scheduled to begin in summer of 2022 and be completed in fall of 2024. A project vicinity map and location map are shown in Figure 1-1 and Figure 1-2, respectively.

Figure 1-1 Project Vicinity Map



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Figure 1-2 Project Location Map



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1.3 Project Alternatives

A build alternative and no-build alternative are being considered for this project.

1.3.1 Build Alternatives

The build alternative proposes to extend the life of the existing pavement on the northbound and southbound mainline, including the on-ramps and off-ramps of Interstate 5. Construction work on the northbound lane from post mile 37.2 to post mile 45.8 and southbound lane from post mile 37.2 to post mile 44.9 consists of removing 0.35 foot of existing pavement and replacing with 0.15 foot of rubberized hot mix asphalt and 0.15 foot of hot mix asphalt. Construction work on the northbound lane, from post mile 45.8 to post mile 48.8 and southbound lane from post mile 44.9 to post mile 48.8 consists of removing 0.45 foot of existing pavement and replacing with 0.15 foot of rubberized hot mix asphalt and 0.25 foot of hot mix asphalt.

Pavement work for the on-ramps and off-ramps consists of removing 0.40 foot of existing pavement and replacing with 0.15 foot of rubberized hot mix asphalt and 0.25 foot of hot mix asphalt. In addition, the project will install rumble strips, and upgrade the following: guardrail systems, 109 drainage systems, road signs and dikes. This project will also rehabilitate lighting systems and intelligent transportation system elements. All work for this project will be limited to 10 feet from edge of pavement, except for drainage work and the upgrade/installation of intelligent transportation system elements.

There will be a 1-mile single lane closure for up to 48 hours in one direction at the following post mile locations where culverts are going to be replaced: 42.47, 43.73, 44.28, 44.48, 46.13, 47.58. This additional information was not included in the draft environmental document during the circulation period.

This project contains a number of standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are listed later in this chapter under “Standard Measures and Best Management Practices Included in All Alternatives.”

1.3.2 No-Build (No-Action) Alternative

There are no proposed improvements in the no-build alternative as the existing pavement will remain unchanged. Doing nothing will allow the existing pavement to continue deteriorating and will require more extensive repairs. The no-build alternative will not satisfy the purpose and need of the project.

1.3.3 Standard Measures and Best Management Practices included in All alternatives

The following standard measures and best management practices may apply to the project:

13-1 General Water Pollution Control: Contractor must abide to this section.

14-1.02 Environmentally Sensitive Area: Pertains to environmentally sensitive areas marked on the ground. Do not enter an environmentally sensitive area unless authorized. If breached, immediately stop all work as direct by biologist, secure the area, and notify the engineer.

14-2.03 Archaeological Resources: Pertains to archaeological resources discovered within or near construction limits. Do not disturb the resources and immediately stop all work within a 60-foot radius of discovery, secure the area, and notify the engineer. Do not move archaeological resources or take them from the job site. Do not resume work within the radius of discovery until authorized. Archaeological mitigation may include monitoring.

14-6.03 Species Protection: Pertains to protecting regulated species and their habitat that occur within or near the job site. Upon discovery of a regulated species, immediately stop all work as directed by a biologist and notify the engineer.

14-6.03B Bird Protection: Pertains to protecting migratory and nongame birds, their occupied nests and their eggs. Upon discovery of an injured or dead bird or migratory or nongame bird nests that may be adversely affected by construction activities, immediately stop all work as directed by biologist and notify the engineer. Exclusion devices, nesting-prevention measures, and removing constructed and unoccupied nests may be applied.

14-7.03 Discovery of Unanticipated Paleontological Resources: If paleontological resources are discovered at the job site, do not disturb the resources and immediately stop all work within a 60-foot radius of the discovery, secure the area, and notify the engineer. Do not move paleontological resources or take them from the job site.

14-7.04 Paleontological Resources Mitigation: Includes specifications for coordinating and working with paleontological resources mitigation team provided by the department.

14-8.02 Noise Control: Pertains to controlling and monitoring noise resulting from work activities. Noise levels are not to exceed 86 decibels at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

14-9.02 Air Pollution Control: Comply with air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the construction contract.

14-11 Hazardous Waste and Contamination: Includes specifications relating to hazardous waste and contamination.

14-11.02 Discovery of Unanticipated Asbestos and Hazardous Substances: Upon discovery of unanticipated asbestos or a hazardous substance, immediately stop work and notify the engineer.

14-11.04 Dust Control: Excavation, transportation, and handling of material containing hazardous waste or contamination must result in no visible dust migration. When clearing, grubbing, and performing earthwork operations in areas containing hazardous waste or contamination, provide a water truck or tank on the job site.

14-11.08 For Regulated Material Containing Aerially Deposited Lead

14-11.09 For Minimal Disturbance of Regulated Material Containing Aerially Deposited Lead

14-11.10 For Disposal of Electrical Equipment Requiring Special Handling

14-11.12 Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue: Includes specifications for removing, handling, and disposing of yellow thermoplastic and yellow painted traffic stripe and pavement marking. The residue from the removal of this material is a generated hazardous waste (lead chromate). Removal of existing yellow thermoplastic and yellow painted traffic stripe and pavement marking exposes workers to health hazards that must be addressed in a lead compliance plan.

14-11.13C Safety and Health Protection Measures: Applies to worker protective measures for potential lead exposure.

14-11.14 Treated Wood Waste: Required to assess handling and disposal of any potential wood waste generated during the project.

Standard Special Provision 36-4 For work involving residue from grinding and cold planing that contains lead from paint and thermoplastic

Standard Special Provision 84-9.03C For the Removal of Yellow Traffic Stripe and Pavement Marking separate from roadways grindings

Standard Special Provision 7-1.02K(6)(j)(iii) Earth Material Containing Lead

1.4 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation, supporting a Categorical Exclusion determination, will be prepared in accordance with the National Environmental Policy Act. When needed for clarity, or as required by CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special-status species by the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service—in other words, species protected by the Federal Endangered Species Act).

1.5 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications are required for project construction:

Agency	Permit/Approval	Status
California Department of Fish and Wildlife	1600 Lake and Streambed Alteration Agreement	The 1600 permit will be obtained prior to start of construction.
California Department of Fish and Wildlife	2081 Incidental Take Permit	Incidental take permit for San Joaquin antelope squirrel may be obtained prior to start of construction.
Central Valley Regional Water Quality Control Board	Clean Water Act Section 401 Water Quality Certification	The 401 certification (permit) will be obtained prior to the start of construction.
U.S. Army Corps of Engineers	Clean Water Act Section 404 Nationwide Permit	The 404 permit will be obtained prior to start of construction.
U.S. Fish and Wildlife Service	Letter of Concurrence	A Letter of Concurrence was received on August 27, 2020.

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Potentially Significant 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 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.

“No Impact” determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report (bound separately in Volume 2), and no further discussion is included in this document.

2.1.1 Aesthetics

The project is not located within a state scenic highway and will not adversely affect a scenic vista. Furthermore, the project will not substantially degrade the existing character or quality of public views of the site or its surroundings. With the use of Caltrans best management practices, the project will not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Considering the information in the Questionnaire to Determine Visual Impact Assessment Level dated May 20, 2020 the following significance determinations have been made.

Except as provided in Public Resources Code Section 21099:

Question—Would the project:	CEQA Significance Determinations for Aesthetics
a) Have a substantial adverse effect on a scenic vista?	No Impact

Question—Would the project:	CEQA Significance Determinations for Aesthetics
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact
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
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No Impact

2.1.2 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.

The project would not convert prime farmland, unique farmland or farmland of statewide importance to non-agricultural use or conflict with existing zoning for agricultural use or Williamson Act contract. There are no forest lands or timberlands within the project area that could be impacted. Considering the information in the Fresno County General Plan dated October 3, 2000, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
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?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning, 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
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
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

2.1.3 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.

