

SAC 12 TERMINOUS SAFETY PROJECT

INITIAL STUDY

with Proposed Negative Declaration



SACRAMENTO COUNTY, CALIFORNIA

DISTRICT 3 – SAC – 12 — Post Miles 0.70 to 6.11

EA 03-2J200 / EFIS 0321000198

**Prepared by the
State of California Department of Transportation**



January 2025



General Information About This Document

What is in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study with proposed Negative Declaration (IS/ND) which examines the potential environmental impacts of the Sac 12 Terminous Safety Project on State Route 12 in Sacramento County, California.

Caltrans is the lead agency under the California Environmental Quality Act (CEQA). This document tells you why the project is being proposed, how the existing environment could be affected by the project, the potential impacts of the project, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read this document.
- Additional copies of this document and related technical studies are available upon request at: Rio Vista Library, 44 S 2nd Street, Rio Vista, CA 94571. This document may be downloaded at the following website:
<https://dot.ca.gov/caltrans-near-me/district-3/d3-projects/d3-sac-12-terminous-capm>
- We'd like to hear what you think. If you have any comments about the proposed project, please send your written comments to Caltrans by the deadline.
- Please send comments via U.S. mail to:
California Department of Transportation
North Region Environmental–District 3
Attention: Jennifer Jones
703 B Street
Marysville, CA 95901
- Send comments via e-mail to: 03_2J200_Project_Inbox@dot.ca.gov
- Be sure to send comments by the deadline: [February 17, 2025](#)

What happens after this?

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 obtained, Caltrans could complete the design and construct all or part of the project.

Alternate Formats

For individuals with sensory disabilities, this document can be made 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, Attention: Sergio Ochoa Sanchez, Public Information Officer, 703 B Street, Marysville, CA 95901; (916) 826-3093 Voice, or use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1 (800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech-to-Speech) or 711.

INITIAL STUDY
with Proposed Negative Declaration

SAC 12 TERMINOUS SAFETY PROJECT

Improve safety of the traveling public, install a concrete median barrier, provide standard width inside shoulders, improve left turn lane access at Terminous Road, rehabilitate drainage systems, and install Transportation Management System elements on State Route 12 in Sacramento County, from Post Miles 0.70 to 6.11, east of Solano County and west of San Joaquin County.

Submitted Pursuant to:

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

THE STATE OF CALIFORNIA
Department of Transportation

1/6/25
Date of Approval


Erin Dwyer, Office Chief
North Region Environmental–District 3
California Department of Transportation
CEQA Lead Agency

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

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PROPOSED NEGATIVE DECLARATION

Pursuant to: Division 13, California Public Resources Code

State Clearinghouse Number: Pending

Project Description

The California Department of Transportation (Caltrans) proposes the Sac 12 Terminous Safety Project along State Route (SR) 12 in Sacramento County between Post Mile 0.70 (0.1 mile east of the SR 160 Junction) to Post Mile 6.11 (Mokelumne River Bridge No. 29-0043). The project proposes to install concrete median barrier, provide standard width inside shoulders, improve left turn access at the intersection of Terminous Road, grind and overlay the existing pavement, replace fair condition drainage systems, replace existing nonstandard/poor condition roadside signs, upgrade existing nonstandard guardrails, provide concrete vegetation control under guardrail, add Maintenance Vehicle Pullouts, and install a census station and closed circuit television.

Determination

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

Caltrans has prepared an Initial Study for this project and, following public review, has determined from this study that the proposed project would have *No Impact* on:

- Aesthetics
- Agricultural and Forest Resources
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils

- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Tribal Resources
- Utilities and Service Systems
- Wildfire

The proposed project would have *Less than Significant Impacts* to:

- Air Quality
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Transportation
- Mandatory Findings of Significance



Erin Dwyer, Office Chief
North Region Environmental–District 3
California Department of Transportation



Date

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Acronyms and Abbreviated Terms

Acronym/Abbreviation	Description
AB	Assembly Bill
ADL	Aerially Deposited Lead
BMPs	Best Management Practices
BRIP	Biological Resource Information Program
BSA	Biological Study Area
CAFE	Corporate Average Fuel Economy
CAA	Clean Air Act
CAL-CET	Caltrans Construction Emissions Tool
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAPTI	Climate Action Plan for Transportation Infrastructure
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQ	(White House) Council on Environmental Quality
CEQA	California Environmental Quality Act
CFGF	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CH ₄	methane
CNPS	California Native Plant Society
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CTP	California Transportation Plan
CWA	Clean Water Act
Delta	Sacramento-San Joaquin Delta
DSC	Delta Stewardship Council
DP	Director's Policy
DPS	Distinct Population Segment
ECL	Environmental Construction Liaison
EIR	Environmental Impact Report
EO(s)	Executive Order(s)
EP	edge of pavement
EPA	Environmental Protection Agency
ESA(s)	Environmentally Sensitive Area(s)
ESL	Environmental Study Limits
FEMA	Federal Emergency Management Agency

Acronym/Abbreviation	Description
FESA	Federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FP	Fully Protected species
FR	Federal Regulations
GHG	greenhouse gas
GWP	Global Warming Potential
H&SC	Health & Safety Code
HFCs	hydrofluorocarbons
HSIP	Highway Safety Improvement Program
IS	Initial Study
IS/ND	Initial Study / Negative Declaration
MASH	Manual for Assessing Safety Hardware
MBTA	Migratory Bird Treaty Act
MGS	Midwest Guardrail System
MLD	Most Likely Descendent
MMT	million metric tons
MPO	Metropolitan Planning Organization
MTIP	Metropolitan Transportation Improvement Program
MVP	Maintenance Vehicle Pullout
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act of 1990
NAHC	Native American Heritage Commission
ND	Negative Declaration
NEPA	National Environmental Policy Act
NESMI	Natural Environment Study with Minimal Impacts
NHTSA	National Highway Traffic and Safety Administration
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	ozone
OPC	Ocean Protection Council
OPR	Governor's Office of Planning and Research
PDT	Project Development Team
PLAC	Permits, licenses, agreements, & certifications
PM	Particulate Matter
PM(s)	Post Mile(s)
Project	Sac 12 Terminous Safety Project

Acronym/Abbreviation	Description
PRC	Public Resources Code (California)
RCP	Reinforced Concrete Pipe
RHMA	Rubberized Hot Mix Asphalt
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
SACOG	Sacramento Area Council of Governments
SB	Senate Bill
SER	(Caltrans) Standard Environmental Reference
SF ₆	sulfur hexafluoride
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Officer
SHS	State Highway System
SLR	Sea Level Rise
SNC(s)	Sensitive Natural Community(ies)
SO ₂	sulfur dioxide
SR	State Route
SRA	State Responsibility Area
SS	Standard Specification
SSC	CDFW Species of Special Concern
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan
TAC	Transportation Analysis under CEQA
TMDL	Total Maximum Daily Load
TMP	Transportation Management Plan
U.S. or US	United States
USACE	United States Army Corps of Engineers
USC	United States Code
U.S. DOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VMT	Vehicle Miles Traveled
WPCP	Water Pollution Control Program
WOTUS	Waters of the U.S.
WPCP	Water Pollution Control Program



CHAPTER 1. PROPOSED PROJECT

1.1 Introduction/Project Setting

The California Department of Transportation (Caltrans) proposes the Sac 12 Terminus Safety Project on State Route (SR) 12 in Sacramento County, between Post Miles (PM) 0.70 and 6.11. The total length of the proposed project is 5.41 miles. Within the limits of the proposed project, SR 12 is an undivided, two-lane conventional highway with 5 to 8-foot-wide outside shoulders. This proposed project was programmed for safety.

The Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA).

The proposed project is in Sacramento County on SR 12 from PM 0.70 to PM 6.11 (Figures 1 and 2). SR 12 is an east-west route connecting the Bay Area to the San Joaquin Valley. Within District 3, SR 12 is part of the Interregional Road System. The Interregional Road System is a series of interregional state highway routes outside the urbanized areas that provides access to, and links between, the state's economic centers, major recreational areas, and urban and rural regions. The Federal Highway Administration (FHWA) has functionally classified SR 12 as a Principal Arterial that is on the Federal Highway System (FHS). Within District 3, SR 12 is approximately 6 miles long and runs east to west from Mokelumne River to Sacramento River through open spaces, farmland, and rural areas in Sacramento County. SR 12 has a wide variety of users including commuters, recreational travelers and freight and agriculture truck drivers.

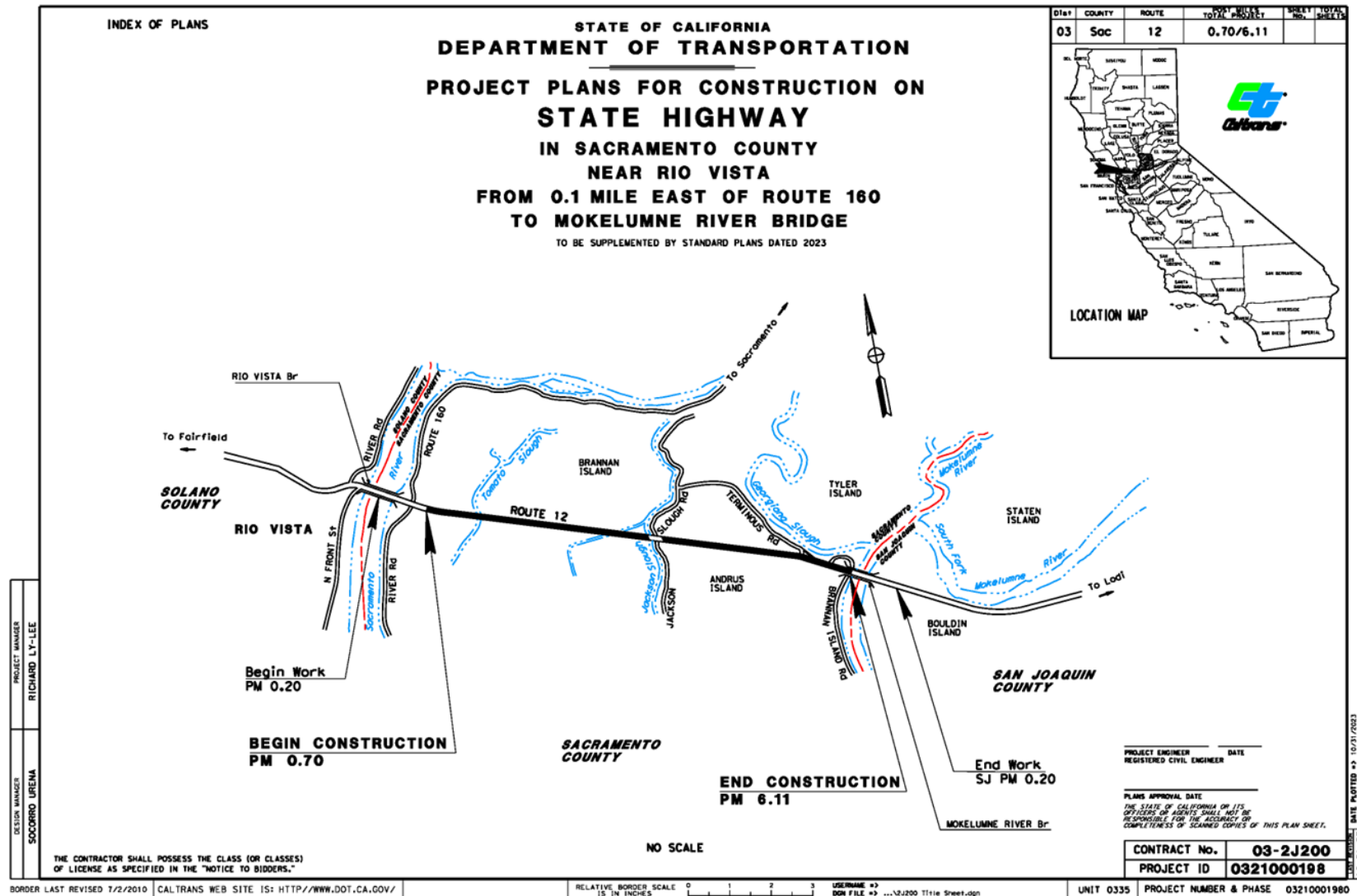


Figure 1. Project Vicinity





Figure 2. Project Location Map



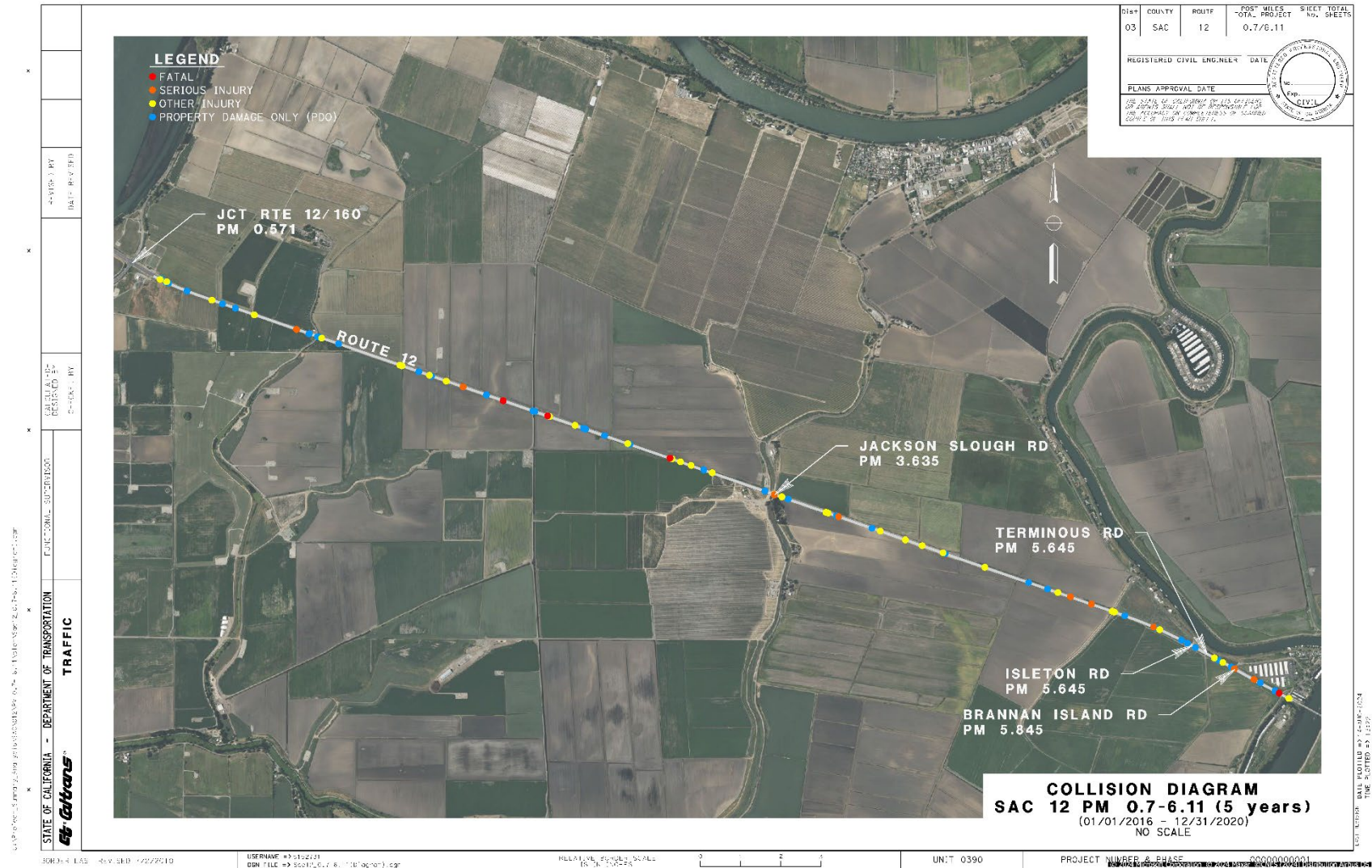
1.2 Purpose and Need

Purpose

The purpose of this proposed project is to improve traveling public safety by reducing the number of fatal and serious injury collisions.

