

Loma Rica Road to Spring Valley Road Widening and Rehabilitation Project

Marysville, CA
03-YUB-20-PM 8.0/10.2
EA 2F320, Project ID# 0300020594

Initial Study

with Proposed Mitigated Negative Declaration



Prepared by the
State of California Department of Transportation

March 2016



General Information About This Document

What's in this document?

The California Department of Transportation (Caltrans), as California Environmental Quality Act (CEQA) lead agency, has prepared this Initial Study (IS) to examine the potential impacts associated with the proposed project located in Yuba County, California. The document will present any potential environmental impacts related to the project and illustrate how to avoid, minimize and/or possibly mitigate those impacts.

What should you do?

This document is provided as a means to understand the proposed project and its potential effects on the surrounding area.

- Read through this document to understand what is planned and contact Caltrans with any possible concerns you might have. We would like to hear your thoughts. Hard copies of this document can be found at the:
- Yuba County Library, 303 Second Street, Marysville, CA 95901
- This document is also available electronically at
<http://www.dot.ca.gov/dist3/departments/envinternet/yuba.htm>
- Submit Comments via post mail service to the following address:
Attn: Thaleena Bhattal
California Department of Transportation, Environmental Planning
703 B Street
Marysville, CA 95901
- Or you can submit comments via email to Thaleena.Bhattal@dot.ca.gov
- Please submit your comments by **April 22, 2016**

What happens next?

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

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Deanna Shoopman, Public Information Officer, (530) 741-4572, or use the California Relay Service TTY number, 1-800-735-2929.

YUB 20 Loma Rica to Spring Valley Road Widening and Rehabilitation Project

INITIAL STUDY with Proposed Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

3/7/2016
Date of Approval



John D. Webb, Chief
North Region Environmental Services, South
California Department of Transportation

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to restore, resurface and rehabilitate State Route 20 from post mile (PM) 8.0 to 10.2 in Yuba County. The project is located 0.1 miles east of Loma Rica Road to 0.2 miles west of Spring Valley Road.

Determination

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

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

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

The proposed project would have no effect on: aesthetics, air quality, cultural resources, geology and soils, hazards and hazardous materials, land use and planning, agriculture and forest resources, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

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

John D. Webb, Chief
North Region Environmental Services, South
California Department of Transportation

Date

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Chapter 1 Proposed Project

Project Title

Loma Rica Road to Spring Valley Road Widening and Rehabilitation Project

Lead Agency Name, Address

California Department of Transportation
703 B. Street
Marysville, CA 95901

Project Location

This project is located in Yuba County six miles east of Marysville on State Route (SR) 20 from post mile (PM) 8.0 to 10.2. The project is located 0.1 miles east of Loma Rica Road to 0.2 miles west of Spring Valley Road.

Purpose and Need

The purpose and need for a Resurface, Restore and Rehabilitate (3R) project is to restore the facility to a state of good repair so that the roadway will be in a condition that only requires minimal maintenance expenditures by Caltrans. In a 3R project, in addition to extending the service life of the pavement structure, it will also replace and upgrade other highway appurtenances and facilities within the project limits that failing, worn out or functionally obsolete. The purpose of the project is to upgrade the roadway geometrics to current standards for a design speed of 55 miles per hour (mph) and rehabilitate the existing pavement to extend the service life of the pavement. The existing vertical alignment and shoulder widths do not meet the current design standards and the existing pavement is exhibiting signs of distress and will further deteriorate without action.

Description of Project:

- Repair locations of severe pavement failure
- Seal pavement cracks
- Overlay with Rubberized Hot Mix Asphalt (RHMA)
- Widen shoulder to eight feet
- Place Shoulder backing on both shoulders
- Install or replace Centerline Rumble Strips and use Safety Edge paving to help motorist to maintain control and reduce over-steering.
- Correct/Upgrade vertical curve to provide adequate sight distance near PM 9.7
- Raise road profile by approximately 0.5 feet to 1.0 feet from PM 8.90 to PM 9.15 to reduce potential flooding
- Minor realignment to straighten short set of reversing curves at PM 8.8/9.0

- Provide standard deceleration lane length (375 feet), storage length for queuing traffic (105 feet) and approach taper (330 feet) at left turn channelization at Kibbe Road intersection
- At Kibbe Road intersection, existing curve radius will be flattened from 1,500 feet to 1,750 feet
- Grade side slopes to 4:1 or flatter except near Kibbe Road
- Place hot mix asphalt (HMA) dike to at 2:1 side slope area to reduce erosion
- Install new Midwest Guardrail System (MGS)
- Extend, replace, and upsize culverts including the Cordua Irrigation District (CID) to increase the capacity of the drainage system
- Move/replace culverts as needed that run parallel to the route, beneath connecting driveways, and intersecting streets that are impacted by the roadway improvements
- Realign, shift, and reconstruct roadside ditches to accommodate shoulder widening
- Relocate utilities (power and telephone poles) that encroach into the Clear Recovery Zone and which are in the way of the proposed roadside ditches.
- Remove and replace existing pavement delineation
- Acquire 9 right of way parcels (approximately 5.57 acres) to widen shoulders, reconstruct new roadside ditches, and relocate utility poles