Considering the information included in the Air Quality Memo for the Panoche Capital Maintenance Project dated March 25, 2019, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Air Quality
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact

Question—Would the project:	CEQA Significance Determinations for Air Quality
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
c) Expose sensitive receptors to substantial pollutant concentrations?	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	No Impact

2.1.4 Biological Resources

The final environmental document (Initial Study with Mitigated Negative Declaration) has been updated from the draft environmental document (Initial Study with Proposed Mitigated Negative Declaration) to reflect the following changes. Based on the Letter of Concurrence received from the U.S. Fish and Wildlife Service dated August 27, 2020, additional conservation measures have been added for blunt-nosed leopard lizard, San Joaquin kit fox and giant kangaroo rat species.

Considering the information included in the Biological Assessment dated March 9, 2020, Natural Environment Study dated May 20, 2020, Letter of Concurrence dated August 27, 2020 and ongoing consultation with the Caltrans biologist, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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, U.S. Fish and Wildlife Service, or National Oceanic and Atmospheric Administration Fisheries?	Less Than Significant Impact with Mitigation

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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?	No Impact
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 with Mitigation
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
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
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

Affected Environment

The action area was defined to assess impacts of the proposed project on biological resources. It consists of the project footprint and a 500-foot buffer around the footprint where direct project impacts will occur. The action area includes temporary and permanent impacts resulting from construction activities occurring in staging areas, access routes, and construction easements for culvert replacement.

The action area primarily consists of disturbed habitat, non-native grassland habitat, and saltbush scrub habitat. This portion of the Interstate 5 corridor is dominated by agricultural development and all areas beyond the action area have been converted to agriculture. Specifically, the lands throughout the action area are occupied by an almond orchard, plowed fields, and vineyards. Dry washes are located intermittently throughout the project area where flood waters pool from the nearby foothills.

Caltrans biologist have consulted with the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife since March 2019. It was

determined that the southernmost 3 miles of the project site contain suitable habitat for blunt-nosed leopard lizards (*Gambelia sila*) and giant kangaroo rats (*Dipodomys ingens*) based on the consultation. Therefore, Caltrans was advised to conduct surveys for blunt-nosed leopard lizards and giant kangaroo rats to confirm absence in those areas where ground disturbance will occur within 50 feet of small mammal burrows along this segment of Interstate 5. Surveys were focused between post miles 37.0 and 40.0. The California Department of Fish and Wildlife and U.S. Fish and Wildlife Service agreed that the surveys conducted by Caltrans were suitable. Further consultation with California Department of Fish and Wildlife was warranted due the presence of San Joaquin antelope squirrels (*Ammospermophilus nelsoni*) discovered during surveys.

Caltrans consulted with the California Department of Fish and Wildlife in April 2020 to discuss which culverts may be under their jurisdiction. It was determined that the California Department of Fish and Wildlife has jurisdiction over 22 culverts within the project area and a 1600 Streambed Alteration Agreement will be required for these culverts. Measures to avoid take of San Joaquin antelope squirrels apply within these jurisdictional areas. Therefore, Caltrans will have a contingency plan to stop all work and seek incidental take coverage (2081 Incidental Take Permit) if avoidance becomes infeasible.

There are federal and state listed species either listed endangered and/or threatened with the potential to occur within the action area. These species include blunt-nosed leopard lizards, San Joaquin kit foxes (*Vulpes macrotis mutica*), giant kangaroo rats, San Joaquin woolly-threads (*Monolopia congdonii*), San Joaquin antelope squirrels, Fresno kangaroo rats (*Dipodomys nitratooides exilis*), and Swainson's hawks (*Buteo swainsoni*). Other animal species designated as California Species of Special Concern by the California Department of Fish and Wildlife, plant species with special designation by the California Native Plant Society, and migratory birds that have the potential to occur within the action area, as well as other waters are discussed here. A Biological Assessment has been submitted to the U.S. Fish and Wildlife Services and a letter of concurrence was received on August 27, 2020.

Blunt-Nosed Leopard Lizard

The blunt-nosed leopard lizard is designated a federal and state endangered species. Blunt-nosed leopard lizards are relatively large terrestrial lizards that range from 3 to 5 inches. They have granular scales, are usually gray to brown in color with cream colored crossbands and large dark spots. Blunt-nosed leopard lizards have a pale underside that lightens as their body temperature increases and gray markings on the throat. This species is found in chenopod scrub and other sparsely vegetated alkali and desert scrub habitats. This species will often seek cover in mammal burrows, under shrubs or structures such as fence posts.

No occurrences of blunt-nosed leopard lizards were observed during protocol surveys. However, during coordination with the California Department of Fish and Wildlife, the southernmost 3 miles of the project site was determined to be marginal suitable habitat for this species. There have been 5 documented occurrences of this species in Fresno County, the closest occurred in 1993 is 1.5 to 2 miles west of the action area, along the base of the Tumey Hills in undisturbed habitat. There was another occurrence in the Tumey Hills in 1992 located 20 miles northwest of the action area. A third occurrence in 1979 was about 18 miles east of the action area near Mendota. The other two occurrences in Fresno County were both located south of the project site with the closest occurring in 1935 in Coalinga and the other in 1980 about halfway between the city of Coalinga and city of Avenal.

San Joaquin Kit Fox

The San Joaquin kit fox is designated a federal endangered species and state threatened species. San Joaquin kit foxes are primarily nocturnal and stay active throughout the year. They use dens for shelter, reproduction, protection from predators, and temperature regulation. Their dens typically have a distinct key-hole shaped entrance. San Joaquin kit foxes occupy valley and foothill grasslands, or grassy open-stage habitats with scattered shrubs, in areas of loose-textured soils. There have been 17 documented sightings of San Joaquin kit foxes within 5 miles of the project. One of the most recent occurrences in 1995 was documented at the south end of the action area around Interstate 5 and West Dinuba Avenue. The other 16 historic occurrences vary in distance from the project area, ranging from 1 to 10 miles away. There have not been any documented sightings within 5 miles of the action area within the last 20 years.

Numerous potential den sites were identified while conducting field surveys and small mammal trapping surveys confirmed a suitable prey-base in the area for the species. Trail cameras were installed at the four largest culvert locations within the proposed project area to capture potential passage of kit foxes through the project footprint, but none were observed. Furthermore, the potential dens showed no signs of recent activity or use. In addition, surveys conducted in 2017 by Caltrans biologists for the Tumey Gulch 3 Bridge Replacement Project (06-0S830, post mile 44.40 to 45.40), which occurs within the action area of this project, was negative for this species.

Giant Kangaroo Rat

The giant kangaroo rat is a federal and state endangered species. The giant kangaroo rat is easily differentiated from other species of kangaroo rats in California by the presence of five toes on its hind feet, other kangaroo rats only have four toes on their hind feet. This species is found in annual grasslands on the western side of the San Joaquin valley in chenopod scrub, and valley and foothill grassland habitats. Nocturnal small mammal surveys were conducted for this project and yielded negative results for giant

kangaroo rats. There are several documented observations of giant kangaroo rats in 1992 that occurred about 1.25 to 2 miles west of the action area along the base of Tumey Hills. Another occurrence of this species in 2006 was documented about 3.25 miles west of the action area. Eleven more occurrences in 1992 were documented in portions of the hills next to the action area to the west.

San Joaquin Woolly-Threads

The San Joaquin woolly-thread is a federal endangered species. It is an annual herb with a blooming period between February and March. This species is limited to the State of California and is typically found in chenopod scrub, valley and foothill grasslands and sandy soils. Observations of this species were recorded at higher elevations of the adjacent hill sites to the project area but have not been documented within the last 20 years on the valley floor in the action area. The closest occurrences of this species to the project site was about 3 miles to the west of Panoche Road overcrossing in the Panoche Hills and about 4.3 miles west of Kamm Avenue in 2013. Protocol-level botanical surveys for San Joaquin woolly-threads were negative throughout the project footprint. In addition, surveys conducted in 2017 by Caltrans biologists for the Tumey Gulch 3 Bridge Replacement project, which occurs within the action area of this project, was negative for this species.