Need

Segments of State Route (SR) 12 in Caltrans Districts 3, 4, and 10 have appeared in the annual Two and Three Lane Monitoring Reports over the past 15 years and, more recently, in the Cross Over Collision Monitoring Report. This segment of SR 12 in District 3 has appeared in the Cross Over Collision Monitoring Reports from years 2018 to 2022. Even though several incremental safety countermeasures have been installed within this segment over the recent years, collisions continue to occur. From January 1, 2016, to December 31, 2020, there were a total of 204 collisions within this segment, which included 5 fatal collisions and 12 serious injuries. Figure 3 is a diagram which displays the plotted data of the collisions. Out of these collisions, 7 were listed on the 2020 Cross Over Collision Monitoring Report, including 4 fatal collisions and 3 injuries. From January 1, 2021, to October 3, 2022, a total of 96 additional collisions occurred within this segment, including 4 fatal collisions and 7 serious injuries. This proposed project should reduce the number of fatal and serious injury collisions within this segment of SR 12.



Initial Study / Proposed Negative Declaration
EA 03-2J200 Sac 12 Terminous Safety Project



1.3 Project Description

The proposed SAC 12 Terminus Safety Project is along SR 12 in Sacramento County between PM 0.70 (0.1 mile east of the SR 160 Junction) and PM 6.11 (Mokelumne River Bridge No. 29-0043). The project proposes the following:

- install a concrete median barrier
- provide standard 5-foot-width inside shoulders
- improve left turn lane access at the intersection of Terminus Road
- grind and overlay the existing pavement
- replace fair condition drainage system
- replace existing nonstandard/poor condition roadside signs
- upgrade existing nonstandard guardrails
- provide concrete vegetation control under guardrails
- add Maintenance Vehicle Pullouts
- install a census station and closed circuit television

1.4 Proposed Alternatives

No-Build (No-Action) Alternative

The No-Build Alternative would maintain the facility in its current condition and would not meet the purpose and need of the project. For each potential impact area discussed in Chapter 2, the No-Build Alternative has been determined to have no impact. Under the No-Build Alternative, no alterations to the existing conditions would occur and the proposed improvements would not be implemented.

Proposed Build Alternative

Pavement

- Cold plane a depth of 0.25' from the edge of pavement (EP) to EP and overlay 0.25' Rubberized Hot Mix Asphalt (RHMA-G).
- Repair locations of severe existing asphalt pavement failure with digouts.
- Provide 5' standard width inside shoulders.

- Widen roadway 6 to 8 feet in each direction to provide standard inside and outside shoulder widths.
- Place imported shoulder backing material at the outside edge of shoulders, where needed.
- Restripe lanes and shoulders with 6" enhanced wet night visibility thermoplastic traffic stripes, pavement markings and raised retroreflective pavement markers.

Drainage

- Replace the culvert at PM 5.42 in accordance with a hydraulic study to be conducted in Phase 1.
- Due to shoulder widening, reconstruct drainage ditches, as needed.

Signs

- Replace existing roadside signs with signs that comply with current standards at various locations.
- Add merge delineation markers and signage on eastbound SR 12 at Brannan Island Road.

Safety

- Construct 56" tall concrete median barrier within the project limits, excluding the intersection of SR 12 and Jackson Slough Road from PM 3.5 to PM 3.8.
- Improve left turn lane access at the intersection of Terminous Road.
- Improve left turn access at the intersection of Terminous Road and SR 12.
- Upgrade all existing metal beam guardrails to steel post Midwest Guardrail Systems (MGS) with end treatments that comply with the current MASH standards to meet minimum length as needed.
- Upgrade bridge approach guardrail for Mokelumne Bridge 29-0043 to comply with current MASH standards.
- Upgrade bridge approach guardrail for Mokelumne Bridge 29-0043 to comply with current MASH standards.

- Place inside shoulders rumble strip and replace rumble strip for outside shoulders throughout the project limits, excluding the intersection of SR 12 and Jackson Slough Road from PM 3.5 to PM 3.8.

TMS

- Install one new Census Station at SR 12, PM 5.645.
- Install one new lowerable Closed Circuit Television HM90 pole at SR 12, PM 5.645.
- Replace loop detectors for Vehicle Detection Systems at PM 5.575, PM 5.630, PM 5.772, and PM 5.857.
- Construct two Maintenance Vehicle Pullouts (MVP): One at SR 12 PM 5.63 on Terminous Road and the other at SR 12 PM 5.85 on Brannon Island Road.

1.5 Permits and Approvals Needed

Permits, licenses, agreements, and certifications (PLACs) are not required for project construction because no biological resources relevant to permits would be impacted.

1.6 Standard Measures and Best Management Practices Included in All Alternatives

Under CEQA, “mitigation” is defined as avoiding, minimizing, rectifying, reducing/eliminating, and compensating for an impact. In contrast, Standard Measures and Best Management Practices (BMPs) are prescriptive and sufficiently standardized to be generally applicable, and do not require special tailoring for a project. These are measures that typically result from laws, permits, agreements, guidelines, resource management plans, and resource agency directives and policies. For this reason, the measures and practices are not considered “mitigation” under CEQA; rather, they are included as part of the project description in environmental documents.

The project contains a number of standardized project features, standard practices (measures), and Best Management Practices (BMPs) which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project and, as such, are included as part of the project description. Any project-specific avoidance, minimization, or

mitigation measures that would be applied to reduce the effects of project impacts are listed further below or in Section 2.4.—Biological Resources.

Aesthetics Resources

AR-1: Where feasible, construction lighting would be temporary, and directed specifically on the portion of the work area actively under construction.

Air Quality

AQ-1: Water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions.

AQ-2: All construction equipment will use low sulfur fuel as required by California Code of Regulations (CCR) Title 17, Section 93114.

AQ-3: Track-out reduction measures, such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used.

AQ-4: All transported loads of soils and wet materials will be covered before transport, or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation.

AQ-5: Dust and mud that are deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce particulate matter (PM) emissions.

Biological Resources

BR-1: General

Before start of work, as required by permit or consultation conditions, a Caltrans biologist or Environmental Construction Liaison (ECL) would meet with the contractor to brief them on environmental permit conditions and requirements relative to each stage of the proposed project including, but not limited to, work windows, drilling site management, and how to identify and report regulated species within the project areas.

BR-2: Animal Species

- A. To protect migratory and nongame birds (occupied nests and eggs), if possible, vegetation removal would be limited to the period outside of the bird breeding season (removal would occur between September 16 and January 31). If vegetation removal is required during the breeding season, a nesting bird survey would be conducted by a qualified biologist within five days prior to vegetation removal. If an active nest is located, the biologist would coordinate with CDFW to establish appropriate species-specific buffer(s) and any monitoring requirements. The buffer would be delineated around each active nest and construction activities would be excluded from these areas until birds have fledged, or the nest is determined to be unoccupied.
- B. To prevent attracting corvids (birds of the *Corvidae* family which include jays, crows, and ravens), no trash or foodstuffs would be left or stored on-site. All trash would be deposited in a secure container daily and disposed of at an approved waste facility at least once a week. Also, on-site workers would not attempt to attract or feed any wildlife.
- C. Artificial night lighting may be required. To reduce potential disturbance to sensitive resources, lighting would be temporary and directed specifically on the portion of the work area actively under construction. Use of artificial lighting would be limited to Cal/OSHA work area lighting requirements.

BR-3: Invasive Species

Invasive non-native species control would be implemented. Measures would include:

- Straw, straw bales, seed, mulch, or other material used for erosion control or landscaping would be free of noxious weed seed and propagules.

Cultural Resources

- CR-4:** If human remains and related items are discovered on private or State land, they would be treated in accordance with State Health and Safety Code (H&SC) § 7050.5. Further disturbances and activities would cease

in any area or nearby area suspected to overlie remains, and the County Coroner contacted.

Pursuant to California Public Resources Code (PRC) § 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD).

Human remains and related items discovered on federally-owned lands would be treated in accordance with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (23 USC 3001). The procedures for dealing with the discovery of human remains, funerary objects, or sacred objects on federal land are described in the regulations that implement NAGPRA 43 CFR Part 10. All work in the vicinity of the discovery shall be halted and the administering agency's archaeologist would be notified immediately. Project activities in the vicinity of the discovery would not resume until the federal agency complies with the 43 CFR Part 10 regulations and provides notification to proceed.

Energy

- E-1:** Use recycled and energy-efficient building materials, energy-efficient tools and construction equipment, and renewable energy sources in construction and operation of the project.
- E-2:** Improve operations and maintenance practices by regularly checking and maintaining equipment to ensure it is functioning efficiently.
- E-3:** Optimize start-up time, power-down time, and equipment sequencing.
- E-4:** Educate employees about how their behaviors affect energy use.
- E-5:** Ensure that team members are trained in the importance of energy management and basic energy-saving practices. Hold staff meetings on energy use, costs, objectives, and employee responsibilities.

Greenhouse Gas Emissions

- GHG-1:** Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality (Caltrans Standard Specification [SS] 14-9).
- GHG-2:** Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of diesel-fueled commercial motor vehicles and equipment with gross weight ratings of greater than 10,000 pounds to no more than 5 minutes.
- GHG-3:** Caltrans Standard Specification "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resources Board (CARB) (Caltrans SS 7-1.02C).
- GHG-4:** Use of a Transportation Management Plan (TMP) to minimize vehicle delays and idling emissions. As part of this, construction traffic would be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along the highway during peak travel times.

Hazardous Waste and Material

- HW-1:** Per Caltrans requirements, the contractor(s) are required to properly manage removed stripe and pavement marking and must prepare a project-specific *Lead Compliance Plan* (CCR Title 8, § 1532.1, the "Lead in Construction" standard) to reduce worker exposure to lead-impacted soil. The plan would include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of materials containing lead.

Traffic and Transportation

- TT-1:** The contractor would be required to schedule and conduct work to avoid unnecessary inconvenience to the public and to maintain access to driveways, houses, and buildings within the work zones. Pedestrian and bicycle access would be maintained during construction.

TT-2: A Transportation Management Plan (TMP) will be prepared for the project.

Utilities and Emergency Services

UE-1: All emergency response agencies in the project area would be notified of the project construction schedule and would have access to State Route 12 throughout the construction period.

UE-3: The project is located within the No CAL FIRE Fire Hazard Severity Zone (FHSZ). The contractor would be required to submit a jobsite Fire Prevention Plan as required by Cal/OSHA before starting job site activities. In the event of an emergency or wildfire, the contractor would cooperate with fire prevention authorities.

Water Quality and Stormwater Runoff

WQ-1: The project would comply with the provisions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order 2022-0033-DWQ), effective January 1, 2023. If the project results in a land disturbance of one acre or more, coverage under the Construction General Permit (CGP) (Order 2022-0057-DWQ) is also required.

Before any ground-disturbing activities, the contractor would prepare a Stormwater Pollution Prevention Plan (SWPPP) (per the Construction General Permit Order 2022-0057-DWQ) or Water Pollution Control Program (WPCP) (projects that result in a land disturbance of less than one acre) that includes erosion control measures and construction waste containment measures to protect Waters of the State during project construction. For SWPPP projects (which are governed according to both the Caltrans NPDES permit and the Construction General Permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES and CGP and the corresponding requirements of those permits are adhered to. For WPCP projects (which are governed according to the Caltrans NPDES permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES permit is adhered to.

The SWPPP or WPCP would identify the sources of pollutants that may affect the quality of stormwater; include construction site Best Management Practices (BMPs) to control sedimentation, erosion, and potential chemical pollutants; provide for construction materials management; include non-stormwater BMPs; and include routine inspections and a monitoring and reporting plan. All construction site BMPs would follow the latest edition of the *Caltrans Storm Water Quality Handbooks: Construction Site BMPs Manual* to control and reduce the impacts of construction-related activities, materials, and pollutants on the watershed.

The project SWPPP or WPCP would be continuously updated to adapt to changing site conditions during the construction phase.

Construction may require one or more of the following temporary construction site BMPs:

- Any spills or leaks from construction equipment (e.g., fuel, oil, hydraulic fluid, and grease) would be cleaned up in accordance with applicable local, state, and/or federal regulations.
- Accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities would be removed by dewatering.
- Water generated from the dewatering operations would be discharged on-site for dust control and/or to an infiltration basin, or disposed of offsite.
- Temporary sediment control and soil stabilization devices would be installed.
- Existing vegetated areas would be maintained to the maximum extent practicable.
- Clearing, grubbing, and excavation would be limited to specific locations, as delineated on the plans, to maximize the preservation of existing vegetation.
- Vegetation reestablishment or other stabilization measures would be implemented on disturbed soil areas, per the Erosion Control Plan.

- For SWPPP projects (which are governed according to both the Caltrans NPDES permit and the Construction General Permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES and CGP and the corresponding requirements of these permits are adhered to. For WPCP projects (which are governed according to the Caltrans NPDES permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES permit is adhered to.

WQ-2: The project would incorporate pollution prevention and design measures consistent with the *2016 Caltrans Storm Water Management Plan*. This plan complies with the requirements of the Caltrans Statewide NPDES Permit (Order 2022-0033-DWQ)

The project design may include one or more of the following:

- Vegetated surfaces would feature native plants, and revegetation would use the seed mixture, mulch, tackifier, and fertilizer recommended in the Erosion Control Plan prepared for the project.
- Where possible, stormwater would be directed in such a way as to sheet flow across vegetated slopes, thus providing filtration of any potential pollutants.

1.7 Discussion of the NEPA Categorical Exclusion

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

CHAPTER 2. CEQA ENVIRONMENTAL CHECKLIST

Environmental Factors Potentially Affected

The environmental factors noted below would be potentially affected by this project. Please see the CEQA Environmental Checklist topics on the following pages for additional information.

Potential Impact Area	Impacted: Yes / No
Aesthetics	No
Agriculture and Forest Resources	No
Air Quality	Yes
Biological Resources	No
Cultural Resources	No
Energy	No
Geology and Soils	No
Greenhouse Gas Emissions	Yes
Hazards and Hazardous Materials	Yes
Hydrology and Water Quality	Yes
Land Use and Planning	No
Mineral Resources	No
Noise	No
Population and Housing	No
Public Services	No
Recreation	No
Transportation	Yes
Tribal Cultural Resources	No
Utilities and Service Systems	No
Wildfire	No
Mandatory Findings of Significance	Yes

The CEQA Environmental 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 project will indicate there are no impacts to a particular resource. A “NO IMPACT” answer in the last column of the checklist reflects this determination. The words “significant” and “significance” used throughout the CEQA Environmental Checklist are only related to potential impacts pursuant to CEQA. The questions in the CEQA Environmental Checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, as well as standardized measures that are applied to all or most Caltrans projects (such as Best Management Practices [BMPs] and measures included in the Standard Plans and Specifications or as Standard Special Provisions [Section 1.4]), are considered to be an integral part of the project and have been considered prior to any significance determinations documented in the checklist or document.