No Build

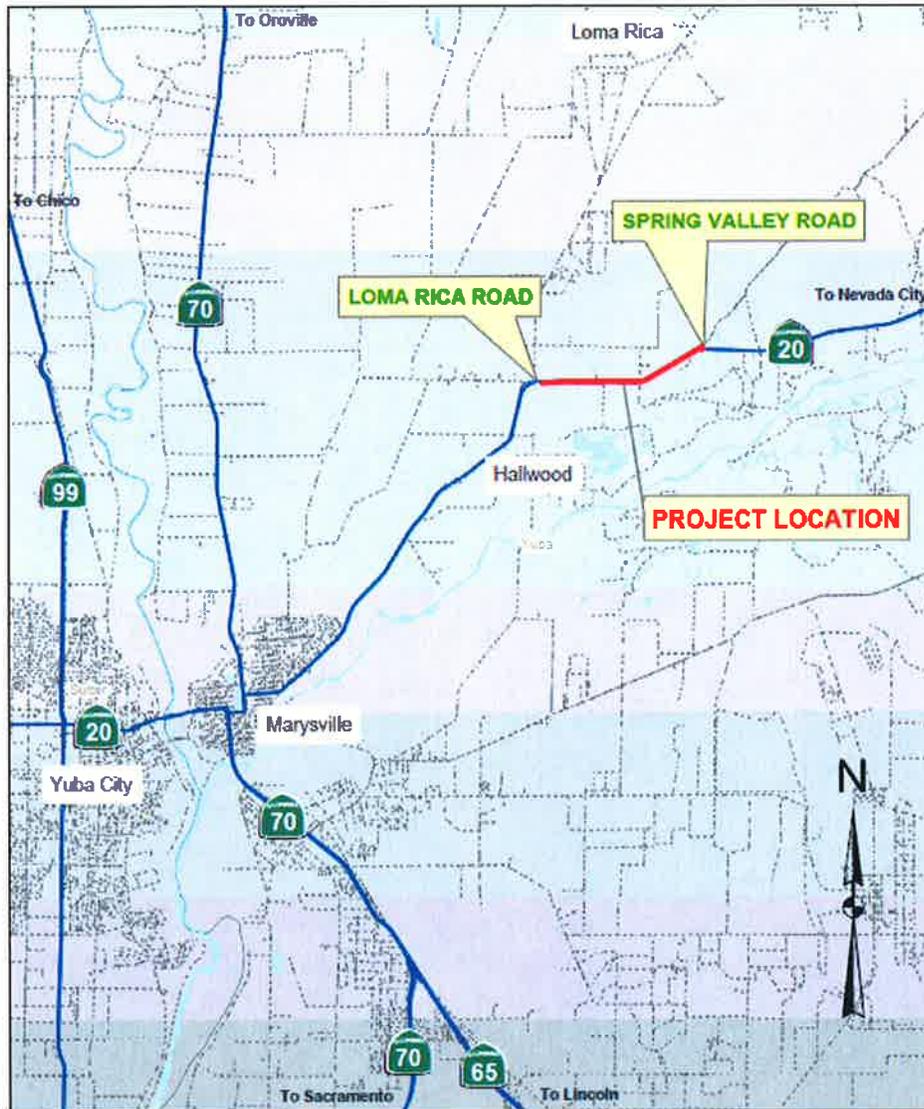
The “no build” alternative would make no improvements to the existing roadway. By not making any improvements, this alternative would not meet the purpose and need of the project.

Permits and Approval Needed

This project will require the following permits:

Agency	Permit/Approval	Status
California Department of Fish and Wildlife (CDFW)	1602 Lake and Streambed Alteration Agreement	Will be submitted during design phase, will take approximately six to nine months
U.S. Army Corps of Engineers (USACE)	404 Nationwide 14	Will be submitted during design phase, will take approximately nine to twelve months
Central Valley Regional Water Quality Control Board (CVRWQCB)	401 Water Quality Certification	Will be submitted during design phase, will take approximately nine to twelve months
U.S. Fish and Wildlife Service	Letter of Concurrence (LOC)	Required and has been completed

LOCATION MAP
Yuba 20 - Rehabilitate Pavement and Widen Shoulders
YUB-20-PM R8.0/10.2 EA 2F320K



**STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION**

**PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY**

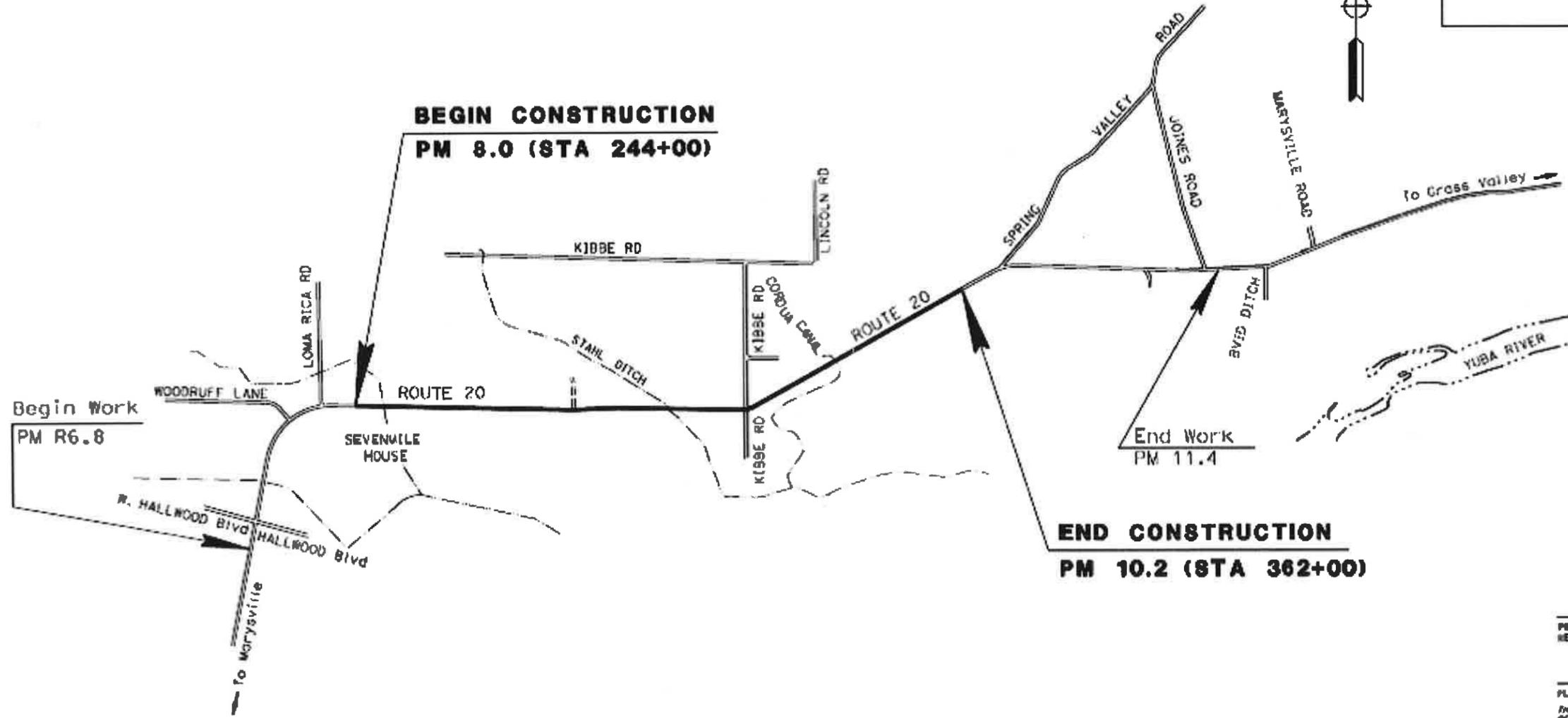
IN YUBA COUNTY

**ABOUT 6 MILES EAST OF MARYSVILLE
FROM 0.1 MILE EAST OF LOMA RICA ROAD
TO 0.2 MILE WEST OF SPRING VALLEY ROAD**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2015