San Joaquin Antelope Squirrel

The San Joaquin antelope squirrel is a state threatened species. This species is only found within California, in the San Joaquin Valley, the Cuyama and Panoche valleys, and the Carrizo and Elkhorn plains. This species prefers dry, open habitats with loosely scattered shrubs and friable fine-grained, sandy or gravelly soils. This species lives in family units of 6 to 8 individuals cohabiting within extensive underground burrows. San Joaquin antelope squirrels are short lived species with many living less than a year but some have been reported to live over five years. While conducting blunt-nosed leopard lizard surveys, Caltrans biologists discovered San Joaquin antelope squirrels at the southern end of the project. Additionally, when surveying for giant kangaroo rats, two San Joaquin antelope squirrels were incidentally captured. These findings triggered the potential need for compensatory mitigation and if avoidance of this species is not feasible, a 2081 permit through the California Department of Fish and Wildlife will be obtained.

Fresno Kangaroo Rat

The Fresno kangaroo rat is a federal and state endangered sub-species of the San Joaquin kangaroo rat. Historically, the Fresno kangaroo rat could be found on desert scrub and herbaceous habitats with scattered shrubs on the floor of the San Joaquin Valley. However, urban, agricultural, and other forms of development have forced this species off its habitat and currently only few isolated populations remain. The Fresno kangaroo rat is the smallest of the

three subspecies of San Joaquin kangaroo rat. Fresno kangaroo rats are a nocturnal animal that stay active year-round. They dig their own burrows in loose soils and eat the seeds from annual plants and grasses, as well as green vegetation and insects.

Nocturnal small mammal surveys were conducted from June through August 2019. No Fresno kangaroo rats were found. The closest documented occurrence in 2003 of the Fresno kangaroo rat was along State Route 180, southeast of Mendota and over 20 miles northeast of the action area. Another occurrence with the same date, was also documented along State Route 180, approximately 25 miles northeast of the action area. The only two other recent documented observations of this species occurred in 1990, and were documented near San Joaquin, approximately 25 and 30 miles east of the project.

Burrowing Owl

The burrowing owl (*Athene cunicularia*) is designated a California species of concern by California Department of Fish and Wildlife. Burrowing owls can be found throughout western North America and the State of California. In California, this species prefers a habitat with open grasslands, deserts and shrub communities. Burrowing owls can also be found in disturbed habitats such as agricultural fields, ruderal grassy fields, vacant lots, and pastures. Protocol-level surveys were not conducted for this species and no burrowing owls were observed during any of the biological surveys. The closest documented occurrence of burrowing owl within the last 20 years is approximately 10 miles west of the action area in the Panoche Hills. According to the California Department of Fish and Wildlife, the second closest occurrence in 2016 is approximately 13 miles or more south of the action area along Whitney Avenue with agricultural lands adjacent to the east.

California Glossy Snake

The California glossy snake (*Arizona elegans occidentalis*) is designated a California species of concern by the California Department of Fish and Wildlife. This species is a medium sized muscular non-poisonous snake with smooth glossy scales, a light faded appearance, and a short tail. The average length of adults are 3 to 4 feet. This species is reported to exist in various locations from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and Peninsula ranges. This species is usually found in arid scrub, grassland, chaparral habitats, and areas with loose and sandy soils. The species is nocturnal and burrows, hiding underground during the day.

Caltrans did not conduct surveys for this species and no glossy snakes were identified during the project surveys, including the nocturnal small mammal surveys. According to the California Department of Fish and Wildlife, the two closest documented occurrences of this species occurred in 2004 and 2014 approximately 4 miles west of the action area in the Tumey Hills. Both

observations were recorded at higher elevations than the action area, and there are no recent documented occurrences of this species at lower elevations on the valley floor, except one that is several miles to the south near the city of Huron.

San Joaquin Coachwhip

The San Joaquin coachwhip (*Masticophis flagellum ruddocki*) is a species of snake endemic to California and is a California Species of Special Concern by the California Department of Fish and Wildlife. This species is a medium sized slender non-poisonous snake. This species has smooth scales, a large head and eyes and a thin neck and tail. The average length of adults are 3 to 6 feet. This species is reported to range from Arbuckle in the Sacramento Valley in Colusa County southward to the Grapevine in the Kern County portion of the San Joaquin Valley and westward into the inner South Coast Ranges. This species occurs in open, dry, treeless areas with little or no cover, including valley grassland and saltbush scrub. They avoid dense vegetation where they cannot move quickly, including mixed oak chaparral woodland. They will take refuge in rodent burrows, under shaded vegetation, and under surface objects. This species can tolerate high heat.

Caltrans did not conduct a specific survey for this species; however, the species was identified while conducting a blunt-nosed leopard lizard survey on two separate occasions.

Coast Horned Lizard

The coast horned lizard (*Phrynosoma blainvillii*) is listed as a California Species of Special Concern by the California Department of Fish and Wildlife. This species is a flat, wide, oval shaped lizard with scattered enlarged pointed scales on the upper body surface and a “crown” of horns or spines on the head. Colors can range from light brown, to brown, to reddish brown, with dark blotches on the upper surface and side of the neck, and a pale colored belly below. Adults average between 2.5 and 4.5 inches in length. Coast horned lizards can occupy a wide variety of habitats but are most common in lowlands with open areas for sunning and scattered low shrubs for cover. This species shows preference for loose sandy soils. Surveys were conducted for this species during blunt-nosed leopard lizard surveys with negative results and no coast horned lizards were observed during any of the other biological surveys. According to the California Department of Fish and Wildlife, the two closest documented occurrences in 1992 of this species are located approximately 3.2 miles west of the project in the Cervo Hills.

Tulare Grasshopper Mouse

The Tulare grasshopper mouse (*Onychomys torridus tularensis*) is designated a California Species of Special Concern by the California Department of Fish and Wildlife. This species current range encompasses the western edge of the Tulare Basin and includes western Kern County, Carrizo

Plain Natural Area, the Cuyama side of the Caliente Mountains, San Luis Obispo County, and the Ciervo-Panoche Region in Fresno and San Benito Counties. This species is nocturnal and can be found in arid grassland and saltbush scrub habitats. This species has a low reproductive rate, low population density, large home range, and short-life span, making it particularly vulnerable to loss of habitat and/or extinction caused by a catastrophic event, such as drought or fire.

Nocturnal small mammal surveys were conducted from June through August 2019. One Tulare grasshopper mouse was captured during these surveys. There was a recent documented occurrence of this species roughly 0.2 mile from the action area on Kamm Avenue in 2016. Another documented observation of Tulare grasshopper mouse occurred in 1981 in the Panoche Hills, approximately 10 miles northwest of the action area. The other documented occurrences of Tulare grasshopper mouse near the project occurred back in 1918, 1932, and 1955.

Swainson's Hawk

The Swainson's hawk is designated as a state-threatened species by the California Department of Fish and Wildlife. This species breeds or migrates in California within the Central Valley, Owens Valley, and Mojave Desert. Swainson's hawks breed and nest in areas with few trees in juniper-sage flats, riparian areas, oak savannah habitats, or other sparsely treed areas next to agricultural fields and pastures. They forage over open grasslands, shrub lands, alfalfa fields and pastures, where rodents are abundant.

Protocol-level surveys were conducted for this species and no Swainson's hawks or nests were observed during any of the biological surveys. The closest documented occurrences of this species were approximately ten miles in 2005 and eleven and a half miles in 2004 north of the action area along the California Aqueduct. Beyond those, the next closest documented recent occurrence was in 2000 approximately twelve and a half miles northeast, near Mendota.

Migratory Birds

The Federal Migratory Bird Treaty Act (15 U.S. Code 703-711), 50 Code of Federal Regulations Part 21 and 50 Code of Federal Regulations Part 10, prohibits killing, possessing, or trading of migratory birds. Executive Order 13186 requires that any project with federal involvement address impacts of federal actions on migratory birds. Although these species are not protected under federal or state endangered species acts, the Fish and Game Code (Sections 3503, 3513, and 3800) does protect them from harassment or harm and protects their eggs and nestlings. Disturbance that causes nest abandonment or loss of reproductive effort or both is considered "take" by the California Department of Fish and Wildlife.

Several species of birds protected under the Migratory Bird Treaty Act and the California Fish and Game Code may nest on or adjacent to the project impact area. These include the cliff swallow, horned lark, loggerhead shrike, and others.