Project Impact Analysis Under CEQA

CEQA broadly defines “project” to include “the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment” (14 CCR § 15378). Under CEQA, normally the baseline for environmental impact analysis consists of the existing conditions at the time the environmental studies began. However, it is important to choose the baseline that most meaningfully informs decision-makers and the public of the project’s possible impacts. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project’s impacts, a Lead Agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a Lead Agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record. The CEQA Guidelines require a “statement of the objectives sought by the proposed project” (14 CCR § 15124(b)).

CEQA requires the identification of each potentially “significant effect on the environment” resulting from the project, and ways to mitigate each significant effect. Significance is defined as “*Substantial or potentially substantial adverse change to any of the physical conditions within the area affected by the project*” (14 CCR § 15382). CEQA determinations are made prior to and separate from the development of mitigation measures for the project.

The legal standard for determining the significance of impacts is whether a “fair argument” can be made that a “substantial adverse change in physical conditions” would occur. The fair argument must be backed by substantial evidence including facts, reasonable assumption predicated upon fact, or expert opinion supported by facts. Generally, an environmental professional with specific training in an area of environmental review can make this determination.

Though not required, CEQA suggests Lead Agencies adopt thresholds of significance, which define the level of effect above which the Lead Agency will consider impacts to be significant, and below which it will consider impacts to be less than significant. Given the size of California and its varied, diverse, and complex ecosystems, as a Lead Agency that encompasses the entire State, developing thresholds of significance on a state-wide basis has not been pursued by Caltrans. Rather, to ensure each resource is evaluated objectively, Caltrans analyzes potential resource impacts in the project area based on their location and the effect of the potential impact on the resource as a whole. For example, if a project has the potential to impact 0.10 acre of wetland in a watershed that has minimal development and contains thousands of acres of wetland, then a “less than significant” determination would be considered appropriate. In comparison, if 0.10 acre of wetland would be impacted that is located within a park in a city that only has 1.00 acre of total wetland, then the 0.10 acre of wetland impact could be considered “significant.”

If the action may have a potentially significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the Lead Agency may adopt a Negative Declaration (ND) if there is no substantial evidence that the project may have a potentially significant effect on the environment (14 CCR § 15070(a)).

A proposed Negative Declaration must be circulated for public review, along with a document known as an Initial Study. CEQA also allows for a “Mitigated Negative

Declaration” in which mitigation measures are proposed to reduce potentially significant effects to less than significant (14 CCR § 15369.5). Although the formulation of mitigation measures shall not be deferred until some future time, the specific details of a mitigation measure may be developed after project approval when it is impractical or infeasible to include those details during the project’s environmental review. The Lead Agency must (1) commit itself to the mitigation, (2) adopt specific performance standards the mitigation will achieve, and (3) identify the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure. Compliance with a regulatory permit or other similar processes may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards (§ 15126.4(a)(1)(B)).

Per CEQA, measures may also be adopted, but are not required, for environmental impacts that are not found to be significant (14 CCR § 15126.4(a)(3)). Under CEQA, mitigation is defined as *avoiding, minimizing, rectifying, reducing, and compensating for any potential impacts* (CEQA 15370). Regulatory agencies may require additional measures beyond those required for compliance with CEQA. Though not considered “mitigation” under CEQA, these measures are often referred to in an Initial Study as “mitigation”, Good Stewardship, or Best Management Practices. These measures can also be identified after the Initial Study/Negative Declaration is approved.

CEQA documents must consider direct and indirect impacts of a project (California Public Resources (CPR) Code § 21065.3). They are to focus on significant impacts (14 CCR § 15126.2(a)). Impacts that are less than significant need only be briefly described (14 CCR § 15128). All potentially significant effects must be addressed.

No-Build (No-Action) Alternative

For each of the following CEQA Environmental Checklist questions, the “No-Build” Alternative has been determined to have “No Impact”. Under the “No-Build” Alternative, no alterations to the existing conditions would occur and no proposed improvements would be implemented. The “No-Build” Alternative will not be discussed further in this document.

Definitions of Project Parameters

When determining the parameters of a project for potential impacts, the following definitions are provided:

Project Area: This is the general area where the project is located. This term is mainly used in the *Affected Environment* section (e.g., watershed, climate type, etc.).

Project Limits: This is the beginning and ending post miles for a project. This is different than the Environmental Study Limits in that it sets the beginning and ending limits of a project along the highway. It is the limits programmed for a project, and every report, memo, etc., associated with a project should use the same post mile limits. In some cases, there may be areas associated with a project that are outside of the project limits, such as staging and disposal locations.

Project Footprint: The area within the Environmental Study Limits (ESL) the project is anticipated to impact, both temporarily and permanently. This includes staging and disposal areas.

Environmental Study Limits (ESL): The project engineer provides the Environmental team the ESL (Figure 4) as an anticipated boundary for potential impacts. The ESL is *not* the project footprint. Rather, it is the area *encompassing* the project footprint where there could *potentially* be direct and indirect disturbance by construction activity. The ESL is larger than the project footprint in order to accommodate any future scope changes. The ESL is also used for identifying the various Biological Study Areas (BSAs) needed for different biological resources.

Biological Study Area (BSA): The BSA encompasses the ESL plus any areas outside of the ESL that could be potentially affected by a project (e.g., noise, visual, Coastal Zone, etc.). Depending on resources in the area, a project could have multiple BSAs. Each BSA should be identified and defined. If the project is within the Coastal Zone, this area would also include the required 100 foot buffer.

As there are no required buffers for special status species which would define the BSA, for the purposes of this document, the BSA is the same as the ESL.

2.1 Aesthetics

Except as provided in Public Resources Code Section 21099:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Have a substantial adverse effect on a scenic vista?				✓
Would the project: b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
Would the project: c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				✓
Would the project: d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Visual Impact Assessment* dated August 21, 2024 (Caltrans 2024i).

Potential impacts to visual characteristics of the environmental setting are not anticipated as the proposed project would be visually compatible with the existing infrastructure and would not impact the visual characteristic of the existing environment. The proposed project would not have an adverse effect on any scenic resources as there are no scenic resources within the proposed project site. No scenic vistas or informal scenic vistas have been established within or visible from the proposed project site. The proposed project site, located in a non-urbanized area, is surrounded by open agricultural farmlands. The proposed improvements would not degrade the existing visual character the public travelers currently experience along State Route 12. The proposed project would not create any new source of light or glare.

2.2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project; the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
Would the project: b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
Would the project: c) Conflict with existing zoning for, or cause rezoning of forest land (as defined by 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))?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
Would the project: e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, the California Department of Conservation Farmland Maps (California Department of Conservation 2020), and Williamson Act data from Sacramento County General Map Viewer (County of Sacramento 2023).

Potential impacts are not anticipated as the proposed project work would occur within the existing Caltrans right of way on State Route 12. The proposed project does not require the acquisition of land. The proposed project would not cause any zoning conflicts or change any zoning. There are no forest or timberlands within the project limits. The proposed project work would not change the existing environment.

2.3 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.

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
Would the project: b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				✓
Would the project: c) Expose sensitive receptors to substantial pollutant concentrations?				✓
Would the project: d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓	

Regulatory Setting

The federal Clean Air Act (CAA), as amended, is the primary federal law that governs air quality, while the California Clean Air Act (CAA) is its corresponding state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and California Air Resources Board (CARB), set standards for the concentration of pollutants in the air.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under NEPA. In addition to this analysis, a parallel “Conformity” requirement under the federal CAA also applies. U.S. EPA regulations at 40 Code of Federal Regulations (CFR) 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for National Ambient Air Quality Standards (NAAQS) and do not apply at all for state standards regardless of the status of the area.

Affected Environment

The *Air Quality, Greenhouse Gas, and Energy Analysis* was prepared on September 17, 2024 (Caltrans 2024a). This project is an intersection channelization project under the Highway Safety Improvement Program (HSIP). As such, this project is exempt from all air quality conformity analysis requirements per Table 2 of 40 Code of Federal Regulations (CFR) § 93.126, subsection “Safety” (“Highway Safety Improvement Program implementation”) and no further air quality analysis is required under NEPA. The proposed project is located within the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD). SMAQMD is the primary agency responsible for writing the Air Quality Management Plan in cooperation with the Sacramento Area Council of Governments, local agencies, and the private sector. This Plan provides the blueprint for meeting state and federal ambient air quality standards.

Environmental Consequences

This project is not a capacity-increasing transportation project. The proposed modifications would not result in changes to the traffic volume, fleet mix, speed, location of existing facility or any other factor that would cause an increase in emissions relative to the No-Build Alternative; therefore, this project would not cause an increase in operational emissions. During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other construction-related activities. Construction activities are expected to increase traffic congestion in the area, resulting in increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Avoidance, Minimization and Mitigation Measures

Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.6 would be implemented to avoid and minimize impacts to air quality.

Based on the determinations made in the CEQA Environmental Checklist, impacts would be less than significant and no mitigation is required.

Discussion of CEQA Environmental Checklist Question 2.3—Air Quality

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The proposed project does not conflict or obstruct implementation of the applicable air quality plans. The proposed project is a safety project which would install a median barrier, improve left turn access at the intersection of Terminous Road, and rehabilitate drainage system.

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

No Impact. The proposed project and its scope of work would not result in the increase of criteria pollutants.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

No Impact. The proposed project is not adjacent to sensitive receptors (e.g., schools, residential, hospitals), therefore would have no impact.

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

Less Than Significant Impact. The proposed project's scope of work includes installing a concrete median barrier, widening the roadway shoulder to current standards, and drainage work. Upon completion of construction, the proposed project would not induce additional emissions. Construction activities would be temporary and would comply with standardized procedures or minimizing air pollutants during construction. Temporary impacts would be less than significant.

2.4 Biological Resources

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?				✓
Would the project: 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?				✓
Would the project: c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
Would the project: 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?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
Would the project: 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” determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Natural Environment Study/Minimal Impacts* (NES/MI) (Caltrans 2024f) prepared in September 2024. Potential impacts to biological resources are not anticipated as there are no biological resources located within the proposed project limits.

The proposed project is located in a rural area of Sacramento County, within the city of Isleton, and work would only occur within the existing Caltrans right of way along the shoulder of SR 12 and the roadway of SR 12 itself. There are no habitats present for any candidate, sensitive, or special status species within the ESL. There are no riparian habitats or sensitive natural communities of special concern. The proposed project is not located near any state or federally protected wetlands. There are no migratory wildlife corridors or use of native wildlife nursery sites present. The proposed project’s scope of work does not involve any tree removal. There is no conservation plan that covers the location of the ESL. The closest plan is the South Sacramento Habitat Conservation Plan and its border ends approximately 4 miles to the north of the proposed project limits.

Avoidance, Minimization and Mitigation Measures

The Federal Migratory Bird Treaty Act (MBTA) (15 USC 703-711), Title 50 Code of Federal Regulations (CFR) Part 21 and 50 CFR Part 10, and the California Department of Fish and Game Code (CFGF) Sections 3503, 3513, 3800, and AB-2627 protect migratory birds, their occupied nests, and their eggs from disturbance or destruction.

Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.6 would be implemented to avoid and minimize impacts to special status species. Additionally, the following Standard Special Provisions (SSPs) will be implemented during project activities to protect those species covered under the MBTA.

- SSP 14-6.03 B Bird protection: To ensure compliance with Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Section 3513, If possible vegetation removal should occur outside the nesting season (February 1–September 30). If this is not possible and vegetation removal is to occur during the nesting season, a pre-construction survey will be required. The pre-construction survey will be performed by a qualified biologist 5 days *prior to beginning of work* to determine the presence of nesting birds and ensure active nests are not directly or indirectly impacted during construction. The pre-construction survey area will include the limits of the project impact area plus a 500-foot buffer. If an active nest is found, a qualified biologist will notify the Resident Engineer and determine the appropriate buffer distance from construction to ensure protection of the nest. The contractor will stop work within the protected buffer area until the qualified biologist determines the nest is inactive.
- SSP 14-6.03D Contractor-supplied biologist: The Contractor-Supplied Biologist will monitor tributary diversion or dewatering for aquatic species, vegetation removal for aquatic and terrestrial species, ESA, and silt fencing stability, and any other biological commitments for this project.
- SSP 14-6.03D(2) Natural Resource Protection Plan: The Natural Resource Protection Plan (NRPP) requires the use of a Contractor-Supplied Biologist. The Contractor gathers all the requirements from SSP 14-6.02 Species Protection and from the various permits, licenses, agreements, and certifications (PLACs) into one document, and describes the implementation measures the Contractor will take to assure that the requirements are met.

The Contractor-Supplied Biologist will be on site in order to survey, monitor, and potentially remove any wildlife species from the project area.

- SSP 14-6.03D(3) Biological resource information program: The Biological Resource Information Program (BRIP) requires the Contractor-Supplied Biologist to prepare and present a Biological Resource Information Program to familiarize personnel with regulated species and habitats, related laws and regulations, and species protection measures and protocols.

Based on the determinations made in the CEQA Environmental Checklist, no mitigation measures are proposed for biological resources.

2.5 Cultural Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				✓
Would the project: b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?				✓
Would the project: c) Disturb any human remains, including those interred outside of dedicated cemeteries?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Historic Property Survey Report* dated August 2024 (Caltrans 2024d) and *Archaeological Survey Report* dated August 2024 (Caltrans 2024b).

The proposed project would not cause a substantial adverse change in the significance of historical or archaeological resources. There are no historical resources in the Area of Potential Effects (APE). While the Sacramento River TCL boundary is within the APE, there are no elements of the archaeological resource within the project ESL. Based on the cultural studies, no burial sites were identified within the Environmental Study Limits. The proposed project is not anticipated to disturb any human remains.

Avoidance, Minimization and Mitigation Measures

Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.6 would be implemented to avoid and minimize impacts to cultural resources.

- Caltrans Standard Special Provision (SSP) 14-1.02 for archaeological monitoring will be applied. An archaeological monitor and Wilton Rancheria tribal monitor will be used during ground-disturbing activities.

Based on the determinations made in the CEQA Environmental Checklist, no mitigation measures are proposed.

2.6 Energy

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?				✓
Would the project: b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Air Quality, Greenhouse Gas, and Energy Analysis* dated September 17, 2024 (Caltrans 2024a).

Potential impacts are not anticipated due to the proposed project scope of work which would not increase capacity or provide congestion relief when compared to the No-Build Alternative, making it unlikely energy consumption from mobile sources would occur. Construction-related energy consumption would be temporary. There would not be a permanent new source of energy demand. The proposed project’s scope of work does not include activities that would result in long-term energy consumption by equipment required to operate and maintain in the roadway. This proposed safety project would install a median barrier and would not conflict or obstruct a state or local plan for renewable energy or energy efficiency.

2.7 Geology and Soils

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> 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. 				✓
ii) Strong seismic ground shaking?				✓
iii) Seismic-related ground failure, including liquefaction?				✓
iv) Landslides?				✓
Would the project: b) Result in substantial soil erosion or the loss of topsoil?				✓
Would the project: 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?				✓
Would the project: 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?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓
Would the project: f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, the Alquist Priolo Earthquake Zoning Map (California Department of Conservation 2016), the *Preliminary Geotechnical Report* dated August 14, 2023 (Caltrans 2023a), as well as the *Paleontological Technical Study* dated July 26, 2024 (Caltrans 2024h).