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	20	0.0/10.2		

LOCATION MAP



NO SCALE

PROJECT MANAGER
MADARAJAH SUTINAHAR

DESIGN ENGINEER
FERMIN BARRERA

PROJECT ENGINEER _____ DATE _____
REGISTERED CIVIL ENGINEER



PLANS APPROVAL DATE _____
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CONTRACT No.	03-2F3204
PROJECT ID	0300020594

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

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

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

- Coastal Zone – This project does not occur in the coastal zone.
- Geology/Topography – This project will not change the geology or topography of the project area.
- Growth – This is will not increase capacity nor lead to growth.
- Paleontology – There are no Paleontological resources that will be affected by this project.
- Parks and Recreation Facilities – This project will not have an impact on nor hinder the use of parks or recreation areas.
- Pedestrian and Bicycle Facilities – This project will not have an impact on pedestrian or bicycle facilities. Pedestrian and bicycle access will be maintained throughout construction.
- Timberlands – There are no timberlands within the project area.
- Visual/Aesthetics – According to the Visual Impact Assessment survey, completed in April of 2013, this project will not have an impact on visual resources.
- Wild and Scenic Rivers – There are no rivers classified as Wild and Scenic within the project limit.

Human Environment

Farmland

Regulatory Setting

The California Environmental Quality Act (CEQA) requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other uses.

Affected Environment

According to the Yuba County General Plan, agriculture is the most extensive land use in Yuba County and the most significant component of the country's economy. This proposed project will impact 9 agriculture parcels, of these, none are under Williamson Act contracts. In addition to impacting these parcels, the project proposes to acquire an additional 10 parcels for possible anchor easements. An anchor easement is a permanent easement to accommodate a guy wire anchor to a utility pole. Approximately 278,943 acres or 68 percent of the total county area, are comprised of agricultural croplands and pasture.

Environmental Consequences

The proposed project would acquire a total of approximately 5.57 acres of farmland from 9 parcels. The zoning for these parcels consist of prime farmland, farmland of state wide importance and not prime farmland. The Natural Resources Conservation Service (NRCS) and the California Department of Conservation were consulted about the proposed project and its potential impacts to farmland.

The impacts from the proposed project will result in the loss and relocation of ditches. The project is not expected to result in an impact to an extent that prevents the landowner from continuing production. The farmland acquisition will be done by using slivers of the parcels. No take of farmland will prevent future farming.

Avoidance, Minimization, and/or Mitigation Measures

- No avoidance, minimization and/or mitigation measures are required for Farmland.

Current Parcel Size (acres)	Amount Required (acres)	Farmland Type
428.31	2.35	Prime Farmland
988.82	3.22	Not Prime Farmland

Utilities

Affected Environment

A preliminary utility analysis was done December of 2015 to identify possible utility conflicts with the proposed work.

There are PG&E power poles on the south side of Route 20 for the entirety of the project limits, and AT&T telephone poles on the North side of Route 20. Additionally, there is a buried AT&T fiber optic line on the north side of Route 20 at the base of the telephone poles. Potholing will be required to positively locate that buried line. There are also three irrigation ditch crossings of Route 20 within the project limits that are owned by Brown's Valley Irrigation District (BVID).

It is anticipated that many of the PG&E and AT&T poles will need to be relocated further away from the edge of the traveled way to ensure that they are not within the clear recovery zone for motorists. The clear recovery zone is a space that is provided for a driver to safely return back to the road if their car leaves the traveled pathway. Culvert work at two of the irrigation ditch crossings is anticipated. One culvert will be extended on both sides of the highway by approximately 5 feet. The other crossing is a double culvert and it will require the replacement and extension of both pipes. Relocation of the buried fiber optic line is not anticipated.

Environmental Consequences

The affected utilities include The PG&E overhead electric, AT&T overhead electric, and the BVID ditches. There are no expected long term impacts to utilities. Temporary impacts will be due to relocation efforts only by PG&E and AT&T. No service interruptions are expected outside of the relocations.

All work at the irrigation ditches will be performed during a three week work window when there is no water in the ditches.

Through traffic for emergency services (law enforcement, fire trucks) would be accommodated during construction.

Avoidance, Minimization, and/or Mitigation Measures

It is anticipated that the aerial utility relocations will be minor in nature and short term. Typically, the new poles are installed while the existing poles are still active. This limits the amount of time the utilities are shut off because they can be moved

immediately onto the new poles. No disruption is expected for the homeowners. The fiber optic line will be identified by potholing and will be avoided.

Physical Environment

Hazardous Waste/Materials

Regulatory Setting

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

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

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

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

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to

implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and clean up contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

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

Affected Environment

A Hazardous Waste Initial Site Assessment (ISA) was completed in March of 2011 and an updated ISA was completed in November of 2015.

Lead-contaminated soil may exist within and near our R/W due to the historical use of leaded gasoline. The areas of primary concern in relation to highway facilities are soils along routes with historically high vehicle emissions due to large traffic volumes, congestion, or stop and go situations. Since soil disturbance and relinquishment to the contractor will occur, an Aerially Deposited Lead (ADL) site investigation is required. This site investigation will determine if hazardous soils exist and what actions, if any, will need to occur during construction.

Hazardous levels of lead and chromium are known to exist in the yellow color traffic stripes. Since these traffic stripes will be grinded off along with the roadway, the levels of lead and chromium will become non-hazardous. Non-hazardous levels of lead are also known to exist in the white traffic striping.

Treated wood waste (TWW) are known to exist in the wood posts associated with the wood sign posts. These wood products are typically treated with preserving chemicals that may be hazardous (carcinogenic) and include but are not limited to arsenic, chromium, copper, creosote, and pentachlorophenol. The California Department of Toxic Substances Control (DTSC) requires that TWW either be disposed as a hazardous waste, or if not tested, the generator may presume that TWW is a hazardous waste and must be disposed in an approved treated wood waste facility.

Environmental Consequences

The disturbance and transport of soil that contains ADL has the potential to exposed workers and the public to elevated levels of lead. Lead exposure can also result from

workers coming in contact with residue resulting from the removal of traffic striping and pavement markings.

The mishandling and improper disposal of TWW has the potential to expose workers and the public to elevated levels of heavy metals and other toxic substances.

Avoidance, Minimization, and/or Mitigation Measures

Since construction of the proposed project will disturb soil, Caltrans will prepare work plans, health and safety plans, conduct site investigations, and prepare site investigation report as needed.

Materials Containing Lead and Aerially Deposited Lead

- The Contractor must implement a project specific Lead Compliance Plan prepared by a Certified Industrial Hygienist (CIH) as required by the California Occupational Safety and Health Administration (Cal/OSHA). The plan will detail the correct procedures for handling, removing, and disposing of earth materials containing lead and waste from removing traffic stripes and pavement markings.
- All materials containing lead will be handled in accordance with all applicable laws, rules, and regulations, including those of the following agencies: California Occupational Safety and Health Administration (Cal/OSHA), California Regional Water Quality Control Board (Central Valley RWQCB), California Department of Toxic Substances Control (DTSC).
- All workers, including Caltrans staff, will receive lead compliance training before beginning any work that could potentially expose them to lead containing substances.