Panoche Pepper-Grass

Panoche pepper-grass (*Lepidium jaredii* ssp. *Album*) is ranked 1B.2 by the California Native Plant Society rare and endangered plant inventory. The 1B rank status identifies the plant as being rare, threatened, or endangered and the 0.2 further qualifies it as being moderately threatened. This species is potentially threatened by wind development, grazing, and vehicles. It is an annual herb that belongs to the mustard family. It is a native species that is limited to the state of California alone. This species is typically found in valley and foothill grasslands and is common on alluvial fans and washes. Panoche pepper-grass is often on white or grey clay resembling lenses on steep slopes in clay and gypsum-rich soils.

Recent observations of this species were recorded at the base and adjacent hill sides to the project as well as on the valley floor near the project site. According to the California Department of Fish and Wildlife, the closest known occurrence to the project site is roughly 2 miles east of the Manning Avenue overcrossing in 2017. Protocol-level botanical surveys for Panoche-pepper grass were conducted in March and April 2019. Surveys were negative for the presence of Panoche-pepper grass throughout the action area.

Showy Golden Madia

Showy golden madia (*Madia radiata*) is ranked 1B.1 by the California Native Plant Society rare and endangered plant inventory. The 1B rank status identifies the plant as being rare, threatened, or endangered and the 0.1 further qualifies it as being seriously endangered in California. Showy golden madia is an annual herb that belongs to the Aster family. It is a native species that is limited to the state of California. This species is typically found in the Inner South Coast Ranges and in the eastern San Francisco Bay area. Showy golden madia is often on grassy or open slopes in clay soils.

Recent observations of this species were recorded at the base as well as on the adjacent hillsides but have not been documented within the last 20 years on the valley floor near the project site. Protocol-level botanical surveys for showy golden madia were conducted in March and April 2019. The majority of occurrences are located at higher elevations in the Tumey Hills west of the project. Surveys were negative for the presence of showy golden madia throughout the action area.

Other Waters

The project area includes potential jurisdictional waters. A total of 0.80 acre and 2,950.9 linear feet of potential waters of the U.S./State have been

mapped onsite. However, this acreage and extent calculated is subject to modification during the U.S. Army Corps of Engineers verification process. These waters are subject to the jurisdiction of the Regional Water Quality Control Boards, U.S. Army Corps of Engineers, and California Department of Fish and Wildlife. The aquatic features located within the project limits are considered dry wash drainages. These channels run west to east through the action area.

Environmental Consequences

Blunt-Nosed Leopard Lizard

Blunt nosed leopard lizards are unlikely to occur in the action area because the project footprint is located along a disturbed highway right-of-way that contains only marginally suitable habitat for the species. However, the project will temporarily impact 20.82 acres of potential suitable habitat for this species consisting of ruderal non-native grassland and salt bush scrub, due to installation of box culverts. About 0.08 acre of potentially suitable habitat for this species will be permanently impacted by construction. With the implementation of conservation measures, Caltrans has made a may affect, but is not likely to adversely affect determination for this species.

San Joaquin Kit Fox

San Joaquin kit fox are unlikely to occur in the project footprint. There is low probability that a dispersing or transient kit fox would be traversing through the action area. The project contains marginally suitable habitat for the species and no recent sightings have been documented in the project area. However potential dens have been observed in the project area, but the camera station revealed that the only active dens were occupied by Black-tailed jack rabbits. Based on negative findings of this species during trail camera surveys, the presence of predators, and competing species within the action area, the likelihood of the San Joaquin kit fox is low. However, 0.08 acre of marginally suitable habitat will be permanently impacted and approximately 20.82 acres of suitable habitat will be temporarily impacted by construction of the project. With the implementation of conservation measures, Caltrans has determined a may affect, but is not likely to adversely affect determination for this species.

Giant Kangaroo Rat

The giant kangaroo rat is unlikely to occur in the project area. There are a few records for this species within a 5-mile radius of the action area and the project footprint is located along disturbed highway which contains marginally suitable habitat for the species. However, 0.08 acre of potential habitat will be permanently impacted, and 20.82 acres of potential habitat will be temporarily impacted by construction. Based on the negative findings of this species during protocol surveys and the presence of marginal suitable habitat coupled with a high abundance of Heermann's kangaroo rats within the action area the likelihood of giant kangaroo rat presence is determined to be low.

Caltrans does not expect giant kangaroo rats in the area and with the implementation of conservation measures, Caltrans has made a may affect, but is not likely to adversely affect determination for this species.

San Joaquin Woolly-Threads

Protocol-level botanical surveys did not identify San Joaquin woolly-threads within the project area. Caltrans does not expect San Joaquin woolly-threads to be present in the action areas based on the low habitat quality within the project area and regular vehicle disturbances. However, the project may permanently impact 0.08 acre of non-native grassland habitat for San Joaquin woolly-threads due to installation of box culverts. About 20.82 acres of non-native habitat for the San Joaquin woolly-threads may be temporarily impacted by construction. With the implementation of conservation measures, Caltrans has determined that the project may affect, but is not likely to adversely affect this species.

San Joaquin Antelope Squirrel

Potential impacts to San Joaquin antelope squirrels are based on the suitable habitat that is present within the southern 3 miles of the project. Although San Joaquin antelope squirrels have been found to occupy the project area, no direct impacts to individual San Joaquin antelope squirrels are expected to result from the proposed project. About 0.08 acre of potentially suitable habitat will be permanently impacted, and 20.82 acres of potentially suitable habitat will be temporarily impacted by construction.

Fresno Kangaroo Rat

No impacts to individual Fresno kangaroo rats are expected due to the negative trapping results, the presence of several Heerman's kangaroo rats in the action area and the locations of documented occurrences of this species. Caltrans does not consider the action area to contain suitable habitat for this species. With the implementation of avoidance and minimization measures Caltrans has made a no effect determination for this species.

Burrowing Owl

The project would have no direct or indirect impacts on individual burrowing owls during construction. No direct or indirect effects are anticipated after construction is complete because the project would not increase the number of travel lanes, vehicle-miles-traveled, or the speed of traffic on Interstate 5 over baseline conditions. With implementation of avoidance and minimization measures, Caltrans has made a determination of no adverse impact for this species.

California Glossy Snake

California glossy snakes are unlikely to be in the project impact area, and the project is not anticipated to have any direct or indirect impacts on individuals of the species. No direct or indirect effects are anticipated after construction is

complete, because the project would not increase the number of travel lanes, vehicle-miles-traveled, or the speed of traffic on Interstate 5 over baseline conditions. However, the project would permanently impact 0.08 acre of potentially suitable California glossy snake habitat and temporarily impact approximately 20.82 acres of potentially suitable California glossy snake habitat within the right-of-way. With implementation of conservation measures, Caltrans has made a determination of no adverse impact for this species.

San Joaquin Coachwhip

Caltrans does not expect this species to be impacted by construction activities and no individual animals are anticipated to be harmed. No direct or indirect effects are anticipated after construction is complete, because the project would not increase the number of travel lanes, vehicle-miles-traveled, or the speed of traffic on Interstate 5 over baseline conditions. However, the project would permanently impact 0.08 acre of habitat and temporarily impact approximately 20.82 acres of potential habitat within the right-of-way. With implementation of conservation measures, Caltrans has made a determination of no adverse impact for this species.

Coast Horned Lizard

No impacts are anticipated to occur to individual coast horned lizards. No direct or indirect effects are anticipated after construction is complete, because the project would not increase the number of travel lanes, vehicle-miles-traveled, or the speed of traffic on Interstate 5 over baseline conditions. However, approximately 0.08 acre of potentially suitable habitat will be permanently impacted, and 20.82 acres of potentially suitable habitat will be temporarily impacted during construction. With implementation of conservation measures, Caltrans has made a determination of no adverse impact for this species.

Tulare Grasshopper Mouse

No direct impacts to individual Tulare grasshopper mice are expected to result from the proposed project. However, approximately 0.08 acre of potentially suitable habitat will be permanently impacted, and 20.82 acres of potentially suitable habitat will be temporarily impacted by construction. With implementation of conservation measures, Caltrans has made a determination of no adverse impact for this species.