Potential impacts to geology and soil resources are not anticipated and much of the proposed project’s work would occur on already constructed roadway. The proposed project location is not near any known earthquake faults, not located in a liquefaction zone or landslide zone and would not result in substantial soil erosion or loss of topsoil. The proposed project’s scope of work would not cause potential adverse effects or result in strong seismic ground shaking. The proposed project is not located on a geologic unit or soil that is unstable or would become unstable due to the project. There are no substantial risks to life or property as the proposed project is not located on expansive soil. The proposed project would not construct septic tanks or alternative wastewater disposal systems. There has been no unique paleontological resource or unique geologic feature identified with the proposed project limits.

2.8 Greenhouse Gas Emissions

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
Would the project: b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				✓

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. The Intergovernmental Panel on Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy. Climate change in the past has generally occurred gradually over millennia, or more suddenly in response to cataclysmic natural disruptions. The research of the Intergovernmental Panel on Climate Change and other scientists over recent decades, however, has unequivocally attributed an accelerated rate of climatological changes over the past 150 years to GHG emissions generated from the production and use of fossil fuels.

Human activities generate GHGs consisting primarily of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), and various hydrofluorocarbons (HFCs). CO₂ is the most abundant GHG; while it is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO₂ that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO₂.

The impacts of climate change are already being observed in the form of sea level rise, drought, extended and severe fire seasons, and historic flooding from changing storm patterns. The most important strategy to address climate change is to reduce GHG emissions. Additional strategies are necessary to mitigate and adapt to these impacts. In the context of climate change, “mitigation” involves actions to reduce GHG emissions to lessen adverse impacts that are likely to occur. “Adaptation” is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation project.

Regulatory Setting

For a full list of laws, regulations, and guidance related to climate change (GHGs and adaptation), please refer to Caltrans’ Standard Environmental Reference (SER), Chapter 16, Climate Change.

Federal

To date, no nationwide numeric mobile-source GHG reduction targets have been established; however, federal agencies are mandated to consider the effects of climate change in their environmental reviews.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) is the basic national charter for protection of the environment which establishes policy, sets goals, and provides direction for carrying out the policy. NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project. In May 2024, the White House Council on Environmental Quality (CEQ) issued the National Environmental Policy Act Implementing Regulations Revisions Phase 2 (89 Federal Regulations [FR] Reg. 35442). The CEQ regulations do not establish numeric thresholds of significance, but mandate that federal agencies consider the effects of climate change in their environmental reviews, including direct, indirect, and cumulative impacts. The CEQ regulations further require that agencies quantify greenhouse gas emissions, where feasible, from the proposed action and alternatives. The regulations also direct agencies to identify reasonable alternatives that reduce climate change-related effects.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea level rise, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2022). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—“the triple bottom line of sustainability” (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Early efforts by the federal government to improve fuel economy and energy efficiency to address climate change and its associated effects include The Energy Policy and Conservation Act of 1975 (42 USC Section 6201); and Corporate Average Fuel Economy (CAFE) Standards. The U.S. Department of Transportation’s National Highway Traffic and Safety Administration (NHTSA) sets and enforces corporate average fuel economy (CAFE) standards for on-road motor vehicles sold in the United States. The Environmental Protection Agency (U.S. EPA) calculates average fuel economy levels for manufacturers, and also sets related GHG emissions standards for vehicles under the Clean Air Act. Raising CAFE standards leads automakers to create a more fuel-efficient fleet, which improves our nation’s energy security, saves consumers money at the pump, and reduces GHG emissions (U.S. DOT 2014). These standards are periodically updated and published through the federal rulemaking process.

State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs).

In 2005, EO S-3-05 initially set a goal to reduce California’s GHG emissions to 80 percent below year 1990 levels by 2050, with interim reduction targets. Later EOs and Assembly and Senate bills refined interim targets and codified the emissions reduction goals and strategies. The California Air Resources Board (CARB) was directed to create a climate change scoping plan and implement rules to achieve

“real, quantifiable, cost-effective reductions of greenhouse gases.” Ongoing GHG emissions reduction was also mandated in Health and Safety Code (H&SC) Section 38551(b). In 2022, the California Climate Crisis Act was passed, establishing state policy to reduce statewide human- caused GHG emissions by 85 percent below 1990 levels, achieve net zero GHG emissions by 2045, and achieve and maintain negative emissions thereafter.

Beyond GHG reduction, the State maintains a climate adaptation strategy to address the full range of climate change stressors, and passed legislation requiring state agencies to consider protection and management of natural and working lands as an important strategy in meeting the state’s GHG reduction goals.

Environmental Setting

The proposed project is located in an isolated rural non-attainment area in Sacramento County. An isolated rural non-attainment area, as defined in 40 CFR 93.101, is an area not part of a metropolitan planning area and does not have federally required metropolitan transportation plans. Within the boundaries of Caltrans District 3, State Route (SR) 12 is approximately 6 miles long and runs east to west through open spaces, farmland, and rural areas between the Mokelumne River and the Sacramento River. SR 12 has a wide variety of users including commuters, recreational travelers, and freight truck drivers. The proposed project is located within the jurisdiction of the Sacramento Area Council of Governments (SACOG). SACOG is the agency responsible for guiding transportation development through their metropolitan transportation plan/sustainable community strategy and addressing GHGs reduction goals.

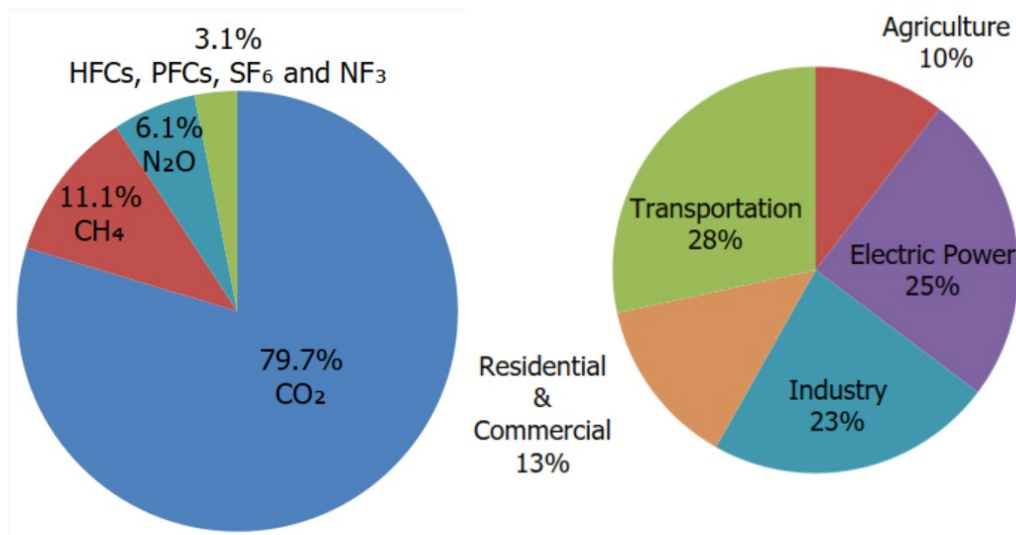
GHG Inventories

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the CARB does so for the state of California, as required by H&SC Section 39607.4. Cities and other local jurisdictions may also conduct local GHG inventories to inform their GHG reduction or climate action plans.

National GHG Inventory

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. Total national GHG emissions from all sectors in 2022 were 5,489.0 million metric tons (MMT), factoring in deductions for carbon sequestration in the land sector. (Land Use, Land Use Change, and Forestry provide a carbon sink equivalent to 15% of total U.S. emissions in 2022 [U.S. EPA 2024a].) While total GHG emissions in 2022 were 17% below 2005 levels, they increased by 1% over 2021 levels. Of these, 80% were CO₂, 11% were CH₄, and 6% were N₂O; the balance consisted of fluorinated gases. From 1990 to 2022, CO₂ emissions decreased by only 2% (U.S. EPA 2024a).

The transportation sector's share of total GHG emissions remained at 28% in 2022 and continues to be the largest contributing sector (Figure 4). Transportation activities accounted for 37% of U.S. CO₂ emissions from fossil fuel combustion in 2022. This is a decrease of 0.5% from 2021 (U.S. EPA 2024a, 2024b)).

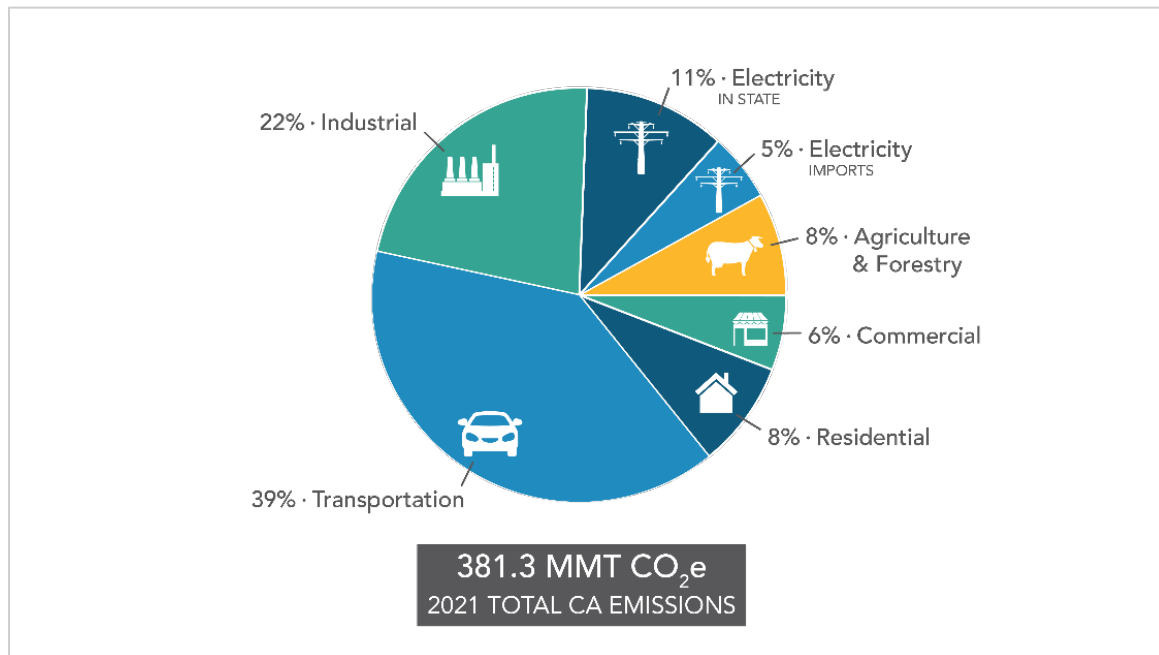


(Source: U.S. EPA 2024b)

Figure 4. U.S. 2022 Greenhouse Gas Emissions

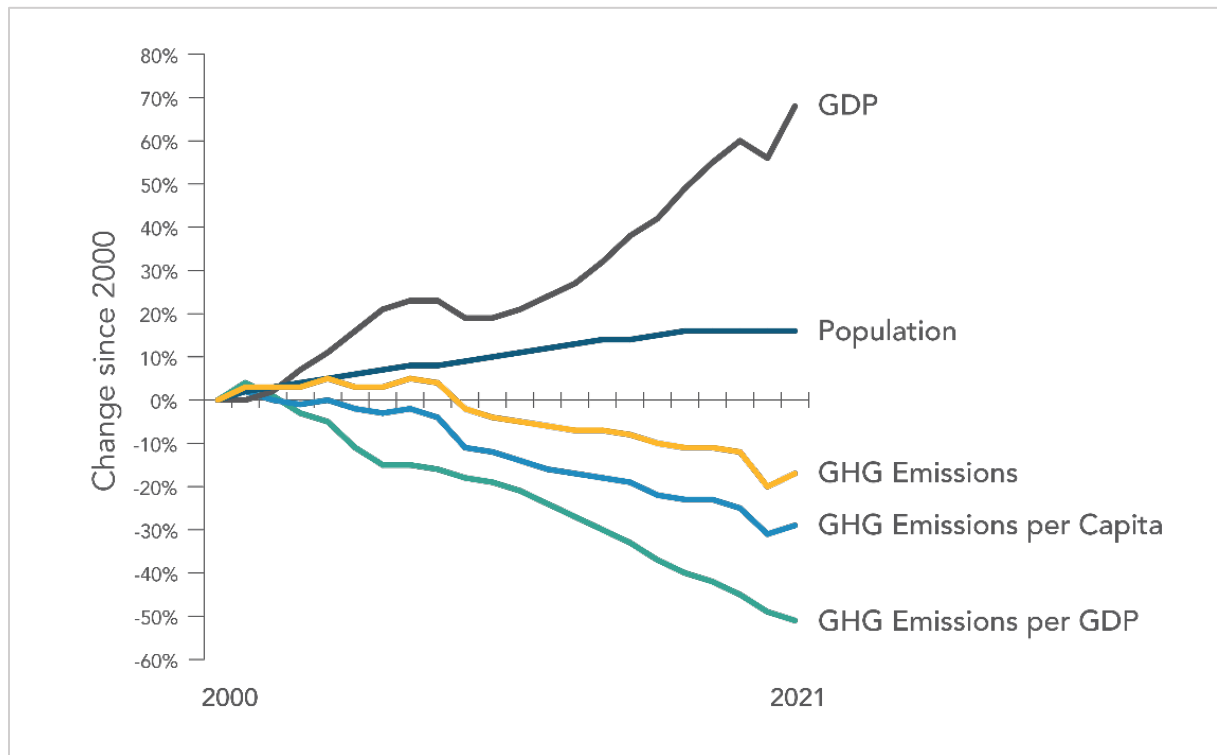
State GHG Inventory

The CARB collects GHG emissions data for transportation, electricity, commercial and residential, industrial, agricultural, and waste management sectors each year (Figure 5). It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. Overall statewide GHG emissions declined from 2000 to 2021 despite growth in population and state economic output (Figure 6). Transportation emissions remain the largest contributor to GHG emissions in the state (Figure 6) (CARB 2023).



(Source: CARB 2023)

Figure 5. California 2021 Greenhouse Gas Emissions by Economic Sector



(Source: CARB 2023)

Figure 6. Change in California GDP, Population, and GHG Emissions since 2000

AB 32 required the CARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020 and to update it every 5 years. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions. The CARB adopted the first scoping plan in 2008 (CARB 2008). The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The *2022 Scoping Plan for Achieving Carbon Neutrality*, adopted September 2022, assesses progress toward the statutory 2030 reduction goal and defines a path to reduce human-caused emissions to 85 percent below 1990 levels and achieve carbon neutrality no later than 2045, in accordance with AB 1279 (CARB 2022a).

Regional Plans

As required by *The Sustainable Communities and Climate Protection Act of 2008*, the CARB sets regional GHG reduction targets for California's 18 Metropolitan Planning Organizations (MPOs) to achieve through planning future projects that will cumulatively achieve those goals, and reporting how they will be met in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the RTP/SCS for SACOG. The regional reduction target for SACOG is 19% percent by 2035 (CARB 2021).

The proposed project location is within Sacramento County which is under the jurisdiction of SACOG. SACOG is designated by the federal government as the Metropolitan Planning Organization (MPO) for the Sacramento region. Yolo County, Solano County, Costa County, and San Joaquin County are within a few miles of the proposed project vicinity. SACOG is the Regional Transportation Planning Agency (RTPA) for Sacramento and Yolo counties. Solano, Costa, and San Joaquin counties share similar proposals as SACOG's RTP's to address GHG reduction in their jurisdictions. Transportation-related goals for these GHG reduction measures are referenced below in Table 1.