Treated Wood Waste

- Prior to construction any workers that have the potential to come in contact with or handle treated wood waste (TWW) will be given training on the proper handling procedures and applicable laws, including procedures for identifying and segregating TWW, and proper disposal methods.
- Treated wood waste will be, properly labeled for easy identification, and stored within the project area in a secured lockable enclosure to prevent unauthorized access. The TWW will also be stored so that it is protected from precipitation,

or any other sources of water, to prevent contaminating any water that could leave the site. All TWW that leaves the site will be documented and disposed of at an approved TWW facility.

Water Quality and Storm water Runoff

Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source¹ unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCB) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE).
- The goal of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

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

¹ A point source is any discrete conveyance such as a pipe or a man-made ditch.

Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of the USACE's Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For Standard permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency's Section 404 (b)(1) Guidelines (40 CFR Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent² standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4.

State Requirements: Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This Act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., such as groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined and this definition is broader than the CWA definition of "pollutant". Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA, and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions, and then set criteria necessary to protect these uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In

² The U.S. EPA defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall."

addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollution Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). The U.S. EPA defines an MS4 as “any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that are designed or used for collecting or conveying storm water.” The SWRCB has identified Caltrans as an owner/operator of an MS4 pursuant to federal regulations. The Caltrans MS4 permit covers all Caltrans rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted. Caltrans MS4 Permit, Permit was adopted on September 19, 2012, and became effective on July 1, 2013. (Order No. 2012-011-DWQ.) The permit has three basic requirements:

1. Caltrans must comply with the requirements of the Construction General Permit (see below);
2. Caltrans must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and
3. Caltrans storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) BMPs, to the Maximum Extent Practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

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

Construction General Permit

Construction General Permit (Order No. 2009-009-DWQ), adopted by the SWRCB on September 2, 2009, became effective on July 1, 2010. The permit regulates storm water discharges from construction sites which result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least one acre must comply with the provisions of the Construction General Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop storm water pollution prevention plans; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The 2009 Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP). In accordance with Caltrans Standard Specifications, a Water Pollution Control Plan (WPCP) is necessary for projects with DSA less than one acre.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by USACE. The 401 permit certifications are

obtained from the appropriate RWQCB, dependent on the project location, and are required before USACE issues a 404 permit.

In some cases the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as Waste Discharge Requirements (WDRs) under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

Affected Environment

Based on the Water Quality Assessment (WQA) that was completed on December 4, 2015, the project lies in the Marysville Hydrologic Unit, and the “Undefined” Hydrologic Sub-Area (HAS 515.40). Furthermore, the project is in the lower Feather River watershed and the Jack Slough sub-watershed, Hydrologic Unit Code 180201590501. The principle receiving water body of the highway drainage is, Jack Slough. Surface runoff from the highway is conveyed by two drainage ditches leading northward towards Jack Slough, the Cordua Canal, and the unnamed tributary to Jack Slough.

Environmental Consequences

The project proposes to alter the highway drainage systems, including increasing the size of the gutters. This will lead to a slight change in drainage pattern because of the drainage flow changes in the gutters. Paving of the eight foot shoulder will add impervious surface area leading to an increased chance of runoff possibility. The discharge of storm water runoff from construction sites has the potential to affect water quality standards, water quality objectives and beneficial uses. Potential pollutants and sources are sediment; non-storm water (groundwater, water from cofferdams, dewatering, water diversions) discharges; from vehicle and equipment cleaning agents, fueling, and maintenance; from waste materials and materials handling and storage activities.

Avoidance, Minimization, and/or Mitigation Measures

To prevent potential pollution to receiving waters as a result of construction activities and/or operation related to this project, the following recommendations are highly advised:

- During construction, compliance with the NPDES permit requires the appropriate selection and deployment of both structural and non-structural Best Management Practices (BMPs) that achieve the performance standards of Best Available Technology economically achievable/Best Conventional Pollutant Control Technology (BAT/BCT) to reduce or eliminate storm water pollution.

- The general contractor performing the work would be responsible for preparing the approved SWPPP, constructing or implementing the BMP measures and regularly inspecting and maintaining the implementation plan.
- Temporary BMPs would be implemented during construction activities to avoid erosion and sedimentation, prevent off site contamination by construction materials, reduce the pollutants in storm water discharges through construction, reduce storm water discharges from the construction site and reduce impacts on water bodies once the project is complete.
- Where working areas encroach on live or dry streams, lakes, or wetlands, RWQCB-approved physical barriers adequate to prevent the flow or discharge of sediment into these systems will be constructed and maintained between working areas and streams, lakes and wetlands. During construction of the barriers, discharge of sediment and silt into streams will be held to a minimum. Discharge will be contained through the use RWQCB-approved measures to keep sediment from entering protected waters.
- Oily or greasy substances originating from the Contractor's operations will not be allowed to enter or be placed where they will later enter tributary waters or a live or dry stream. Asphalt concrete will not be allowed to enter tributary waters, a live or dry stream, pond, or wetland.
- Standard Special Provisions (SSP) for Construction Site Management, Water Pollution Control and Relations with the Regional Water Quality Control Board will reduce the impacts of construction activities and prevent construction site runoff from entering adjacent waterways. The project SWPPP would also require the Contractor to identify the location and storm water protection of designated staging areas and would include specific requirements for equipment fueling, maintenance and storage processes.

With the incorporation of these avoidance and minimization measures there will be less than a significant impact to water quality and storm water runoff.

Biological Environment

Wetlands and Other Waters

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to

regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the United States Environmental Protection Agency (U.S. EPA).

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

Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE's Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For Standard permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (U.S. EPA 40 Code of Federal Regulations [CFR] Part 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system waters of the U.S. (WOTUS) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

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

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCB) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development

Commission or Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see the Water Quality section for additional details.

Affected Environment

Wetlands were determined to be present at numerous locations within the project area during delineation field work conducted on May 7th and May 26th. The delineation of wetlands conducted in May of 2015 is currently pending jurisdictional determination by the USACE. These wetlands consist of 1.4088 acres of roadside ditch wetlands and are the result of intermittent agricultural discharge and roadside runoff. Other waters of the U.S. and State are present within the project limits: two un-named intermittent drainages at PM's 8.09 and 9.7 and two named intermittent drainages at PM's 9.1 (Stahl's Ditch) and 10.1 (Cordua Canal). All of these drainages branch off of the mainline Cordua Canal, which is a diversion from the nearby Yuba River. The canal is used as a primary diversion for agricultural uses within and around the project area.