Swainson's Hawk

Although no impacts are expected to occur to individual Swainson's hawks and they have not been found to occupy the action area, about 0.08 acre of potentially suitable foraging habitat will be permanently impacted, and 20.82 acres of potentially suitable foraging habitat will be temporarily impacted during construction of the project. With implementation of conservation

measures Caltrans, has made a determination of no adverse impact for this species.

Migratory Birds

The project has a low likelihood of resulting in the death or injury of migratory birds or their active nests, eggs, or young with implementation of avoidance and minimization measures. Effects would be limited in duration, occurring only during construction. There will be no permanent effects to potential nesting areas by the activities of this maintenance project. However, the project could have a minor effect on nesting birds.

Panoche Pepper-Grass and Showy Golden Madia

No permanent impacts are anticipated. However up to 0.08 acre of non-native grassland may be permanently impacted, and 20.82 acres of non-native habitat may be temporarily impacted by construction.

Other Waters

Of the 0.800 acre of potential Waters of the U.S./State which have been delineated within the action area, only 0.49 acre will be impacted by construction activity. Of those 0.49 acre, approximately 0.15 acre will be permanently impacted.

Caltrans and the contractor would follow applicable Best Management Practices during construction. Additional measures would be implemented as required by the permit conditions of Sections 401 and 404 of the Clean Water Act and a 1600 Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance and minimization measures for all species listed above include but are not limited to:

- Worker environmental awareness training.
- If staging or storage areas are required off pavement, they will be approved by a project biologist or will require proof of environmental compliance.
- Prohibit staging in the outside shoulder of Caltrans right-of-way.
- Minimizing vegetation removal to the maximum extent possible to complete project.
- Revegetating areas subject to temporary disturbance.
- Implementation of Caltrans standard special provisions.

- Caltrans best management practices.
- An Environmentally Sensitive Area will be established to avoid impacts to any sensitive areas within action area identified during field surveys, and any species during construction. Any Environmentally Sensitive Areas will be marked with temporary orange mesh fencing and/or stakes with flagging and will be installed prior to the start of construction if the sensitive resources are identified early. A detailed drawing of Environmentally Sensitive Area locations will be included in the design plans of the construction contract for sensitive resources that have already been identified. The Environmentally Sensitive Area locations will be maintained by the contractor during construction and will be removed upon completion of the project. Additional fencing may be installed if sensitive resources are discovered during construction.

Blunt-Nosed Leopard Lizard

Caltrans would perform a preconstruction survey for blunt-nosed leopard lizards no more than one year prior to start of construction. This protocol-level survey will be performed by a qualified biologist on the southern part of the action area.

San Joaquin Kit Fox

The following avoidance and minimization measures are recommended for San Joaquin kit foxes:

- Perform a preconstruction survey.
- Provide an on-call biologist for this species.
- Monitor San Joaquin kit fox activity during night work.
- Implement den avoidance measures if dens are identified during preconstruction surveys or construction.
- Implement standard recommendations for San Joaquin kit foxes.
- Inspect construction pipes, culverts, or similar structures with a diameter of 4 inches or greater.
- Limit construction vehicle and equipment speeds.
- Confine lighting to areas within the construction footprint.
- Dispose of trash properly.
- Prohibit firearms and prohibit pets on the project site, except law enforcement animals.

- Prohibit the use of rodenticides, herbicides and pest and rodent traps on project site during construction.
- Provide escape ramps for any trenches more than 2 feet deep.

Giant Kangaroo Rat

The following avoidance and minimization measures are recommended for giant kangaroo rats:

- Perform a preconstruction survey for giant kangaroo rats.
- Have a qualified biologist present on site to monitor culvert work taking place at post miles 45.0 and 45.09.
- Flag and avoid potential giant kangaroo rat precincts.
- If giant kangaroo rats are found on site and cannot be avoided formal consultation with the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service will be required.

San Joaquin Woolly-Threads

Performing preconstruction surveys for special-status plants and implementing avoidance and/or minimization measures during construction would ensure that effects on San Joaquin woolly-threads are negligible. If a plant is found within the action area, it will be flagged. The plant will be transplanted, and the topsoil of the plant will be kept safe in a location near the worksite and returned after construction. The boundaries and abundance of any populations will be accurately mapped. If the plant cannot be avoided formal consultation with U.S. Fish and Wildlife Service will be required.

California Glossy Snake, San Joaquin Coachwhip, and Coast Horned Lizard

Caltrans would perform a preconstruction survey for sensitive reptiles and amphibians.

Swainson's Hawk

The following avoidance and minimization measures are recommended to avoid adversely affecting Swainson's hawks:

- Scheduling construction to avoid sensitive breeding periods, if feasible.
- Performing preconstruction surveys for nesting birds if construction will occur during the breeding season.

In addition, if at the time any Swainson's hawks are found to be nesting near the action area, a 600-foot "no-work" buffer would be placed around the nest to protect young until they have fledged and a half mile "no-work" buffer will be in place if the nest is near a California Department of Fish and Wildlife

1600 jurisdictional area. In addition, a qualified biologist may be present to monitor construction activities in close proximity to the nest. Furthermore, all areas disturbed by project construction will be restored to pre-project conditions. These measures are designed to protect this species and any potentially suitable habitat in the project area from adverse impacts.

San Joaquin Antelope Squirrel

Avoidance and minimization efforts include performing pre-construction surveys for San Joaquin antelope squirrels. Measures to completely avoid take for the San Joaquin antelope squirrel will consist of avoiding small mammal burrows by 50 feet. If the burrows cannot be avoided by 50 feet, then exclusion fencing will be placed around the burrows. In addition, during construction, a biologist will be present with the authority to stop work if a San Joaquin antelope squirrel is discovered in the work area. A contingency plan to stop work and seek incidental take coverage if avoidance is not possible will be implemented.

Mitigation measures for this project may include the purchase of conservation bank credits for San Joaquin antelope squirrel if a 2081 Incidental Take Permit is required. Caltrans has informally reserved credits with a mitigation bank. The unit cost for bank credits is pending negotiation.

Migratory Birds

Construction would be scheduled to avoid sensitive breeding periods if feasible. Preconstruction surveys would be performed for nesting birds if construction will occur during the breeding season. A qualified biologist will knock down all swallow nests in box culverts receiving work and bird exclusion netting will be installed prior the beginning of the avian nesting season. An environmentally sensitive area will be established to avoid impacts to any sensitive areas within the action area identified during field surveys, and any species of migratory nesting birds during construction. Any environmentally sensitive areas will be marked with temporary orange mesh fencing and/or stakes with flagging and will be installed prior to the start of construction. A detailed drawing of environmentally sensitive area locations will be included in the design plans of the construction contract. The environmentally sensitive area locations will be maintained by the contractor during construction and will be removed upon completion of the project.

Panoche Pepper-Grass and Showy Golden Madia

Best management practices would be implemented during construction including conducting a worker environmental training program. No compensatory mitigation is proposed.

Other Waters

Project vehicles and equipment will only be allowed to enter those areas deemed necessary for the completion of the project to avoid unnecessary impacts.

All other portions of the channels will be protected through the installation of environmentally sensitive area fencing, or other form of demarcation. The following additional avoidance and minimization measures will also be employed:

- A stormwater pollution prevention plan will be prepared specifically for this project.
- Best Management Practices specifically protecting water quality will be implemented and will include the following:
 1. Installation of measures to control erosion during construction and after construction is completed.
 2. Installation of measures to ensure all project debris is removed from the channel once construction is completed.
 3. Installation of measures in the case of a hazardous materials spill. At a minimum, a spill kit shall be kept on-site and an Emergency Response Plan shall be developed and implemented if a spill occurs.

The construction contract will include standard specifications outlining additional Best Management Practices.

- In areas where features will be protected with an environmental sensitive area fencing, the locations of the fencing will be identified on the project mapping and included in the Plans, Specifications, and Estimates section of the construction contract so they can either be flagged or fenced on-site prior to the start of construction. A qualified biologist will be present for the environmental sensitive area fencing installation.
- Any areas that are temporarily disturbed or impacted by construction of the project, will be restored to pre-project conditions after construction is complete.
- Furthermore, work in areas determined to have aquatic resources will require compensatory mitigation through the purchase of credits.