Table 1. Regional and Local Greenhouse Gas Reduction Plans

Title	GHG Reduction Policies or Strategies
<i>Sacramento Area Council of Governments (SACOG) Sacramento County Climate Action Plan (adopted August 2022) (County of Sacramento 2022b)</i>	<ul style="list-style-type: none"> • Low and Zero Emissions Vehicles and Equipment. • Natural and Working Lands. • Encourage use of electric or sustainably fueled construction equipment.
<i>Solano County Climate Action Plan (adopted June 7, 2011) County of Solano 2011)</i>	<ul style="list-style-type: none"> • Protect and preserve forested areas, agricultural lands, wildlife habitat, and wetlands that provide carbon sequestration.
<i>Contra Costa County Climate Action Plan (August 2024 Draft under Board of Supervisors Review) (County of Contra Costa 2024)</i>	<ul style="list-style-type: none"> • Reduce water use in unincorporated County and in County facilities. • Manage groundwater resources sustainably.
<i>San Joaquin County 2022 RTP/SCS & EIR (adopted June 24, 2022) (County of San Joaquin 2022)</i>	<ul style="list-style-type: none"> • GHG emission reduction measures for offroad construction vehicles during construction and perform periodic site inspections. Current GHG-reducing measures include the following: <ul style="list-style-type: none"> ○ Minimizing idling time (e.g., five-minute maximum). ○ Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the five-minute idling limit

Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation and use of the State Highway System (SHS) (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are CO₂, CH₄, N₂O, and HFCs. CO₂ emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH₄ and N₂O. A small amount of HFC emissions related to refrigeration is also included in the transportation sector. (GHGs differ in how much heat each traps in the atmosphere, called global warming potential, or GWP. CO₂ is the most important GHG, so amounts of other gases are expressed relative

to CO₂, using a metric called “carbon dioxide equivalent”, or CO₂e. The global warming potential of CO₂ is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO₂.)

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

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

Operational Emissions

The proposed project is a safety project that would reduce frequency and severity of collisions. The project would not increase capacity or change travel demands or traffic patterns when compared to the No-Build Alternative. The proposed project would install a concrete median barrier, widen inside shoulders to current standard width, improve left turn lane access at Terminous intersection, repair or replace drainage systems, repair pavement, upgrade roadside signs and guardrails, and install a new census station and new closed-circuit television. These improvements to update roadway features to current standards and added safety features to decrease collisions have low to no potential to increase GHG emissions. The type of work proposed in this project generally causes minimal or no increase in operational GHG emissions. Because the proposed project would not increase the number of travel lanes on State Route 12, no increase in vehicle miles traveled (VMT) would occur. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction. These emissions would 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. While construction GHG emissions are only produced for a short time, they have long-term effects in the atmosphere, so cannot be considered “temporary” in the same way as criteria pollutants that subside after construction is completed.

Use of long-life pavement, improved Transportation Management Plans, and changes in materials can also help offset GHG emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

Construction is expected to begin in 2027 and last approximately 200 working days. The Caltrans Construction Emissions Tool CAL-CET2021 v1.0.2 was used to estimate emissions from construction activities. Table 2 below summarizes estimated GHG emissions generated by on-site equipment for the project. The total CO₂e produced during construction is estimated to be 547 metric tons.

Table 2. Estimate of Total GHG Emissions during Construction

Construction Year	CO ₂ (tons)	CH ₄ (ton)	N ₂ O (ton)	BC (ton)	HFC-134a (ton)	CO ₂ e* (metric ton)
2027	476	0.011	0.026	0.018	0.013	463
2028	85	0.001	0.006	0.002	0.003	84
Total	561	0.012	0.031	0.020	0.016	547

Totals may not add due to rounding.

* Quantity of GHG is expressed as carbon dioxide equivalent (CO₂e) that can be estimated by the sum after multiplying each amount of CO₂, CH₄, N₂O, and HFC134a by its global warming potential (GWP). Each GWP of CO₂, CH₄, N₂O, BC and HFC- 134a is 1, 25, 298, 460 and 1,430, respectively.

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

Additional measures include:

- Utilizing a Transportation Management Plan to minimize vehicle delays
- Scheduling and routing construction traffic to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- Maintaining equipment in proper tune and working condition

CEQA Conclusion

The proposed project's primary scope of work is to install a median barrier. The proposed project would not increase capacity and would not change travel demands or change traffic patterns when compared to the No-Build Alternative. While the proposed project would result in GHG emissions during construction, the proposed project would not result in any increase in operational GHG emissions. Therefore, the proposed project would result in a less than significant impact on generating greenhouse gas emissions. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.6 would be implemented to avoid and minimize impacts. The proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose reducing the emissions of greenhouse gases; as the proposed safety project would not result in operational GHG emissions being increased.

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

Greenhouse Gas Reduction Strategies

Statewide Efforts

In response to Assembly Bill 32, the Global Warming Solutions Act, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors to take California into a sustainable, cleaner, low-carbon future, while maintaining a robust economy (CARB 2022b).

Major sectors of the California economy, including transportation, will need to reduce emissions to meet 2030 and 2050 GHG emissions targets. The Governor's Office of Planning and Research identified five sustainability pillars in a 2015 report: (1) Increasing the share of renewable energy in the State's energy mix to at least 50 percent by 2030; (2) Reducing petroleum use by up to 50 percent by 2030; (3) Increasing the energy efficiency of existing buildings by 50 percent by 2030; (4) Reducing emissions of short-lived climate pollutants; and (5) Stewarding natural resources, including forests, working lands, and wetlands, to ensure that they store carbon, are resilient, and enhance other environmental benefits (California Governor's Office of Planning and Research [OPR] 2015).

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of VMT. Reducing today's petroleum use in cars and trucks is a key state goal for reducing greenhouse gas emissions by 2030 (OPR 2015).

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

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency released *Natural and Working Lands Climate Smart Strategy* (California Natural Resources Agency 2022).

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the CARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016) set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

Climate Action Plan for Transportation Infrastructure

The California Action Plan for Transportation Infrastructure (CAPTI) builds on executive orders signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under CAPTI, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals (California State Transportation Agency 2021).

California Transportation Plan

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the

transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021a).

Caltrans Strategic Plan

The *Caltrans 2020–2024 Strategic Plan* includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021b).

Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a policy to ensure coordinated efforts to incorporate climate change into Caltrans decisions and activities. Other Director's policies promote energy efficiency, conservation, and climate change, and commit Caltrans to sustainability practices in all planning, maintenance, and operations. *Caltrans Greenhouse Gas Emissions and Mitigation Report* (Caltrans 2020b) provides a comprehensive overview of Caltrans' emissions and current Caltrans procedures and activities that track and reduce GHG emissions. It identifies additional opportunities for further reducing GHG emissions from Department-controlled emission sources, in support of Caltrans and State goals.

Project-Level GHG Reduction Strategies

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

- Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality (Caltrans Standard Specification [SS] 14-9).
- Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of diesel-fueled commercial motor vehicles and equipment with gross weight ratings of greater than 10,000 pounds to no more than 5 minutes.

- Caltrans Standard Specification “Emissions Reduction” ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board (CARB) (Caltrans SS 7-1.02C).
- Use of a Transportation Management Plan (TMP) to minimize vehicle delays and idling emissions. As part of this, construction traffic would be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along the highway during peak travel times.
- All areas temporarily disturbed during construction would be revegetated with appropriate native species, as appropriate. Landscaping reduces surface warming and, through photosynthesis, decreases CO₂. This replanting would help offset any potential CO₂ emissions increase.

Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state’s transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Furthermore, the combined effects of transportation projects and climate stressors can exacerbate the impacts of both on vulnerable communities in a project area. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA Assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The *Fifth National Climate Assessment*, published in 2023, presents the most recent science and “analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; [It] analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years ... to support informed decision-making across the United States.” Building on previous assessments, it continues to advance “an inclusive, diverse, and sustained process for assessing and communicating scientific knowledge on the impacts, risks, and vulnerabilities associated with a changing global climate” (U.S. Global Change Research Program 2023).

The U.S. Department of Transportation recognizes the transportation sector’s major contribution of GHGs that cause climate change and has made climate action one of the department’s top priorities (U.S. DOT 2023). FHWA’s policy is to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that fosters resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2022).

The National Oceanic and Atmospheric Administration provides sea level rise projections for all U.S. coastal waters to help communities and decision makers assess their risk from sea level rise. Updated projections through 2150 were released in 2022 in a report and online tool (NOAA 2022).

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. A number of state policies and tools have been developed to guide adaptation efforts.

California's Fourth Climate Change Assessment (Fourth Assessment) (State of California 2018) provides information to help decision makers across sectors and at state, regional, and local scales protect and build the resilience of the state's people, infrastructure, natural systems, working lands, and waters. The Fourth Assessment reported that if no measures are taken to reduce GHG emissions by 2021 or sooner, the state is projected to experience an up to 8.8 degrees Fahrenheit increase in average annual maximum daily temperatures; a two-thirds decline in water supply from snowpack resulting in water shortages; a 77% increase in average area burned by wildfire; and large-scale erosion of up to 67% of Southern California beaches due to sea level rise. These effects will have profound impacts on infrastructure, agriculture, energy demand, natural systems, communities, and public health (State of California 2018).

Sea level rise is a particular concern for transportation infrastructure in the coastal zone.) Major urban airports will be at risk of flooding from sea level rise combined with storm surge as early as 2040; San Francisco airport is already at risk. Miles of coastal highways vulnerable to flooding in a 100-year storm event will triple to 370 by 2100, and 3,750 miles will be exposed to temporary flooding. The Fourth Assessment's findings highlight the need for proactive action to address these current and future impacts of climate change.

To help actors throughout the state address the findings of California's Fourth Climate Change Assessment, AB 2800's multidisciplinary Climate-Safe Infrastructure Working Group published *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. This report provides guidance on assessing risk in the face of inherent uncertainties still posed by the best available climate change science. It also examines how state agencies can use infrastructure planning, design, and implementation processes to respond to the observed and anticipated climate change impacts (Climate-Safe Infrastructure Working Group 2018).

EO S-13-08, issued in 2008, directed state agencies to consider sea level rise scenarios for 2050 and 2100 during planning to assess project vulnerabilities, reduce risks, and increase resilience to sea level rise. It gave rise to the *2009 California Climate Adaptation Strategy*, the *Safeguarding California Plan*, and a series of technical reports on statewide sea level rise projections and risks, including the *State of California Sea-Level Rise Guidance Update* in 2018. The reports addressed the full range of climate change impacts and recommended adaptation strategies. The current California Climate Adaptation Strategy incorporates key elements of the latest sector-specific plans such as the *Natural and Working Lands Climate Smart Strategy*, *Wildfire and Forest Resilience Action Plan*, *Water Resilience Portfolio*, and the *CAPTI* (described above). Priorities in the *2023 California Climate Adaptation Strategy* include acting in partnership with California Native American Tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, implementing nature-based climate solutions, using best available climate science, and partnering and collaboration to best leverage resources (California Natural Resources Agency 2023).

EO B-30-15 recognizes that effects of climate change threaten California's infrastructure and requires state agencies to factor climate change into all planning and investment decisions. Under this EO, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies*, to encourage a uniform and systematic approach to building resilience.

SB 1 Coastal Resources: Sea Level Rise (in Atkins 2021) established statewide goals to “anticipate, assess, plan for, and, to the extent feasible, avoid, minimize, and mitigate the adverse environmental and economic effects of sea level rise within the coastal zone.” As the legislation directed, the Ocean Protection Council collaborated with 17 state planning and coastal management agencies to develop the *State Agency Sea-Level Rise Action Plan for California* in February 2022. This plan promotes coordinated actions by state agencies to enhance California's resilience to the impacts of sea level rise (California Ocean Protection Council 2022).

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans completed climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea level rise.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments guide analysis of at-risk assets and development of Adaptation Priority Reports as a method to make capital programming decisions to address identified risks.

Caltrans Sustainability Programs

The Director's Office of Equity, Sustainability and Tribal Affairs supports implementation of sustainable practices at Caltrans. The *Sustainability Roadmap* is a periodic progress report and plan for meeting the Governor's sustainability goals related to EOs B-16-12, B-18-12, and B-30-15. The Roadmap includes designing new buildings for climate change resilience and zero-net energy, and replacing fleet vehicles with zero-emission vehicles (Caltrans 2023b).

Project Adaptation Analysis

The adaptation analysis is intended to demonstrate how the proposed project will be adapted for resiliency to future climate change effects. Future changes in precipitation, flooding, wildfires, and temperature were considered in the planning and design decisions for the proposed project.

The project proposes to rehabilitate existing drainage systems that are in need of repair; while also extending culverts to accommodate the widening of the roadway. The new drainage features would be designed to perpetuate flow in the existing direction and would have similar or greater capacity than what currently exists. The upgraded and rehabilitated culverts would better facilitate runoff during precipitation events. This would increase resiliency of the drainage systems against flooding from changing precipitation.

The project proposes to improve user safety by installing a concrete barrier and widen inside shoulders to standard width. Additional pavement repairs would occur at locations of existing severe asphalt pavement failures. Improvements to damaged pavements would prevent further deterioration. Precipitation can result in damage to pavements. Repairing pavement before any further deterioration occurs would provide better resiliency to any future increases in precipitation.

The proposed project would not exacerbate the effects of climate change related to CEQA topics such as sea level rise, riverine flooding, hazards, and wildfire. Climate-change risk analysis involves uncertainties as to the timing and intensity of potential risks, although the analysis uses the best available science.

Sea Level Rise

The proposed project is located outside the Coastal Zone (Figure 7) but within an area subject to sea level rise (Figure 8). The proposed project area is vulnerable to sea level rise due to its proximity within the Sacramento-San Joaquin Delta (Delta).