Environmental Consequences

Impacts to WOTUS and State will be the result of filling in ditches due to shoulder widening activities. The wetland drainages will be filled and then relocated within land purchased as new right of way. Proposed construction of the project would result in permanent impacts of approximately 0.1997 acres of "other waters" of the U.S. and State. The impacts to the wetlands are a result of the ditches being filled in and relocated (considered "fill") at the culvert inlets and outlets. It is anticipated that Caltrans will mitigate these impacts using the In-Lieu fee program.

Consultation with the USACE will occur due to project impacts to WOTUS under Section 404 of the Clean Water Act. The amount of impacts will be further calculated once final design plans have been developed. Consultation with the

CVRWQCB will occur due to project impacts to waters of the state, under Section 401 of the CWA. The amount of impacts will also be further calculated once design plans have been further developed. Caltrans will also consult with the CDFW under Section 1602 of the Lake and Streambed Alteration Agreement, for impacts to the same bodies of water

Table 2: Impacts to Waters of the U.S. and State within the Project Area

WATERS OF THE U.S. and STATE	Area (acres)	Fill Below OHWM (acres)	Fill (yds³)
Wetlands (U.S) and State	1.4088	1.408	61,367
OTHER WATERS of the U. S. and STATE			
(intermittent) Culvert PM 8.09	0.0028	0.0003	30
(intermittent) Culvert PM 9.10	0.0690	0.0003	30
(intermittent) Culvert PM 9.7	0.0510	0.0002	15
(intermittent) Culvert PM 10.1	0.0769	0.0003	30
OTHER WATERS TOTALS	0.1997	0.0011	105

Avoidance, Minimization, and/or Mitigation Measures

- Demolition debris, poured concrete, and concrete that contacts water will be contained.
- Standard water quality Best Management Practices (BMPs) will be implemented to protect water quality during construction. The implementation of these BMPs will minimize erosion into waterbodies present within the project area.

With the incorporation of these avoidance and minimization measures there will be less than significant impact to wetlands.

Plant Species

Regulatory Setting

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

Act (CESA). Please see the Threatened and Endangered Species in the following pages for detailed information about these species.

This section of the document discusses all the other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), CA Public Resources Code, Sections 2100-21177.

Affected Environment

Botanical surveys were conducted on two separate occasions in order to capture the blooming periods for any rare plants that could occur in the project area. No sensitive plant species or special status plant species were observed within the area. The project is located within the Great Central Valley region (GV), Sacramento Valley sub-region (ScV), California Floristic Province (CA-FP).

Vegetation communities within the project area are primarily classified based on plant community descriptions provided by the California Wildlife Habitat Relationship System. Pasture and Crop Agriculture is the dominant vegetation type within the project area, with the surrounding roadside drainage ditches containing numerous native, non-native grasses and hydrophytes and surrounding agricultural lands consisting of rice. Between roadside drainages and pavement exists a ruderal community consisting of non-native grasses and weeds.

Common species that are associated with the roadside drainages include common spike rush (*Eleocharis macrostachya*), Joint-leaf rush (*Juncus articulatus*), floating primrose willow (*Ludwigia peploides*) and common cattail (*Typha latifolia*). Upland vegetation includes Italian rye (*Festuca perennis*), rabbits foot grass (*Polypogon imberbis*), and rose clover (*Trifolium hirtum*). Himalayan blackberry (*Rubus armeniacus*) is also prevalent throughout the site.

Pasture and Crop Agriculture

Rice and wild rice are flood irrigated crops that are seed producing annual grasses. They are usually grown in leveed fields that are flooded much of the growing period, and dried out to mature and to facilitate harvesting. They generally produce 100 percent canopy closure as they mature. Crops are usually planted in the spring and harvested in fall.

Rice is grown in areas that traditionally supported natural wetlands. These areas historically supported an abundance of wildlife, especially shorebirds and waterfowl.

Many species have since adapted to rice including waterfowl (ducks, geese), cranes, egrets and other shorebirds.

Ruderal Species

A ruderal species is a plant that is first to colonize disturbed lands. The disturbance may be natural (eg., wildfires or landslides) or man-made (eg., construction or agriculture). Ruderal communities occur in areas of disturbances, such as roadsides, trails, parking lots, etc. These communities are subjected to ongoing or past disturbances (eg., vehicle activities, grazing, mowing, etc.). Ruderal communities are often successional in nature; however, in highly disturbed areas, ruderal assemblages of native and introduced weedy species can become established and maintain a position in the community as succession is prevented by repeated disturbance. The components of the ruderal community vary from place to place and with the nature of the disturbance. Most of the species that occur in these disturbed areas are various annual grasses and forbs of Eurasian origin, many of which also occur in grasslands.

Environmental Consequences

This project will require the filling in and relocation of ditches as well as removal of plants. The ditches will be filled in with dirt and relocated to accommodate the road widening. The only plants that will be removed are those that prevent the road widening from occurring.

Avoidance, Minimization, and/or Mitigation Measures

- Upon completion of project construction, newly created drainages will be permanently stabilized with a hydroseed mixture of native species endemic to the area.
- Only native seed material shall be used. Seed, hay and straw used in erosion control applications shall be certified weed-free or weed-seed free.
- Minimize removal of native vegetation by locating staging areas and access routes in previously disturbed areas and outside of established ESAs.

With the incorporation of these avoidance and minimization measures there will be less than significant impact to plant species.

Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National

Marine Fisheries Service (NOAA Fisheries Service) and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed further below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

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

State laws and regulations relevant to wildlife include the following:

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

Migratory Birds

Federal and State laws protect migratory birds, their occupied nests, and their eggs from destruction. The applicable Federal law is the Migratory Bird Treaty Act (15 USC 703-711), 50 CFR Part 21 and 50 CFR Part 10. Protection under California law is found in the Fish and Game Code Sections 3503, 3513, and 3800.

Affected Environment

Migratory birds try to nest in vegetation or on structures within the project area.

Environmental Consequences

Although no active nests were seen during biological surveys, it is anticipated that migratory birds may try to nest in vegetation or on structures within the project area. Nesting birds have the potential to be impacted during construction if activities were to occur near an active nest. Therefore, measures will be incorporated into the project to avoid any impacts to migratory birds.

Avoidance, Minimization, and/or Mitigation Measures

- If removal of trees-vegetation within the time period of September 1 through February 15 is not feasible, a pre-construction survey for active bird nests will be conducted by a qualified biologist prior to the start of construction.
- If any active bird nest is found, construction will not begin at that location until after the chicks have fledged.
- If a lapse in project related work of fifteen (15) days or longer occurs, another survey and, if required, coordination with USFWS and the CDFW will occur before work can be reinitiated.