2.1.5 Cultural Resources

Considering the information included in the Section 106 Compliance-Screened Undertaking for the Panoche Capital Maintenance Project in

western Fresno County dated October 17, 2019, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
a) Cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5?	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

2.1.6 Energy

Construction activities would result in a temporary increase in energy consumption, but not significantly. The increase may be offset over time by the improvements proposed in the project area. The project is a pavement rehabilitation and drainage improvement project that would not increase capacity. Construction of the project may result in improved highway operations, smoother pavement surfaces, reduced emissions, and reduced energy consumption. Furthermore, the project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Considering the qualitative discussion provided and guidance from the Caltrans Standard Environmental Reference—Chapter 13-Energy, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Energy
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

2.1.7 Geology and Soils

The final environmental document (Initial Study with Mitigated Negative Declaration) has been updated from the draft environmental document (Initial

Study with Proposed Mitigated Negative Declaration) to reflect the following changes. Based on the Addendum to Paleontological Evaluation Report dated June 25, 2020, mitigation measures for field activities have been modified to include additional spot checking and continuous monitoring of culvert replacement within the Tulare Formation.

Considering the information included in the California Geological Survey webpage, *Faulting in California*, the California Department of Conservation Map Data Viewer webpage, Paleontological Identification Report dated April 2, 2019, Addendum to Paleontological Evaluation Report dated June 25, 2020, and the Preliminary Paleontological Evaluation Report and Preliminary Mitigation Measures dated July 2, 2019 the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: ii) Strong seismic ground shaking?	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iii) Seismic-related ground failure, including liquefaction?	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No Impact

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
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
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	No Impact
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
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less Than Significant Impact with Mitigation

Affected Environment

The following section is based on the Panoche Capital Preventative Maintenance Paleontological Identification Report, which was prepared in April 2, 2019 and the related Panoche Capital Preventative Maintenance Preliminary Paleontological Evaluation Report and Preliminary Mitigation Measures, which was prepared in July 2, 2019. The latter report was prepared because of the presence of a known paleontological resource that could be impacted by the project.

Located in western Fresno County within the relatively flat and low-lying Great Valley geomorphic province of California, the project is to the east of the Ciervo Hills and Monocline Ridge; the southern portion of the project is partially located on the eastern flank of these mountain ranges.

Sediments underlying the project consist of Quaternary/Holocene surficial deposits, Quaternary/Late Pleistocene dissected alluvial deposits, and Pleistocene Tulare Formation. A search for paleontological records was completed with online databases and in published materials. The California State University, Fresno Paleontological Sensitivity Mapping Project database lists the paleontological sensitivity of the project area as “high”. The database identifies the high sensitivity sediments as the Pleistocene Tulare Formation. The southern part of the project is located on Tulare Formation sediments.

Based on Caltrans guidelines, the study area has been assigned a “High Potential (High Sensitivity)” to contain paleontological resources of scientific importance. Geologic deposits of similar age and in similar formations elsewhere in the San Joaquin Valley have yielded the fossil remains of Pleistocene vertebrates, invertebrates, and plants.

Environmental Consequences

The Tulare Formation, which underlies the build alternative, would be impacted because of ground disturbance during construction, excavation, and grading for the installation of culverts at the southern end of the project. Excavation will extend to depths greater than three feet below the existing ground surface.

Avoidance, Minimization, and/or Mitigation Measures

Implementation of the following measures would reduce and/or eliminate potential project-related impacts on paleontological resources. The measures would help avoid destruction of, and mitigate other potential effects on, scientifically significant paleontological resources that may be present in Pleistocene Tulare Formation of the study area.

- A Special Provision for paleontology mitigation will be included in the construction contract special provisions section to advise the construction contractor of the requirement to cooperate with the paleontological salvage. The proposed project shall retain a qualified professional paleontologist to prepare and implement a final Paleontological Mitigation Plan prior to construction. If the qualified professional paleontologist is not also a licensed Professional Geologist in the State of California, then a licensed Professional Geologist will also be retained to review and approve the Paleontological Mitigation Plan prior to construction. The Final Paleontological Mitigation Plan will list the proposed staff and their professional qualifications.
- The professional paleontologist shall attend a task order meeting, site visit to review task order requirements, review plans, maps, initial assessment reports, mitigation requirements herein, review site geology and paleontological sensitivity, prepare a mitigation work plan, and prepare Code of Safe Practices in accordance with Title 8 Construction Safety Orders (<http://www.dir.ca.gov/title8/sub4.html>).
- The professional paleontologist shall perform scheduling and coordination, and supervision for paleontological monitors and any salvaging work including bulk sediment screening, perform specimen preparation and identification which involves rigorous cleaning (high air-pressure, brushing, scraping) of specimens including hiring of any paleontological specialists.
- The professional paleontologist may designate a paleontological monitor(s) to be present during qualifying earthmoving activities. Full time

monitoring and spot checking is recommended during any earthmoving activities/excavations in the Tulare Formation.

- Spot checking is required between post miles 37.2 and 42.5 and post mile 42.47, but excluding between post miles 38.3 and 38.5.: It is comprised of less than an 8-hour shift and non-continuous field inspections of cuts, excavated soil, and graded surfaces, and screening of exposed sediment for fossilized macroscopic and microscopic material.
- Continuous monitoring of culvert replacement is required between post miles 38.3 and 38.5 and post mile 42.47, comprising of continuous field inspections of cuts, excavated soils and graded surfaces, and screening of exposed sediment for fossilized macroscopic and microscopic material.
- The full-time paleontological monitor shall have at least 5 years of paleontological resources construction monitoring experience. The monitor is required by project mitigation commitments to be present during all excavation. The monitor will collect geospatial locality data and process bulk sediment samples, review geological and paleontological reports on local area to gain better understanding of the types of lithologies and fossils that may be present, log stratigraphy during excavation, prepare field maps, complete report forms and field notes, and take daily photographs of construction work as well as excavations.
- The project paleontologist shall meet with the Resident Engineer and construction contractor at a preconstruction meeting to develop an agreed upon communication plan and provide for worker safety. All project personnel shall receive a paleontological awareness training session prior to commencement of work. Specific training requirements are presented below as they apply to project personnel. Paleontological training for construction crews should be given by the project paleontologist. Before the start of construction activities, construction personnel involved with earthmoving activities shall be informed of the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction activities, and proper notification procedures should fossils be encountered. This worker training may be included with construction worker education or during environmental training.
- If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work within a 60-foot radius of the find, and immediately notify the Resident Engineer.
- Macro fossils (large enough to view with the unaided eye) could include tusks and other vertebrate remains. Some of these resources may be fragile and require hardening before moving, and may require encasing within a plaster jacket for later preparation and conservation in a laboratory. A full skeleton will require moving either as a whole or in blocks

for eventual preparation. The paleontological monitor in coordination with the Resident Engineer may temporarily halt or redirect the excavation equipment away from the fossils to be salvaged.

- Recovered specimens shall be prepared for identification (not exhibition) and stabilized. Sedimentary matrix with microfossils is screened washed and sorted to identify the contained fossils. Removal of excess matrix during the preparation process reduces storage space.
- Specimens shall be identified by competent qualified specialists to a point of maximum specificity. Ideally, identification is of individual specimens to element, genus, and species. Batch identification and batch numbering (for example, “mammals, 75 specimens”) shall be avoided.
- A Paleontological Mitigation Report shall be prepared following completion of project earthmoving activities. The Paleontological Mitigation Report shall include a summary of the field and laboratory methods, site geology and stratigraphy, faunal list, and a brief statement of the significance and relationship of the site to similar fossil localities.

2.1.8 Greenhouse Gas Emissions

Considering the information included in the Air Quality Memo dated March 25, 2019, and Climate Change report dated May 20, 2020 the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Greenhouse Gas Emissions
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than significant impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	No Impact

Affected Environment

The project sits along State Route 5 in Fresno County. Near the project limits the land use next to State Route 5 is primarily agriculture. State route 5 within the project limits is a four-lane divided freeway and is the main transportation route to and through the area for both passenger and commercial vehicles.