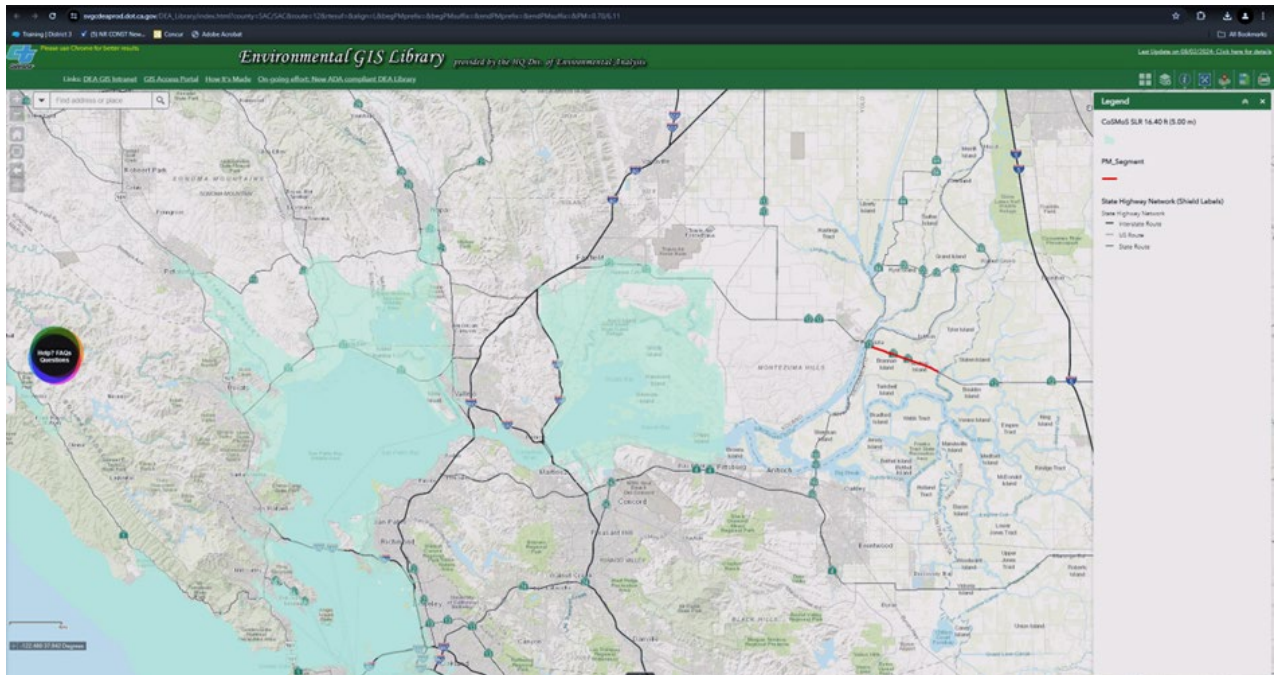


Figure 7. Project Location Outside the Coastal Zone

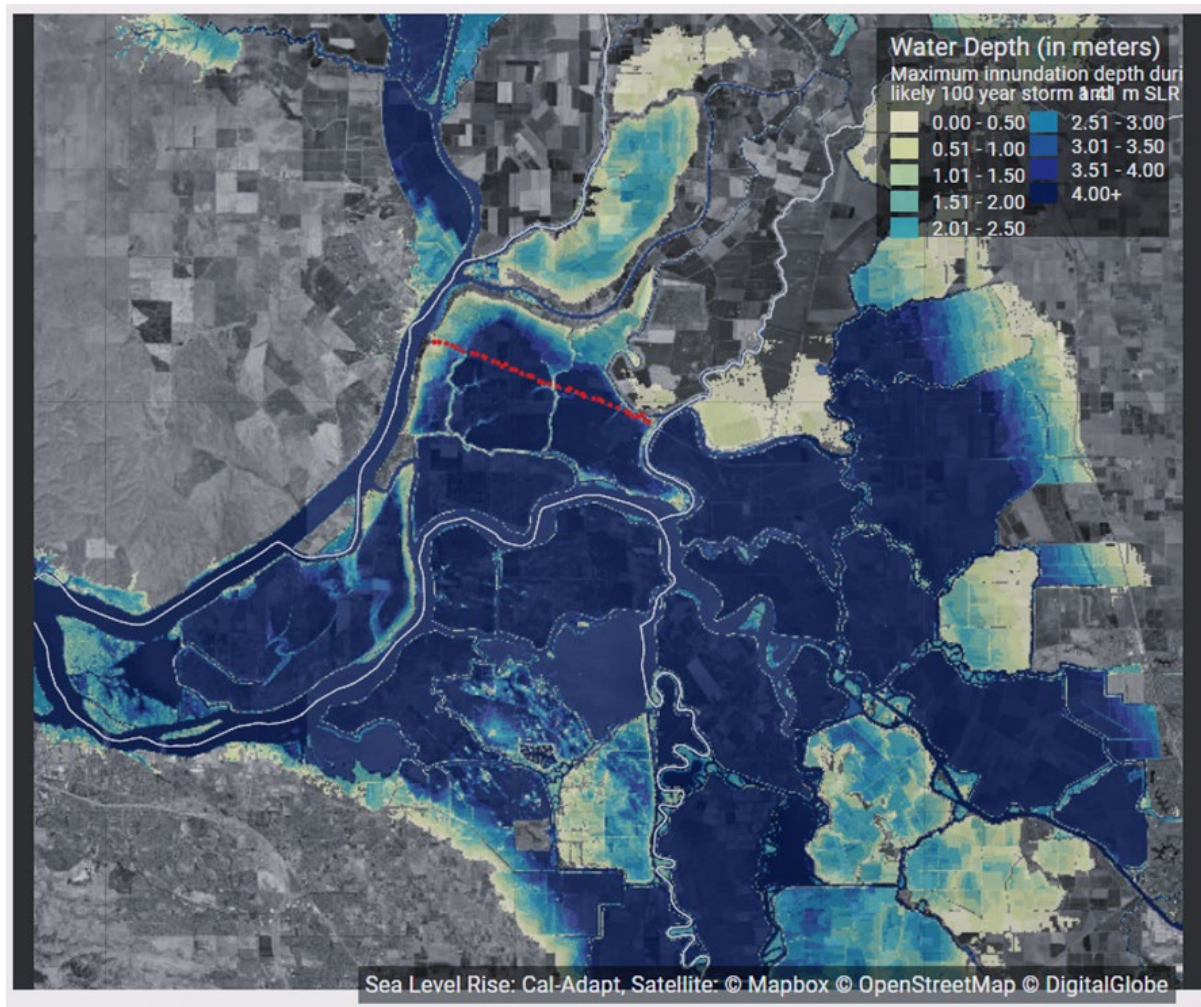


Figure 8. Project Location Subject to Sea Level Rise

Delta Stewardship Council (DSC) was created to advance the State's goals for the Delta. DSC has created the *Delta Plan*, which is a long-term management plan for the Delta. The *Delta Plan* states the difficulties in predicting sea level rise within the Delta due to interactions with river flows, tidal restoration efforts, and potential future sea level rise adaption efforts (Delta Stewardship Council 2019).

The facilities and assets located within the Delta, including those with the highest vulnerabilities to sea level rise, have been identified in the *Caltrans Adaptation Priority Report* for District 3. None of the drainage locations in the proposed project are identified as priority assets. However, the pavement within the proposed project limits was categorized at the top of the Priority 1 Climate Vulnerable Asset listing for “pavement vulnerable to temperature impacts on pavement binder grades, sea level rise, storm surge threats, and network criticality” (Caltrans 2020a).

The purpose of the proposed Sac 12 Terminus Safety Project is not to address all of the priority assets identified in the report, rather to reduce collisions and maintain safety of the corridor by installing a median barrier, widen inside shoulders along State Route 12 to current standards, improve left turn access at Terminus Road, repair or replace drainage systems, and install TMS elements. Widening roadway shoulders to current standards both improves safety of the corridor and addresses needed repairs to pavement identified as a priority asset.

Caltrans Climate Change Vulnerability Assessment for District 3 analyzes sea level rise within the District and states “State Route 12 would not be vulnerable until higher sea level rise scenarios – only minor portions appear vulnerable until the 5.74 feet (1.75 meter) sea level rise scenario” (Caltrans 2019). The proposed project would be within that minor portion of State Route 12 as shown in Figure 9. The proposed project limits presently range in elevation from 22 feet below sea level to 4 feet above sea level, as mentioned in Section 2.10 and from the *Floodplain Hydraulics Study* (Caltrans 2024c).



The Ocean Protection Council's (OPC) extreme estimate (H++ scenario) for sea level rise predictions would have sea level rise reaching 5.74 feet within the proposed project area by 2070. OPC's lowest estimate with high emissions (0.5% probability) for sea level rise predictions would have sea level rise reaching 5.74 feet within the proposed project area around 2085.

Rehabilitated pavement has a design life of 10 to 12 years and the new sections of pavement have a design life of 20 years. The design life for the drainage system installation of reinforced concrete pipe (RCP) at PM 5.420 is between 40 to 60 years.

The project's expected construction year is 2027. Projected sea level rise within the project limits would occur from 2070 to 2085. If the proposed project is constructed in 2027, and the pavement is replaced before 40 years passes, no direct impacts to the pavement due to SLR would be anticipated. If the pavement is replaced after 40 years passes, increased exposure to sea water may occur during overlapping storm and high-tide events. If the pavement is not replaced until after 60 years is passed, degradation is forecast to happen due to presence of sea level inundation. Similarly, this SLR scenario applies to the drainage system. If the drainage system is replaced before 40 years passes and the drainage system's minimum lifespan of 40 years is met, then no direct impacts to the drainage system from SLR would be anticipated. If the drainage system is replaced before 40 years passes, and the maximum lifespan of 60 years is met, direct impacts due to SLR could be possible.

Precipitation and Flooding

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) labels the proposed project area as Zone AE. FEMA defines Zone AE as a Special Flood Hazard Area (SFHA). SFHA are areas that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood.

The *Caltrans Climate Change Vulnerability Assessment Report* for District 3 predicts the proposed project's vicinity to have a 0.0%–4.9% increase in 100-year precipitation depth by 2055. This increase in precipitation would cause greater potential impact on drainage facilities within this flood hazard area.

Drainage systems in good condition can reduce the risk of localized flooding and protect the integrity of the roadbed during precipitation events. Paving the roadway is included in the proposed project's scope of work. Functioning drainage systems can protect the safety of the roadway and the roadbed itself by helping ensure the integrity of the new pavement. The proposed work to repair and improve drainage facilities would extend the life of the current drainage systems. The rehabilitated drainage system would be more resilient to any changes in water flow from increases precipitation or flooding.

Wildfire

The *Caltrans Climate Change Vulnerability Assessment Report* for District 3 classifies the risk for wildfires occurring within the project location to be *below moderate* which is supported in CAL FIRE's Fire Hazard Severity Zone mapping (Figure 10). The mapping displays the proposed project area (circled in pink), which is not in a location vulnerable to wildfire.

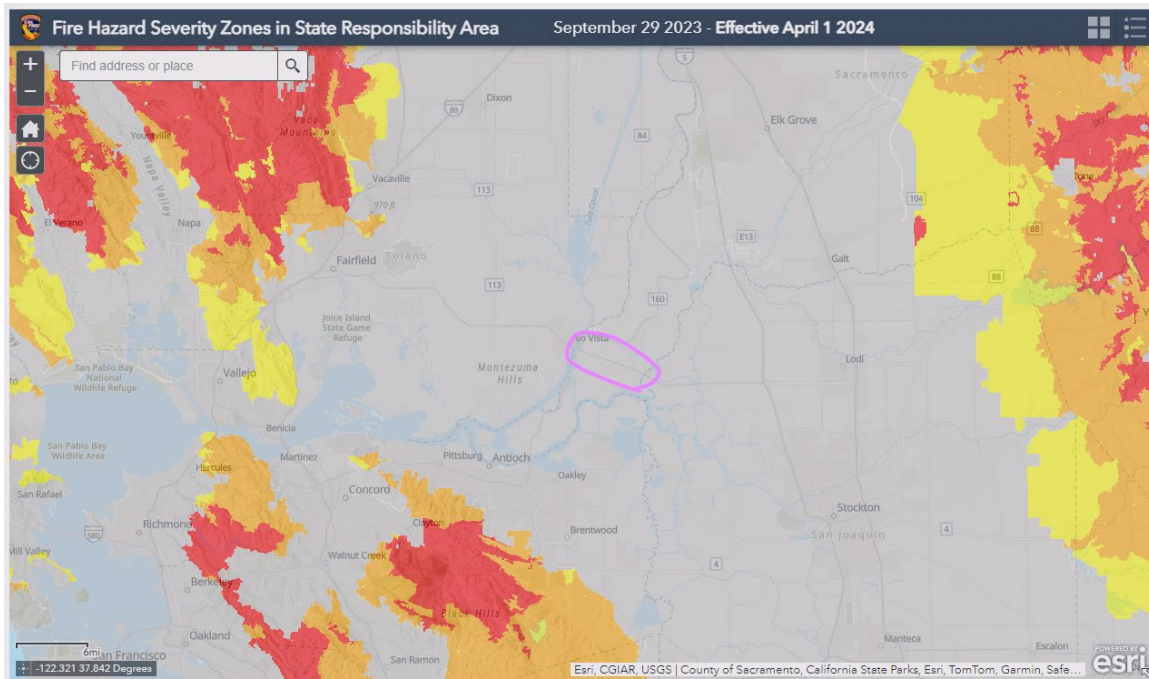


Figure 10. CAL FIRE Map of the Project Area within Fire Hazard Severity Zones in the State Responsibility Area.

Temperature

Caltrans Climate Change Vulnerability Assessment for District 3 indicates a temperature increase of 6.0 to 7.9 degrees within the proposed project area. This could worsen the current vulnerable condition of the pavement within the proposed project limits. The pavement roadway between Post Mile 0.395 and 6.074 has been identified in the *Adaptation Priorities Report* as a Priority 1 Climate Vulnerable Asset for “pavement vulnerable to temperature impacts on pavement binder grades, sea level rise, storm surge threats, and network criticality” (Caltrans 2020a). The proposed scope of work to overlay the pavement would address the asset’s climate vulnerability and provide resiliency to current temperature effects.

2.9 Hazards and Hazardous Materials

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
Would the project: 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?				✓
Would the project: c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
Would the project: 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?				✓
Would 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 result in a safety hazard or excessive noise for people residing or working in the project area?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
Would the project: g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				✓

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many federal and state 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 laws governing hazardous materials, waste and substances include:

- California Health and Safety Code—Chapter 6.5
- Porter-Cologne Water Quality Control Act—§ 13000 et seq.
- CFR 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

An *Initial Site Assessment* dated August 29, 2024 (Caltrans 2024e) was prepared for this project.

The proposed project on State Route 12 in Sacramento County would install a concrete median barrier, widen the inside shoulders to standard width, and extend or repair existing culverts. This proposed work would be on existing structures which may have thermoplastic paint containing lead and treated wood waste. The testing results of other Caltrans projects in the area were reviewed. It is anticipated that nonhazardous and unregulated levels of aerially deposited lead (ADL) would occur in excavated or disturbed soil. Whether the project would have excess soil or whether all excavated soil can be reused or remain on-site without off-site disposal will be determined by Design during Phase 1 and if the proposed Build Alternative has been chosen. The proposed project is not located within or impacting any sites on the California State Water Resources Control Board Cortese List.

Avoidance, Minimization and Mitigation Measures

Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.6 would be implemented to avoid and minimize impacts to hazardous materials. The following Standard Special Provisions may also be implemented:

- Caltrans Standard Special Provision (SSP) 7-1.02K(6)(j)(iii) for Aerially Deposited Lead will be applied to address disturbed soils with potentially elevated concentration of lead.
- If removal of traffic striping occurs, SSP 36-4 regarding lead from paint and thermoplastic and SPP 84-9.03B to specify non-hazardous levels of lead residue would be implemented.
- During construction, treated wood waste may be present within the area. If treated wood waste is present, SSP 14-11.14 would allow treated wood waste for disposal as hazardous waste.

Based on the determinations made in the CEQA Environmental Checklist, no mitigation measures are proposed.

Discussion of CEQA Environmental Checklist Question 2.9—Hazards and Hazardous Materials

- a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

Less Than Significant Impact. Minor and non-hazardous waste issues that could potentially occur at the project site include ADL, thermoplastic paint, and treated wood waste. Before construction, it will be determined whether the project will have excess soil or whether all excavated soil can be reused or remain on-site without off-site disposal. With implementation of Caltrans Standards Measures and Best Management Practices (Section 1.6) and Caltrans Standard Specifications, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; therefore, there would be a less than significant impact.

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

No Impact. Implementation of Caltrans Standard Specifications for the removal and handling of known hazardous materials (such as treated wood waste, ADL, and yellow traffic striping) would minimize the chances of an accidental release of hazardous materials into the environment; therefore, there would be no impact.

- c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

No Impact. The proposed project is located in an area zoned for agriculture and is not located within one-quarter mile of an existing or proposed school. Therefore, there would be no impact.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The proposed project locations are not within or impacting any site on the Cortese list or on a site that is listed as a hazardous materials site compiled pursuant to Government Code Section 65962.5.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The proposed project is located in an area zoned for agriculture and is not located within an airport land use plan or within two miles of an airport.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan as emergency vehicles would be accommodated through any temporary ramp or lane closures.