With the incorporation of these avoidance and minimization measures there will be less than significant impact to migratory birds.

Threatened and Endangered

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement, a Letter of Concurrence and/or documentation of a No Effect finding. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by the

CDFW. For species listed under both the FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

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

Giant Garter Snake (GGS)

Affected Environment

GGS are commonly found in areas with low gradient streams, valley wetlands and marshes, and regions of rice agriculture.

Within the project action area are numerous roadside drainages and agricultural canals that could provide foraging and dispersal habitat. The water levels in these drainages fluctuate seasonally with area rainfall and agricultural demand/discharge. During the growing season, the drainages contain water run-off and dense vegetation. During non-production season, the surrounding rice parcels are completely dry with scarce vegetation as are the roadside ditches.

Though there are areas where habitat may be present within the project area, it is the quality of habitat and location of the habitat that was considered. Any habitat for GGS within the action area is highly manipulated and varies in degrees of quality throughout the year. The vegetative cover required for this species is sparse, and inconsistent and intermittent flow regimes make favorable habitat difficult. There are also no known occurrences of GGS for several miles. The nearest known sighting is approximately 15 miles to the west, across the Feather River in Sutter County. Also, studies from Halstead *et. al.* (2014) indicate there is a historic absence of GGS in the area.

Environmental Consequences

Due to the lack of quality habitat within the project area, the lack of historic presence in the area and the distance from project activities to the nearest recorded occurrence, it is not anticipated that this project will have any adverse effect on GGS and Caltrans is seeking a *may affect, not likely to adversely affect* from USFWS. Informal consultation with USFWS has been initiated, Caltrans submitted a Biological

Assessment and has received a Letter of Concurrence (LOC) from USFWS dated December 30, 2015.

Coordination with the California Department of Fish and Wildlife was completed on April 02, 2015 as required under the California Endangered Species Act. It was determined that the proposed project would not result in “take” of the GGS.

As a result of habitat loss and fragmentation due to urban development, agricultural practices and flood control activities, GGS have become extirpated from the majority of its historical range. Predation from introduced species, parasites and water pollution are also contributors to the decline of the species. This project is not expected to have any effect on the habitat of GGS.

Avoidance, Minimization, and/or Mitigation Measures

- Twenty-four-hours prior to the commencement of construction activities, the project area shall be surveyed for giant garter snakes by a Service-approved biologist. The biologist will provide the Service with a written report that adequately documents the monitoring efforts within 24-hours of commencement of construction activities. The project area shall be re-inspected by the monitoring biologist whenever a lapse in construction activity of two weeks or greater has occurred.
- A Worker Environmental Awareness Training Program for construction personnel shall be conducted by a Service-approved biologist for all construction workers, including contractors, prior to the commencement of construction activities.
- During construction operations, stockpiling of construction materials, portable equipment, vehicles, and supplies will be restricted to the designated construction staging areas and all operations will be confined to the minimal area necessary.
- Project-related vehicles will observe a 20-mile-per-hour speed limit within construction areas, except on existing paved roads where they will adhere to the posted speed limits.
- If snakes are encountered during construction activities, work will be immediately stopped and the biologist will notify the USFWS by telephone at (916) 414-6631 to determine how to proceed.

With the incorporation of these avoidance and minimization measures there will be less than significant impact to Giant Garter Snakes.

Valley Elderberry Longhorn Beetle (VELB)

Affected Environment

The VELB is an insect that is completely dependent on its host plant, the elderberry shrub. The elderberry shrub is an important component of the riparian forests throughout the Central Valley of California. Although this shrub can occur outside of riparian areas, shrubs supporting the greatest beetle densities are located in areas where shrubs are abundant and scattered among dense riparian forested areas.

Suitable habitat for VELB occurs within the project area. Along the northern portion of the roadway, two elderberry shrubs are located approximately 0.5 miles apart. The first is located near PM 8.7 and is a healthy, flowering shrub inhabiting an area between the shoulder of SR 20 within Caltrans right of way, and the edge of an agricultural access road. The second shrub is located near the intersection of SR 20 and Kibbe Road. This shrub is also located within Caltrans right of way along an agricultural roadway, but is much more distressed than the previous shrub. It is completely surrounded by blackberry vines (*Rubus armeniacus*) that also appear to be under distress. It is unclear what the exact stressor is to this vegetation, but it appears to be the result of herbicidal spraying from the adjacent land owner.

Elderberry shrubs are a key component to riparian forests throughout the Central Valley, and the greatest densities of VELB are located among these dense riparian areas. The nearest riparian habitat to the shrubs located within the project action area is between .48 and .79 miles away. These shrubs are not only isolated from nearby riparian vegetation, they are also relatively isolated from each other resulting in less than optimal habitat for VELB. Also, exit hole surveys conducted on May 28, 2015 resulted in a negative finding for any evidence that VELB have occupied or currently occupy these shrubs.

Environmental Consequences

Historically, the greatest threat to VELB has been the elimination, loss, or modification of its habitat by urbanization, agricultural development and practices, and other activities that reduce or eliminate its host plants. This project will not have any impact to the shrubs and VELB.

Based on the results of surveys and the analyses of habitat conditions and requirements, it was determined that the project *may affect, but not likely to adversely affect* VELB. Informal consultation with USFWS has been initiated, Caltrans has submitted a Biological Assessment and has received a Letter of Concurrence from USFWS dated December 30, 2015.

Avoidance, Minimization, and/or Mitigation Measures

- No avoidance or minimization measures are proposed for VELB. It has been determined that the elderberry shrubs located with the project area do not

harbor any evidence of occupation and are isolated from riparian corridors, therefore are not appropriate habitat for VELB.

Vernal Pool Fairy Shrimp

Affected Environment

The vernal pool fairy shrimp is a federally threatened species. Populations occur in ephemeral freshwater habitats, such as vernal pools and swales that form in the cool wet months of the year. Fairy shrimp do not occupy permanent bodies of water and are dependent on seasonal fluctuations in their habitat. They can be found in vernal pools or within vernal pool complexes from Mt. Shasta in the north to Riverside County, California.

There is one small vernal pool located towards the eastern portion of the project near the Cordua Canal by PM 10.1 and is approximately 138 feet from the edge of pavement. The pool has potential to provide adequate habitat for vernal pool fairy shrimp, but is located outside of the project impact area. Though this pool will not be impacted by the project activities, there may be temptation for the area to be used by construction contractors for staging and storage of materials due to the flat topography. Therefore, this area will be protected during construction with environmentally sensitive fencing (ESA) as a first order of work.