The purpose of the project is to extend the life of existing pavement on the northbound and southbound lanes on Interstate 5 beginning 1.9 miles north of

Three Rocks Road undercrossing to 0.2 mile south of Panoche Road overcrossing.

The 2018 Fresno Regional Transportation Plan by Fresno Council of Governments guides transportation in the project area. Chapter 3 of the plan (Sustainable Communities Strategy) discusses the emission reduction strategy for the region. The Sustainable Communities Strategy strives to reduce air emissions from passenger vehicle and light-duty truck travel by investing in public transit systems, managing transportation demand, making transportation system improvements, and continuing to expand and improve bike and pedestrian facilities.

Environmental Consequences

Greenhouse gas emissions impacts of non-capacity increasing projects like the Panoche Capital Preventative Maintenance project are considered less than significant under CEQA because there would be no increase in operational emissions.

However, construction equipment and material process and delivery may generate short-term greenhouse gas emissions during construction. Carbon dioxide emissions generated from construction equipment were estimated using the Caltrans Construction Emissions Tool. The estimated emissions would be eight tons of carbon dioxide per calendar year over 275 working days.

While some construction greenhouse gas emissions would be unavoidable, implementing standard conditions or Best Management Practices designed to reduce or eliminate emissions as part of the project would reduce impacts to less than significant.

Avoidance, Minimization, and/or Mitigation Measures

Measures to reduce project-level greenhouse gas emissions may 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 Air Resources Board emission reduction regulations.
- 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 will also help reduce greenhouse gas emissions.

- Alternative fuels such as renewable diesel should be used for construction equipment.
- Idling is limited to 5 minutes for delivery and dump trucks and other diesel-powered equipment (with some exceptions)
- Reduce construction waste. For example, re-use or recycle construction and demolition waste (reduces consumption of raw materials, reducing landfill waste, and encourages cost savings).
- Reduce construction water consumption of potable water. Encourage recycled water for construction.
- Encourage Improved fuel efficiency from construction equipment (examples provided below)
 - Maintain equipment in proper working condition
 - Right size equipment for the job
 - Use equipment with new technologies
- Construction Environmental Training: Provide construction personnel with the knowledge to identify environmental issues and best practice methods to minimize impacts to the human and natural environment. Supplement existing training with information regarding methods to reduce greenhouse gas emissions related to construction
<https://www.sustainablehighways.org/122/project-development.html>
- Maximize use of recycled materials (tire rubber for example).
- Earthwork Balance Reduce the need for transport of earthen materials by balancing cut and fill quantities.
- Elimination of lighting needs by replacing with ultra-reflective sign materials which are illuminated by headlights.
- Construction scheduling: Lengthen Lane closure duration to reduce necessary mobilization efforts. (Couple with public information effort for congested areas.)
- Measures listed in the applicable Environmental Impact Report prepared for the Regional Transportation Plan/Sustainable Communities Strategy that have been identified to reduce greenhouse gas emissions or to reduce vehicle-miles-traveled.
- Include mulch application in projects around new and existing plants to retain soil moisture.

- Alternatives that match existing grade as much as possible are preferred; reduces earthwork.
- Alternatives should be balanced against competing environmental constraints. (For example, longer alignment may have a reduced overall impact.)
- Implement intelligent transportation systems and Transportation Demand Management elements to smooth traffic flow and increase system efficiency.
- Use corrosion-resistant materials.
- Improve Drainage.
- Improve drainage systems to adapt to localized flooding risks.

2.1.9 Hazards and Hazardous Materials

Considering the information included in the Preliminary Site Investigation dated December 13, 2019, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No Impact
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
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
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

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
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
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

2.1.10 Hydrology and Water Quality

Considering the information included in the Water Compliance Memorandum dated April 8, 2019, and the Location Hydraulic Study dated January 8, 2020 the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	No Impact
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
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

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	No Impact
(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
(iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

2.1.11 Land Use and Planning

The project will not physically divide an established community and does not conflict with the Fresno County General Plan or any other policy or regulation meant to avoid or mitigate an environmental effect. Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Land Use and Planning
a) Physically divide an established community?	No Impact
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

2.1.12 Mineral Resources

In Fresno County, precious minerals and building material aggregate resources are abundant according to the Fresno County General Plan. These resources would not be impacted as work is limited to rehabilitating existing pavement and upgrading an existing transportation infrastructure. Furthermore, this will not result in loss of mineral resources of value to the region and residents of the state. Considering the information included in the Fresno County General Plan, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Mineral Resources
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
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

2.1.13 Noise

Considering the information included in the Noise Compliance Study dated April 17, 2020, the following significance determinations have been made:

Question—Would the project result in:	CEQA Significance Determinations for Noise
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
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact

Question—Would the project result in:	CEQA Significance Determinations for Noise
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

2.1.14 Population and Housing

The project will not directly or indirectly induce substantial unplanned population growth in the area or displace a substantial number of people or housing that would require replacement housing elsewhere. Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Population and Housing
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
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

2.1.15 Public Services

Considering the project would not trigger the need for new or modified public services, the following significance determinations have been made:

Question:	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
Police protection?	No Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

2.1.16 Recreation

No park or recreational facility is within proximity of the project area. Furthermore, the project does not include recreational facilities, or require the expansion or construction of recreational facilities. Considering this information, the following significance determinations have been made:

Question—Would the project:	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
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

2.1.17 Transportation

The project would not conflict with any transportation program, plan, ordinance or policy and will have no impact on vehicle-miles-traveled. The project would not increase hazards due to a geometric design feature or incompatible uses and would not result in inadequate emergency access. Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Transportation
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No Impact
c) Substantially increase hazards due to a geometric design feature (for example, sharp curves or dangerous intersections) or incompatible uses (for example, farm equipment)?	No Impact
d) Result in inadequate emergency access?	No Impact

2.1.18 Tribal Cultural Resources

Considering the information included in the Section 106 Compliance Memo dated October 17, 2019, the following significance determinations have been made.

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:

Question:	CEQA Significance Determinations for Tribal Cultural Resources
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
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

2.1.19 Utilities and Service Systems

Considering the project will not create a demand for new or expanded utilities and service systems and have no impact on a utility or service system supply, nor generate solid waste in excess as described in “d” below, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
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
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
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
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
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

2.1.20 Wildfire

The project is not within or near areas or lands classified as very high fire hazard severity zones. Therefore, the following significance determinations have been made.

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

Question—Would the project:	CEQA Significance Determinations for Wildfire
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
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
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

Question—Would the project:	CEQA Significance Determinations for Wildfire
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

2.1.21 Mandatory Findings of Significance

Question:	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?	No Impact
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
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	No Impact

Appendix A Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
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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 handwritten signature in blue ink, appearing to read 'Toks Omishakin'.

Toks Omishakin
Director

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

Appendix B Comment Letters and Responses

This appendix contains the comments received during the public review period between July 15, 2020 and August 14, 2020 for the draft environmental document. Caltrans received one letter from the California Department of Fish and Wildlife and no comments from the general public were received.

A Caltrans response, shown within double slashes (two slashes start the Caltrans response and two slashes come at the end the response), follows each comment within the comment letters in this section. Related information is incorporated, where appropriate, into the body of this final environmental document.

Note: The comment letters are stated verbatim, with acronyms, abbreviations and any original grammatical or typographical errors. Be aware that some passages may also include internet paths (addresses) that contain a double slash; do not confuse that structure with the Caltrans responses that are set apart by double slashes.

Comment Letter A: California Department of Fish and Wildlife

August 12, 2020

Som Phongsavanh
California Department of Transportation, District 6
855 M street, Suite 200
Fresno, California 93721

Subject: Panoche Capital Preventative Maintenance Project (Project) Initial Study with proposed Mitigated Negative Declaration State Clearinghouse No. 2020070309

Dear Ms. Phongsavanh:

The California Department of Fish and Wildlife (CDFW) received a proposed Mitigated Negative Declaration (MND) and its supporting Initial Study (IS) prepared by the California Department of Transportation (Caltrans) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish and G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during

public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects

that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

PROJECT DESCRIPTION SUMMARY

Proponent: Caltrans

Objective: Caltrans proposes to resurface and rehabilitate an almost 12-mile segment of State Route 5 between its intersection with Kamm Avenue on the south and Panoche Road on the north (Project). All Project-related activities will occur within the existing Caltrans right-of-way either within the paved travel lanes and on-ramps/off-ramps, the unpaved but compacted and engineered shoulder backing, or within the ruderal areas beyond the travel lanes and shoulder backing. The rehabilitation work will include cold-planing and re-pavement, the installation of rumble strips, upgrading guardrails, culvert and dike work, and road sign upgrades.