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

No Impact. The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Standard construction specifications for equipment idling and fuel storage during construction are intended to minimize the risk associated with their use. If a wildland fire affected the area, work would stop, and evacuation routes would be accessible.

2.10 Hydrology and Water Quality

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			✓	
Would the project: b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			✓	
Would the project: c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			✓	
(i) result in substantial erosion or siltation on- or off-site;			✓	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			✓	
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			✓	
(iv) impede or redirect flood flows?			✓	

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			✓	
Would the project: e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			✓	

Regulatory Setting

The primary laws and regulations governing hydrology and water quality include:

- Federal: Clean Water Act (CWA)—33 USC 1344
- Federal: Executive Order for the Protection of Wetlands—EO 11990
- State: California Fish and Game Code (CFGF)—Sections 1600–1607
- State: Porter-Cologne Water Quality Control Act— Sections 13000 et seq.

Affected Environment

A *Water Quality Assessment* dated August 15, 2024, and *Floodplain Hydraulics Study* dated August 12, 2024, were prepared for this project (Caltrans 2024j and 2024c, respectively).

The proposed project sits between Bouldin Island and Andrus Island along State Route 12. The proposed project limits range in elevation from 22 feet below sea level to 4 feet above sea level. The nearest receiving waters are Tomato Slough, Jackson Slough, Delta Waterways Western, and Delta Waterways Eastern. The proposed project resides in a Total Maximum Daily Load (TMDL) watershed as the Delta Waterways are impaired for Methylmercury (Caltrans 2024j).

The proposed project is not located within a high-risk receiving watershed boundary. The entire area of the proposed project limits are designated as FEMA Flood Zone AE and are within a regulatory floodway. Zone AE classification implies the 1% annual flood, also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year.

Environmental Consequences

The proposed project scope of work to install a median barrier would not result in significant floodplain encroachment. The project is not expected to increase the water depth within the project limits (Caltrans 2024c).

Avoidance, Minimization and Mitigation Measures

Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.6 would be implemented to avoid and minimize impacts to hydrology and water quality.

Based on the determinations made in the CEQA Environmental Checklist, no mitigation measures are proposed.

Discussion of CEQA Environmental Checklist Question 2.10—Hydrology and Water Quality

- a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?***

Less Than Significant Impact. The discharge of stormwater runoff from construction sites could have the potential to affect water quality standards, water quality objectives and beneficial uses. Potential pollutants and sources include sediment; non-stormwater (groundwater, waters from cofferdams, dewatering, water diversions) discharges; vehicle and equipment cleaning agents, fueling, and maintenance; waste materials and materials handling; and storage activities. The proposed project would be required to follow the conditions of Caltrans' Statewide NPDES Permit (Stormwater Permit) issued by the State Water Resources Control Board. This statewide permit defines waste discharge requirements for stormwater and non-stormwater discharges from Caltrans' properties and facilities, and discharges associated with operation and maintenance of the State Highway System.

In addition, Caltrans' Stormwater Permit requires Caltrans follow strict and robust guidelines and protocols for implementing approved minimization and avoidance measures and Best Management Practices (BMPs) meant to protect environmental resources, groundwater, and receiving waters for the duration of project activities. Therefore, these impacts would be considered less than significant.

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

Less Than Significant Impact. The proposed project drainage work would include rehabilitating culverts, extending culverts due to shoulder widening, and reconstruction of drainage ditches due to shoulder widening. The intended use of the facility and potential pollutants that will be encountered in stormwater runoff after the project is constructed are not anticipated to change from their current condition. The project is within the Sacramento Valley Groundwater Basin–Solano Subbasin (5-21.66) and pollutants characterized are not linked to Caltrans activities or facilities. Additionally, due to excavation occurring on a temporary and short-term basis during the construction period, groundwater resources should not be affected. It is not anticipated that work being performed would negatively impact regional sustainable groundwater management within the project vicinity. Therefore, these impacts would be considered less than significant.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, impede or redirect flood flows?

Less Than Significant Impact. The proposed project drainage work is anticipated to perpetuate the existing stormwater drainage conditions to the maximum extent feasible. New drainage features would be designed to meet current standards and would flow in the existing direction and have similar or greater capacity than what currently exists. Drainage would be designed to accommodate any anticipated

changes in flow resulting from the addition of approximately 8.38 acres of new impervious surface area. The proposed project does not reside in a segment identified as being prone to erosion and work on the existing drainage system would not substantially alter the existing drainage pattern of the area.

Approximately 24 acres of land disturbance would occur and therefore the proposed project would require coverage under the Construction General Permit (CGP). Compliance with the Construction General Permit (CGP) is anticipated to address the implementation of minimization and avoidance measures, Standard Measures and BMPs, and field implementation strategies outlined in the Contractor-prepared and Caltrans-approved Stormwater Pollution Prevention Plan (SWPPP). These would likely include temporary soil stabilization measures, linear sediment barriers (e.g., silt fence, gravel bag berms, fiber rolls), and construction site waste management (e.g., concrete washout, construction materials storage, litter/waste management) among other approved controls meant to prevent erosion and siltation for the duration of project activities. In compliance with Caltrans' MS4 Permit, permanent treatment BMPs will be incorporated into the project design, where applicable and feasible, to treat stormwater runoff from the aggregated quantity of new impervious surface areas that reach or exceed the required threshold. Therefore, any impacts that may occur would be considered less than significant.

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

Less Than Significant Impact. The proposed project is located in an area designated by the Federal Emergency Management Agency (FEMA) as a Special Flood Hazard Area (SFHA). The proposed project occurs within a TDML watershed. The proposed project is required to follow the conditions of the Caltrans-approved Water Pollution Control Program (WPCP) or SWPPP to address onsite pollutants and the proper storage and containment of deleterious material that may impact receiving waters in the event of a flood threat. These impacts would be considered less than significant.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The proposed project location is under the jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB) and is expected to be in compliance with all applicable NPDES regulatory permits, including the Regional Basin Plan. The implementation of Caltrans Standard Measures and BMPs are anticipated to protect water quality resources within the proposed project limits. Therefore, impacts would be considered less than significant.

2.11 Land Use and Planning

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Physically divide an established community?				✓
Would the project: b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the Sacramento County General Map Viewer (County of Sacramento 2024).

Potential impacts to land use and planning are not anticipated. The proposed project would not physically divide an established community. The proposed project is located in an agricultural area and work would occur within the existing Caltrans right of way along State Route 12. The proposed project complies with the goals of the Sacramento County General Plan (County of Sacramento 2022a) and the Delta Plan (Delta Stewardship Council 2019).

2.12 Mineral Resources

Question:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓
Would the project: 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 scope, description, and location of the proposed project, as well as the Mineral Resource maps from the California Department of Conservation (California Department of Conservation 2024).

Potential impacts to mineral resources are not anticipated as no mineral resources were identified within the project limits or would be affected by the proposed project. Mineral resource extraction is not included in the scope of the proposed project.

2.13 Noise

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in: a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				✓
Would the project result in: b) Generation of excessive groundborne vibration or groundborne noise levels?				✓
Would the project result in: c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Noise Analysis* dated September 17, 2024 (Caltrans 2024g).

Potential impacts to noise resources are not anticipated. The proposed project’s scope of work would not result in permanent increases in ambient noise levels in the vicinity of the project. Temporary increases in noise levels during construction would be in compliance with Sacramento County *General Plan*. (County of Sacramento 2022a) The proposed project is not expected to generate excessive groundborne vibration or groundborne noise. The nearest residence is approximately 2,000 feet away from the roadway.

Vibration levels could be perceptible at residences near the proposed project area during operation of heavy equipment; however, these effects would be short-term and intermittent and would cease once use of heavy equipment is completed. The proposed project is not located within the vicinity of a private, public, or public use airport.

2.14 Population and Housing

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
Would the project: b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts are not anticipated as there are no residences within the proposed project area. The proposed project would not add new homes or businesses and would not extend any roads or other infrastructure. Construction would remain within the limits of the existing Caltrans right of way.

2.15 Public Services

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>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:</p> <p>Fire protection?</p>				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Transportation Management Plan Data Sheet* dated June 10, 2024 (Caltrans 2024k).

Potential impacts to public services are not anticipated. The proposed project work would occur entirely within the Caltrans right-of-way. There would be no adverse impact to government facilities (fire, police, school, park, or other public facilities) and therefore, there would be no need to provide new or altered facilities in order for them to maintain their services.

Avoidance, Minimization and Mitigation Measures

Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.6 would be implemented to avoid and minimize impacts to public services.

Transportation Management Plan has provided the following to be implemented during construction:

- On SR 12, a minimum of one paved traffic lane, not less than 11 feet wide, will be open for use by public traffic with one-way traffic control using flaggers.
- Work will be limited to nighttime and off-peak hours during construction.
- Whenever one-way traffic control is maintained, traffic should be stopped for periods not to exceed 10 minutes, after which accumulated traffic will pass through before another closure is made.
- Coordination with the River Delta Fire District Station shall be required in advance and during construction to maintain access for emergency response at all times.

Based on the determinations made in the CEQA Environmental Checklist, no mitigation measures are proposed.

2.16 Recreation

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 scope, description, and location of the proposed project.

Potential impacts are not anticipated as the proposed project is located in an agricultural area where there are no neighborhood parks, regional parks or other recreational facilities present. The proposed project does not involve construction or expansion of any recreational facilities.

2.17 Transportation

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				✓
Would the project: b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?				✓
Would the project: c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				✓
Would the project: d) Result in inadequate emergency access?				✓

Regulatory Setting

The primary laws and regulations governing transportation and traffic are CEQA, 23 CFR 652, 49 CFR 27, 29 USC 794, and the Americans with Disabilities Act (42 USC § 12101).

Affected Environment

The proposed project is located on State Route 12 in Sacramento County, between Post Miles (PM) 0.70 and 6.11. The total length of the proposed project is 5.41 miles. Within the limits of the proposed project, SR 12 is an undivided, two-lane conventional highway with 8-foot-wide outside shoulders. There are three intersections within the proposed project limits: Jackson Slough Road, Terminous Road, and Brannan Island Road.

Environmental Consequences

The project proposes to perform drainage work and roadway pavement with construction occurring both on and off the roadway. The proposed project anticipates one lane closures during construction.

Avoidance, Minimization and Mitigation Measures

Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.6 would be implemented to avoid and minimize impacts to transportation.

Based on the determinations made in the CEQA Environmental Checklist, no mitigation measures are proposed.

Discussion of CEQA Environmental Checklist Question 2.17— Transportation and Traffic

- a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?***

No Impact. The purpose of the proposed project is to improve safety features and bring the roadway width along State Route 12 up to current standards. This is consistent with Sacramento County's General Plan (County of Sacramento 2022a). Therefore, there would be no impacts.

- b) Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?***

Less Than Significant Impact. The proposed project would not conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b) because the project has been screened as a type of project unlikely to lead to a measurable and substantial increase in VMT, described in Section 5 of the *Transportation Analysis under CEQA* (TAC) guidance document (Caltrans 2020c). Therefore, there would be no impacts.

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

No Impact. The proposed project would not contain patterns of hazardous geometrical design elements and does not require geometrical improvements; therefore, there would be no impact.

d) Would the project result in inadequate emergency access?

No Impact. The proposed project would not result in inadequate emergency access. All emergency response agencies in the proposed project area would be notified of the project construction schedule. All emergency vehicles would be accommodated through the work area. Therefore, there would be no impact.

2.18 Tribal Cultural Resources

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p> <p>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1(k), or</p>				✓
<p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as cultural resources studies by Caltrans staff, which included background research, literature review, in-person field surveys, and consultation with local Native American tribes.

Potential impacts to tribal resources are not anticipated. Consultation letters were sent to:

- Chicken Ranch Rancheria of Me-Wuk Indians
- Guidiville Rancheria of California
- Lone Band of Miwok Indians
- Confederated Villages of Lisjan Nation
- Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- Northern Valley Yokut / Ohlone Tribe
- Tsi Akim Maidu
- Tule River Indian Tribe
- Yocha Dehe Wintun Nation
- United Auburn Indian Community
- Wilton Rancheria

Pursuant to consultation with the tribes, Caltrans has not identified tribal resources within the project limits that would be significant to a California Native American tribe. Thus, the project would not have the potential to cause a substantial adverse change in the significance of a tribal cultural resource.

Avoidance, Minimization and Mitigation Measures

In addition to Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.6 the following measure would be implemented:

- Prior to the construction of this proposed project, Wilton Rancheria has requested Caltrans Non-Standard Special Provision 14-4 Cultural Sensitivity Training be provided to the construction crew.

Based on the determinations made in the CEQA Environmental Checklist, no mitigation measures are proposed.

2.19 Utilities and Service Systems

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities—the construction or relocation of which could cause significant environmental effects?				✓
Would the project: b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				✓
Would the project: c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				✓
Would the project: d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				✓
Would the project: e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				✓

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project.

Potential impacts are not anticipated. Caltrans would verify the location of any underground gas, electric, water, or sewer lines within the project area. The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities.

The proposed project does not require a water supply. The proposed work primarily involves pavement and culvert rehabilitation. It does not include any demand for wastewater treatment. The construction contractor would be responsible for disposing of all construction waste in accordance with all federal, state, and local statutes related to solid waste disposal. The proposed project would comply with all federal, state, and local statutes related to solid waste disposal.

2.20 Wildfire

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near State Responsibility Areas (SRAs) or lands classified as <i>very high</i> Fire Hazard Severity Zones, would the project: a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				✓
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or may result in temporary or ongoing impacts to the environment?				✓
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				✓

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

“No Impact” determinations in this section are based on the scope, description, and location of the proposed project, as well as the Fire Hazard Severity Zones indicated in the State Responsibility Area Map (California Department of Forestry and Fire Protection 2024). Potential impacts are not anticipated as the proposed project is not within a State Responsibility Area or area classified as *very high* Fire Hazard Severity Zone.

2.21 Mandatory Findings of Significance

Does the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				✓
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means 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.)				✓
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				✓

Discussion of CEQA Environmental Checklist Question 2.21—Mandatory Findings of Significance

- a) ***Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?***

No Impact. Determinations are based on the *Natural Environment Study*, which was completed by a qualified Caltrans biologist in September 2024 (Caltrans 2024f). The proposed project does not have the potential to degrade the quality of the environment. The studies and conclusions reached in Chapter 2, Section 2.4 (Biological Resources) of this report support a determination of no impact.

- b) ***Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)***

No Impact. There are projects and proposed projects along the State 12 corridor in the vicinity of the proposed Sac 12 Terminous Safety Project; including the Jackson Slough Road Intersection Improvement Project. The past, present, and foreseeable future actions of these proposed projects would not have cumulatively considerable impacts leading to the degradation of habitat and species diversity, populations, disruption of migration corridors, water quality or other natural resources. The proposed project would not result in any adverse effects that, when considered in connection with other projects, would be considered cumulatively considerable. Therefore, there would be no impact.

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

No Impact. Based on studies completed for the proposed project to analyze potential impacts, the project would not cause substantial adverse effects to human beings, either directly or indirectly. Therefore, there would be no impact.

2.22 Cumulative Impacts

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this proposed project. A cumulative impact assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time (CEQA § 15355).

Cumulative impacts to resources may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

Per Section 15130 of CEQA, a Cumulative Impact Analysis (CIA) discussion is only required in "...situations where the cumulative effects are found to be significant." The cumulative effects for this proposed project were not found to be significant. Given this, an EIR and CIA were not required for this project.

CHAPTER 3. AGENCY AND PUBLIC COORDINATION

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings, interagency coordination meetings, early informational outreach to public officials. This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

The following agencies, organizations, and individuals were consulted in the preparation of this environmental document.