Environmental Consequences

The development of habitat for agricultural uses is the primary factor for the species decline. Urbanization in the Central Valley of California also poses a severe threat to the species existence. The overall rate of loss of vernal pool habitat is approximately 2-3% per year. Informal consultation with USFWS has been initiated, Caltrans has submitted a Biological Assessment and has received a Letter of Concurrence from USFWS dated December 30, 2015.

Avoidance, Minimization, and/or Mitigation Measures

With the implementation of ESA fencing as an avoidance measure, Caltrans is seeking concurrence from USFWS for a *may affect, but not likely to adversely affect* for the vernal pool fairy shrimp. Informal consultation with USFWS has been initiated, Caltrans has submitted a Biological Assessment and is anticipating a Letter of Concurrence from USFWS.

- As a first order of work, the vernal pool area will be demarcated with ESA fencing to prevent encroachment into the area by construction personnel and equipment. Caltrans will incorporate Standard Specification 14-1.02 into the construction contract.
- Measures will be employed to prevent any construction material or debris from entering the vernal pool area. Standard Stormwater BMP's for erosion control will be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters the vernal pool area.

With the incorporation of these avoidance and minimization measures there will be less than significant impact to Vernal Pool Fair Shrimp.

Vernal Pool Tadpole Shrimp

Affected Environment

Vernal pool tadpole shrimp historically occurred within the Central Valley and Central Coast regions of California. With the conversion of wetland-vernal pool habitats to agricultural lands, the majority of historical habitat was lost. Currently, the species is distributed across the Central Valley and portions of the San Francisco Bay area.

Much like other vernal pool shrimp species, the vernal pool tadpole shrimp are reliant on seasonal fluctuations within their habitat. Water must be present in the winter and early spring and absent during the summer. They require the cold winter waters for egg hatching and early growth, and the warm summer conditions for egg cyst drying to prevent fungusing.

There is one small vernal pool located towards the eastern portion of the project near the Cordua Canal by PM 10.1 and is approximately 138 feet from the edge of pavement. This pool is located outside of the project impact area, but still has the potential to provide adequate habitat for vernal pool tadpole shrimp. Though this pool will not be impacted by the project activities, there may be temptation for the area to be used by construction contractors for staging and storage of materials due to the flat topography. Therefore, this area will be protected during construction with ESA as a first order of work.

Environmental Consequences

The development of habitat for agricultural uses is the primary factor for the species decline. Urbanization in the Central Valley of California also poses a severe threat to

the species existence. The overall rate of loss of vernal pool habitat is approximately 2-3% per year. Informal consultation with USFWS has been initiated, Caltrans has submitted a Biological Assessment and has received a Letter of Concurrence from USFWS dated December 30, 2015. In the one small vernal pool located outside of the project impact area, ESA fencing will be placed to avoid vernal pool tadpole shrimp.

Avoidance, Minimization, and/or Mitigation Measures

- As a first order of work, the vernal pool area will be demarcated with ESA fencing to prevent encroachment into the area by construction personnel and equipment.
- Measures will be employed to prevent any construction material or debris from entering the vernal pool area. Standard Stormwater BMP's for erosion control will be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters the vernal pool area.

With the incorporation of these avoidance and minimization measures there will be less than significant impact to Vernal Pool Tadpole Shrimp.

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels. Research from such establishments as the Intergovernmental Panel on Climate Change (IPCC) are primarily concerned with the emissions of GHGs generated by human activity including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

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

There are four primary strategies for reducing GHG emissions from transportation sources: 1) improving the transportation system and operational efficiencies, 2) reducing growth of vehicle miles traveled (VMT), 3) transitioning to lower GHG

emitting fuels, and 4) improving vehicle technologies. To be most effective all four strategies should be pursued collectively. The following Regulatory Setting section outlines state and federal efforts to comprehensively reduce GHG emissions from transportation sources.

Regulatory Setting

State

With the passage of several pieces of legislation including State Senate and Assembly bills and Executive Orders, California launched an innovative and pro-active approach to dealing with GHG emissions and climate change. Relevant legislation include the following policies:

- Assembly Bill 1493 (AB 1493), Pavley.
- Executive Order (EO) S-3-05: (signed on June 1, 2005, by former Governor Arnold Schwarzenegger)
- AB 32, the Global Warming Solutions Act of 2006, Núñez and Pavley
- Executive Order S-20-06: (signed on October 18, 2006 by former Governor Arnold Schwarzenegger)
- Executive Order S-01-07: (signed on January 18, 2007 by former Governor Arnold Schwarzenegger)
- Senate Bill 97 (SB 97) Chapter 185, 2007
- Caltrans Director's Policy 30 (DP-30) Climate Change (approved June 22, 2012): is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. This policy contributes to the Department's stewardship goal to preserve and enhance California's resources and assets.
- Senate Bill 375 (SB 375) Chapter 728, 2008
- Senate Bill 391 (SB 319) Chapter 585, 2009

Federal

Although climate change and GHG reduction is a concern at the federal level; currently there are no regulations or legislation that have been enacted specifically addressing GHG emissions reductions and climate change at the project level.

Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has promulgated explicit guidance or methodology to conduct project-level GHG analysis. As stated on FHWA's climate change website (<http://www.fhwa.dot.gov/hep/climate/index.htm>), climate change considerations should be integrated throughout the transportation decision-making process—from planning through project development and delivery. Despite the lack of Federal GHG regulations and legislation, FHWA as well as the National Highway Traffic Safety Administration (NHTSA) and U.S. EPA are taking steps to lessen climate change impacts by improving transportation system efficiency, creating cleaner fuels, reducing the growth of vehicle hours travelled, and enabling the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines.

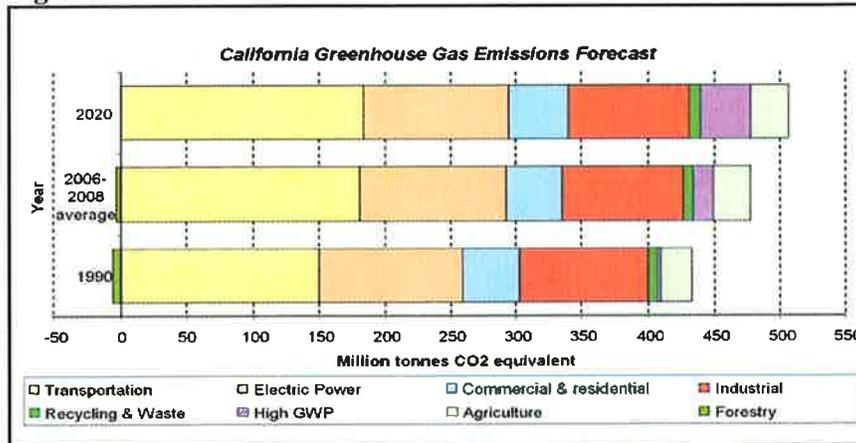
Project Analysis

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.³ In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines sections 15064(h)(1) and 15130). To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult, if not impossible, task.