Location: The almost 12-mile segment of State Route 5 (SR 5) which will be resurfaced and rehabilitated exists between post mile 37.20 and post mile 48.80, and is generally located in western Fresno County.

Timeframe: Unspecified.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments to assist Caltrans in adequately identifying and sufficiently reducing to less-than-significant the potentially significant, direct and indirect Project-related impacts to fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

Currently, the proposed MND indicates that the Project-related impacts to biological resources would be less-than-significant with implementation of specific avoidance and minimization efforts. However, as currently drafted, it is unclear whether some of the species specific measures proposed in the IS sufficiently reduce to less-than-significant the potential Project-related impacts to those species.

In particular, Caltrans concludes there will be less-than-significant effects to the State threatened Swainson's hawk (*Buteo swainsoni*) with implementation of proposed avoidance and minimization measures. CDFW does not agree with this conclusion and herein suggests revisions to the proposed avoidance

of active SWHA nests in the vicinity of the Project, thereby reducing to less-than-significant Project-related impacts to the species. CDFW also recommends a path forward for Caltrans in the event avoidance of SWHA is not feasible.

I. Environmental Setting and Related Impact

Would the Project 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 CDFW or the United States Fish and Wildlife Service (USFWS)?

COMMENT 1: Swainson's Hawk (SWHA)

Issue: SWHA are known to have nested in the vicinity of the Project. The Project activities will involve varying degrees of ground disturbance within the right-of-way and while CDFW agrees that SWHAs in the area may have become habituated to vehicular traffic along the right-of-way and farming activities on the adjoining cropland, CDFW considers it possible that the Project-related activities would represent a novel stimulus which could result in nest abandonment if they occur within ½-mile of an active SWHA nest. This nest abandonment would represent a significant impact to SWHA as well as potentially resulting in take, as it is defined in section 86 of Fish and Game Code.

Specific Impacts: In the IS, Caltrans indicates it will maintain a 600-foot no disturbance buffer from active SWHA nests during Project implementation. However, CDFW considers this 600-foot no disturbance buffer insufficient to avoid take of SWHA. Therefore, CDFW does not agree that the proposed 600-foot no-disturbance buffer reduces to less-than-significant the potential Project-related impacts to the species.

Evidence impact would be significant: SWHA exhibit high nest-site fidelity year after year and lack of suitable nesting habitat in the San Joaquin Valley limits their local distribution and abundance (CDFW 2016). Adoption of the MND as it is written will allow activities that will involve ground disturbance, grading, and excavation employing heavy equipment and work crews within 600 feet of active SWHA nests. These activities could negatively affect these nests and have the potential to result in nest abandonment, significantly affecting nesting SWHA.

Recommended Potentially Feasible Avoidance and Mitigation

Measure(s) Because the Project-related activities represent novel stimuli and threaten nest abandonment, CDFW recommends Caltrans propose a larger no-disturbance buffer in order to reduce to less-than-significant the Project-related impacts to the species. CDFW recommends the following edits to the

SWHA avoidance and minimization measures section of the IS. Further, CDFW recommends these revised measures be made conditions of Project approval.

Recommended Edits to Avoidance and Minimization Measures No. 1 for SWHA on page 15 of the IS.

Currently, under the avoidance and minimization measures section of the IS, Caltrans proposes a 600-foot no-work buffer established around active SWHA nests at and near the Project. CDFW recommends Caltrans edit this measure to include a **½-mile no-work buffer** around active SWHA nests until the young have fledged and are no longer reliant on parental care for survival. If the aforementioned edit to the existing avoidance and minimization measures are not made, and/or the aforementioned buffer is not feasible, CDFW recommends Caltrans obtain incidental take coverage under Section 2081(b) of Fish and Game Code. In summary, if the edited avoidance measure is not feasible, mitigation (take authorization) would be required to reduce to less-than- significant the unavoidable Project-related impacts to SWHA.

//Caltrans Response to Comment 1:

Caltrans does not prescribe to established thresholds such as a 1/2-mile buffer since Swainson's hawk have varying tolerances for human activity. Analysis of surrounding land use, typical background noise and baseline activity, as well as the level of anticipated construction activity near the nest is used to predict how a Swainson's hawk nesting pair may respond to construction activities. Tolerance of novel activity is generally higher for locations with heavy traffic conditions, and other baseline activities which produce movement, noise, and light. Based on the California Natural Diversity Database, and observations in the field, there aren't any known nests within 10 miles of the proposed project. Additionally, suitable nesting substrate is limited within the proposed project limits and these areas are surrounded by agricultural land and commercial areas where there is human activity and foot traffic. The orchards could provide suitable nesting substrate if no other options are available, but they would also be subject to routine agricultural activities which would include foot and/or vehicular traffic. Caltrans has successfully implemented Swainson's hawk avoidance and minimization measures which include buffers, seasonal work windows, monitoring, attenuation, and stopping construction. Since there are no known Swainson's hawk nests within 10 miles of the project, and avoidance and minimization measures would be implemented to avoid take, Caltrans is not proposing to obtain a 2081 permit.//

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be

used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDDB. The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

//Caltrans Response to ENVIRONMENTAL DATA:

A California Native Species Field Survey Form was submitted to CNDDDB on June 25, 2019 by Phillip Wasz of ECORP Consulting.//

FILING FEES

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

//Caltrans Response to FILING FEES:

Caltrans upon filing a Notice of Determination for this project will pay CDFW a filing fee of \$2,406.75.//

CDFW appreciates the opportunity to comment on the Project to assist Caltrans in identifying and avoiding the Project's impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). If you have any questions, please contact Mr. Steven Hulbert, Senior Environmental Scientist (Specialist), at the address provided on this letterhead, or by electronic mail at steven.hulbert@wildlife.ca.gov.

Sincerely,

Julie A. Vance Regional Manager

Attachment 1: Recommended Mitigation and Monitoring Reporting

Program cc: United States Fish and Wildlife Service
2800 Cottage Way, Suite W-2605
Sacramento, California 95825

Literature Cited

CDFW. 2016. Five Year Status Review for Swainson's Hawk (*Buteo swainsoni*). California Department of Fish and Wildlife. April 11, 2016.

Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE RECOMMENDED
MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP)**

PROJECT: Panoche Capital Preventative Maintenance Project

SCH No.: 2020070309

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	(no data)
Mitigation Measure 1: SWHA Avoidance	(no data)
Mitigation Measure 2: SWHA Take Authorization (if avoidance is not feasible)	(no data)

Technical Studies Bound Separately (Volume 2)

Air Quality Memo: March 25, 2019

Climate Change Report: May 20, 2020

Questionnaire to Determine Visual Impact Assessment Level: May 20, 2020

Noise Compliance Study: April 17, 2020

Water Compliance Memo: April 8, 2019

Biological Assessment: March 9, 2020

Natural Environment Study: May 20, 2020

Location Hydraulic Study: January 8, 2020

Section 106 Compliance Memo: October 17, 2019

Preliminary Site Investigation: December 13, 2019

Paleontological Identification Report: April 2, 2019

Preliminary Paleontological Evaluation Report and Preliminary Mitigation Measures: July 2, 2019

Addendum to Paleontological Evaluation Report: June 25, 2020

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to:

Som Phongsavanh, Senior Environmental Planner
Central Region Environmental, California Department of Transportation
855 M Street, Suite 200, Fresno, CA 93721

Or send your request via email to: som.phongsavanh@dot.ca.gov or call 559-445-6447

Please provide the following information in your request:

Project title

General location information

District number-county code-route-post mile

Project ID number