The AB 32 Scoping Plan mandated by AB 32 contains the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the Draft Scoping Plan, ARB released the GHG inventory for California (forecast last updated: October 28, 2010). The forecast is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008.

³ This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

Figure 1 California GREENHOUSE GAS FORECAST



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

Caltrans and its parent agency, the California State Transportation Agency (CalSTA), have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California’s GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.⁴

The purpose of the proposed project is to Resurface, Restore, and Rehabilitate the existing roadway and is not expected to result in an increase of operational GHG emissions. The existing asphalt pavement is deteriorated and has a poor ride quality that requires annual maintenance to repair and maintain. The proposed project would not increase overall roadway capacity, therefore it is not expected to increase CO2 operational emissions. Temporary construction emissions would be unavoidable but there would likely be long-term GHG benefits by improved operation and smoother pavements surfaces.

Construction Emissions

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

⁴ Caltrans Climate Action Program is located at the following web address: http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf

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

CEQA Conclusion

Although construction emissions are unavoidable and are expected to be minimal, the proposed project will not increase capacity and is not expected to result in additional operational CO₂ emissions. However, it is Caltrans determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a determination regarding significance of the project's direct impact and its contribution on the cumulative scale to climate change. However, Caltrans is firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

There are typically two terms used when discussing the impacts of climate change. "Greenhouse Gas Mitigation" is a term for reducing GHG emissions in order to reduce or "mitigate" the impacts of climate change. "Adaptation," refers to the effort of planning for and adapting to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels)⁵.

Greenhouse Gas Mitigation

The Department continues to be actively involved on the Governor's Climate Action Team as ARB works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies the Department is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year.

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

- 1) According to Caltrans' Standard Specifications, the contractor to comply with all pertinent rules, regulations, ordinances, and statutes of the local air district, Section 14-9.02, "Air Pollution Control."
- 2) Caltrans' Standard Specifications, a required part of all construction contracts, should effectively reduce and control emission impacts during construction under the

⁵ http://climatechange.transportation.org/ghg_mitigation/

provisions of Section 7-1.02C “Emission Reduction” and Section 14-9.03 “Dust Control”.

Adaptation Strategies

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

Interim guidance has been released by The Coastal Ocean Climate Action Team (CO-CAT) as well as the Department as a method to initiate action and discussion of potential risks to the states infrastructure due to projected sea level rise.

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

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

Chapter 3- Comments and Coordination

CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicated no impacts. A NO IMPACT answer in the last column reflects this determination. Where a clarifying discussion is needed, the discussion either follows the applicable section in the checklist or is placed within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA—not NEPA—impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

"No Impact" determinations in this section are based on the project scope and discussion with the landscape architect dated, December 2015.

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California 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, Forest Legacy Assessment Project, and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

"No impact and "Less than Significant Impact" determinations in this section are based on the project scope and coordination with NRCS.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

"No Impact" determinations in this section are based on the project scope and the air quality analysis dated, October 2015.

IV. BIOLOGICAL RESOURCES: Would the project:

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- 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?
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- 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?
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

"No impact" and "Less than significant with mitigation" determinations are based on the project scope, coordination with the biologist, and the Natural Environment Study dated, September 2015.

V. CULTURAL RESOURCES: Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
- d) Disturb any human remains, including those interred outside of formal cemeteries?

"No impact" determinations in this section are based on the project scope and review of the Archaeological Survey Report dated, June 2015.

VI. GEOLOGY AND SOILS: Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death in involving:

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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ii) Strong seismic ground shaking?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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iii) Seismic-related ground failure, including liquefaction?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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iv) Landslides?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Result in substantial soil erosion or the loss of topsoil?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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“No impact” determinations in this section are based on the project scope and coordination with the project engineer.

VII. GREENHOUSE GAS EMISSIONS: Would the project:

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

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

While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans' determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

"No impact" determination in this section based on the project scope, coordination with the hazardous waste specialist and the Updated Initial Site Assessment dated, November 2015.

IX. HYDROLOGY AND WATER QUALITY: Would the project:

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

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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- e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?
- f) Otherwise substantially degrade water quality?
- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
- i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- j) Inundation by seiche, tsunami, or mudflow?

"No impact" and "Less than significant impact" determinations are based on the project scope, coordination with water quality specialist, and the Water Quality Assessment dated, December 2015.

X. LAND USE AND PLANNING: Would the project:

- a) Physically divide an established community?
- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

"No impact" determinations in this section are based on the project scope and coordination with Yuba County, dated December 2515.

XI. MINERAL RESOURCES: Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- 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" determinations in this section are based on the project scope and coordination with the project engineer.

XII. NOISE: Would the project result in:

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

“No Impact” determinations in this section are based on the project scope and review of the Noise Analysis document.

XIII. POPULATION AND HOUSING: Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

“No Impact” determinations in this section are based on the project scope, location and coordination with Yuba County.

XIV. PUBLIC SERVICES:

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

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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Other public facilities?

"No impact" determinations in this section are based on the project scope, location and coordination with the project engineer.

XV. RECREATION:

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

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" determinations in this section are based on the project scope and location of the project.

XVI. TRANSPORTATION/TRAFFIC: Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

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

e) Result in inadequate emergency access?

f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

"No Impact" determinations in this section are based on the project scope and coordination with project engineers.

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

"No impact determinations are based on the project scope, coordination with water quality specialist, and the Water Quality Assessment dated, December 2015.

VIII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND TRADING AGENCY

J. BRUNING, BROWN, Jr., Governor

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March 2013

NON-DISCRIMINATION POLICY STATEMENT

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

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

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

MALCOLM DOUGHERTY
Director

"California improves mobility across California"

List of Preparers

To assist in the identification and assessment of potential environmental impacts of the proposed project, Caltrans Environmental staff prepared the following technical reports:

Thaleena Bhattal – Environmental Coordinator and Environmental Document Preparer

Stefan Sutton – Environmental Branch Chief

Salahuddin Chowdhury – Project Engineer and Project Report preparer

Lesley Morgan – Landscape Architect and Visual Impact Assessment preparer

Bill Larson – Cultural Resource Specialist, preparer of Archaeological Survey Report and Historic Property Survey Report

Ken Russo- Biologist and Natural Environment Study Preparer

Arron Rambach – Hazardous Waste and Preparer of Hazardous Waste Study

Jason Lee- Air and Noise Specialist, Preparer of Air Quality/Noise Analysis

Darrell Naruto – Water Quality Specialist and preparer of Water Quality Assessment

Mike DeWall – Floodplain specialist, preparer of Floodplain Analysis