Coordination with Resource Agencies

Consultation packages were sent to representatives of the following tribes:

- Chicken Ranch Rancheria of Me-Wuk Indians
- Guidiville Rancheria of California
- Lone Band of Miwok Indians
- Confederated Villages of Lisjan Nation
- Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- Northern Valley Yokut / Ohlone Tribe
- Tsi Akim Maidu
- Tule River Indian Tribe
- Yocha Dehe Wintun Nation
- United Auburn Indian Community
- Wilton Rancheria

Caltrans consulted with the Native American Heritage Commission (NAHC) for a sacred lands file search. Caltrans District 3 has determined the project would result in a *Finding of No Historic Properties Effectuated*. Concurrence from the State Historic Preservation Officer (SHPO) was not required. All other documentation has been submitted and reviewed.

Consultation with Caltrans Biologist Jonathan Edwards and the United States Fish and Wildlife Service has been ongoing in discussions of the project and the preparation of the Natural Environment Study (NES) and Letter of Concurrence.

Early informational outreach letters to public officials were sent to the following:

- Assemblymember Heath Flora
- Assemblymember Lori D. Wilson
- Assemblymember Carlos Villapudua
- Assemblymember Laurie Davies
- County Supervisor Steven J. Ding
- County Supervisor Pat Hume
- County Supervisor Mitch Mashburn
- Rio Vista Public Works Director Robin Borre
- Isleton Public Works Supervisor Dean Dockery
- Sacramento Department of Transportation Director Ron E. Vicari

The outreach letter to public officials gave notice about the upcoming proposed Sac 12 Terminus Safety Project and requested the public official share with Caltrans any groups or organizations who should be included in the proposed project's distribution list.

Circulation

The Initial Study/Proposed Negative Declaration will be made available for public review and comment for 30 days from January 16, 2025 to February 17, 2025.

Caltrans ensured the document was made available to all appropriate parties and agencies, including:

- 1) Responsible agencies
- 2) Trustee agencies that have resources affected by the project
- 3) Other state, federal, and local agencies which have regulatory jurisdiction, or that exercise authority over resources, which may be affected by the project
- 4) The public. The document was made available online at <https://dot.ca.gov/caltrans-near-me/district-3/d3-projects/d3-sac-12-terminous-capm> Additional copies of the document are available at:

- Rio Vista Library 44 S 2nd Street, Rio Vista, CA 94571
- Caltrans District 3 Office: 703 B Street, Marysville, CA 95901
- To send via postal mail by submitting a request to either the project email address at 03_2J200_Project_Inbox@dot.ca.gov or the project postal address as follows:

California Department of Transportation
North Region Environmental–M5 Branch
Attn: Sac 12 Terminous Safety Project
703 B Street
Marysville, CA 95901



CHAPTER 4. LIST OF PREPARERS

The following individuals performed the environmental work and contributed to the preparation of the Initial Study / Proposed Negative Declaration for this project:

California Department of Transportation, District 3

Erin Damm	Senior Environmental Scientist Contribution: Environmental Branch Chief
Jennifer Jones	Environmental Planner Contribution: Document Writer
Aaron Bali	Air Quality Specialist Contribution: Air, Noise, Energy, and Greenhouse Gas Emission Analysis
Catherine Davis	Archaeologist Contribution: Historical Properties, Archaeology Survey Report
Jonathan Edwards	Biologist Contribution: Natural Environmental Study
William Little	Geologist Contribution: Preliminary Geotechnical Report
Lauryl Rudolph	Hazardous Waste Specialist Contribution: Initial Site Assessment
Brandon Boge	Hydraulics Engineer Contribution: Floodplain Hydraulics Study
Sean Cross	Water Quality Specialist Contribution: Water Quality Assessment
Cathy Wei	Landscape Architect Contribution: Visual Impact Assessment
Daniel Stiles	Project Engineer Contribution: Project Design

Gregory Marks	Project Engineer Contribution: Project Design
John Bamfield	Project Manager Contribution: Project Management

CHAPTER 5. DISTRIBUTION LIST

Federal and State Agencies

Federal Highway Administration (FHWA)
1200 New Jersey Avenue SE
SE Washington, DC 20590

U.S. Army Corps of Engineers–Sacramento District
ATTN: Regulatory Branch
1325 J Street
Sacramento, CA 95814-2922

U. S. Army Corps of Engineers
1325 J Street, Room 1350
Sacramento, CA 95814

United States Fish and Wildlife Service
2800 Cottage Way, Room W-2605
Sacramento, CA 95825

Federal Emergency Management Agency
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

California Department of Fish and Wildlife
2825 Cordelia Road, Suite 100
Fairfield, CA 94534

Native American Heritage Commission
1550 Harbor Blvd Suite 100
West Sacramento, CA 95691

Central Valley Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

California Transportation Commission
1120 N Street
Sacramento, CA 95814

State Historic Preservation Officer
Office of Historic Preservation
PO Box 942896
Sacramento, CA 94296

State Water Resources Control Board
PO Box 100
Sacramento, CA 95812-0100

Central Valley Flood Protection Board
3310 El Camino Ave #151
Sacramento, CA 95821

California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

California Environmental Protection Agency
PO Box 2815
Sacramento, CA 95812-2815

Sacramento Area Council of Governments
1415 L Street, Suite 300
Sacramento, CA 95814

California Highway Patrol–Valley Division
2555 1st Avenue
Sacramento, CA 95818

Ron E. Vicari, Director
Department of Transportation
4100 Traffic Way
Sacramento, Ca 95827

Regional/County/Local Agencies

City of Rio Vista Public Works
One Main Street
Rio Vista, CA 94571

City of Isleton Public Works
101 2nd Street / P.O. Box 716
Isleton, CA 95641

Isleton City Council
PO Box 716
Isleton, CA 95641

Rio Vista City Council
One Main Street
Rio Vista, CA 94571

Elected Officials

Assemblymember Heath Flora
PO Box 942849
Sacramento, CA 94249-0009

Assemblymember Lori D. Wilson
PO Box 942849
Sacramento, CA 94249-0011

Assemblymember Carlos Villapudua
PO Box 942849
Sacramento, CA 94249-0013

Assemblymember Laurie Davies
PO Box 942849
Sacramento, CA 94249-0074

San Joaquin Board of Supervisors
44 North San Joaquin Street
Sixth Floor, Suite 627
Stockton, CA 95202

Sacramento County Board of Supervisors
700 H Street, Suite 2450
Sacramento, CA 95814

Solano County Board of Supervisors
675 Texas Street, Suite 6500
Fairfield, CA 94533-6342

Emergency Services

River Delta Fire District Volunteer
16969 Jackson Slough Rd
Isleton, CA 95641

Isleton Fire Department #93
201 2nd St
Isleton, CA 95641

US Coast Guard
900 Beach Dr.
Rio Vista, CA 94571

Rio Vista Police Department
50 Poppy House Rd.
Rio Vista, CA 94571

Tribes

Confederated Villages of Lisjan Nation
Corrina Gould, Chairperson
10926 Edes Avenue
Oakland, CA, 94603

Nashville Enterprise Miwok-Maidu-Nishinam Tribe
Cosme Valdez, Chairperson
PO Box 580986
Elk Grove, CA, 95758-0017

Northern Valley Yokut / Ohlone Tribe
Erolinda Perez, Tribal Administrator
PO Box 717
Linden, CA, 95236

Tsi Akim Maidu
Don Ryberg, Chairperson
PO Box 510
Browns Valley, CA, 95918

Tule River Indian Tribe
Neil Peyron, Chairperson
PO Box 589
Porterville, CA, 93258

Yocha Dehe Wintun Nation
Anthony Roberts
PO Box 18
Brooks, CA, 95606

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road
Auburn, CA, 95603

Wilton Rancheria
Jesus Tarango, Chairperson
9728 Kent Street
Elk Grove, CA, 95624

Utilities

Pacific Gas & Electric
127 E Main Street
Grass Valley, CA 95945



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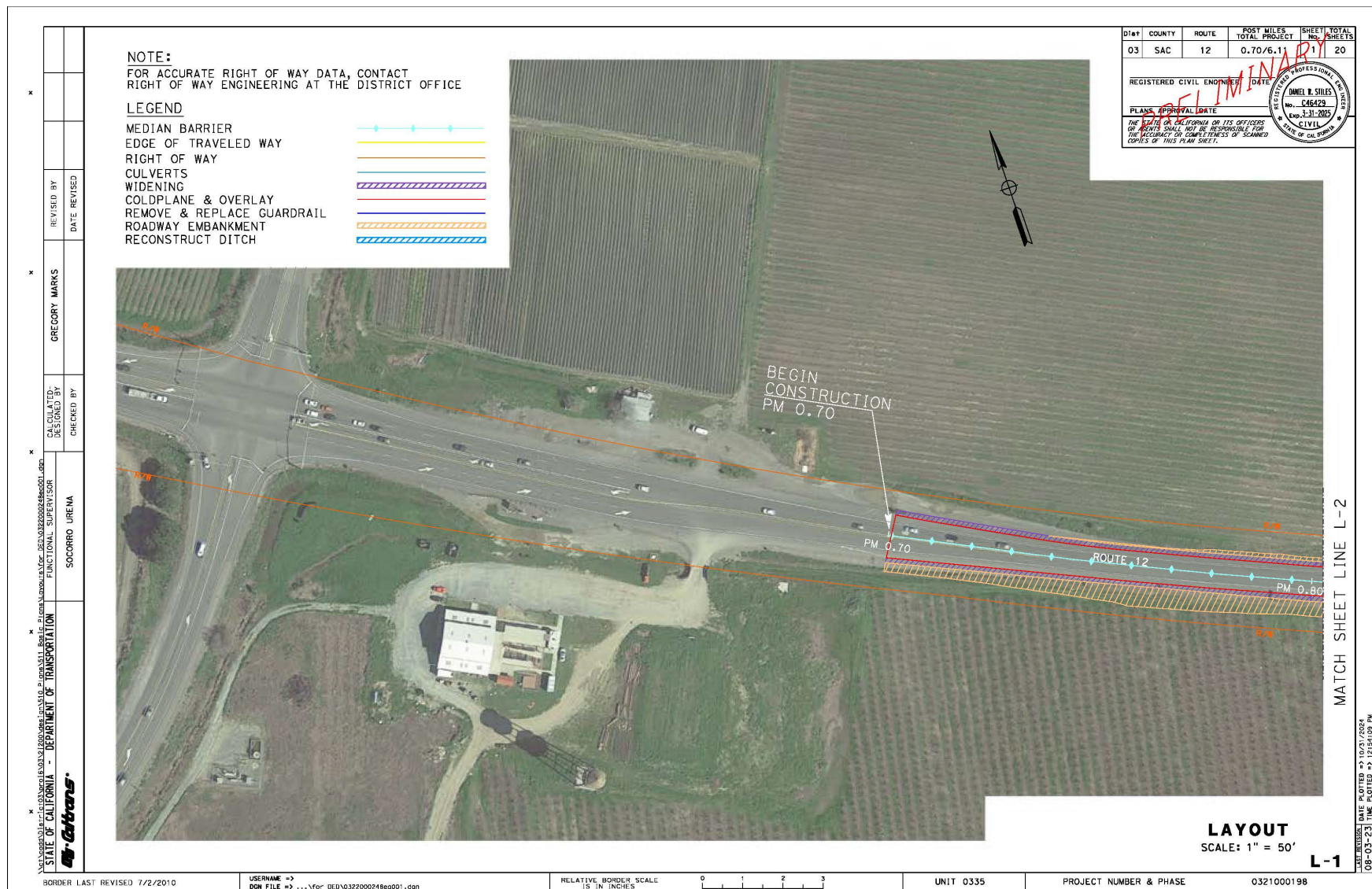
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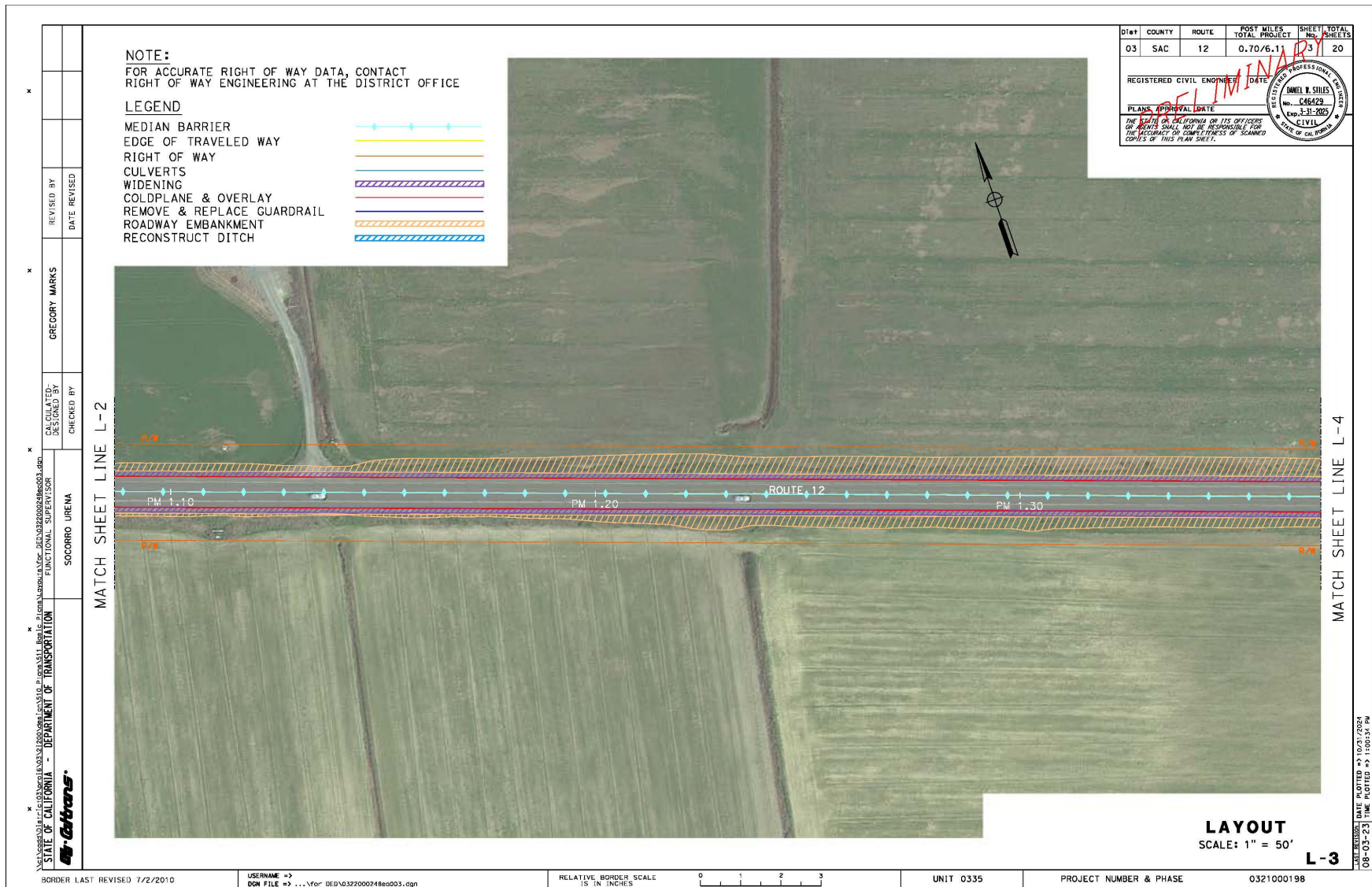
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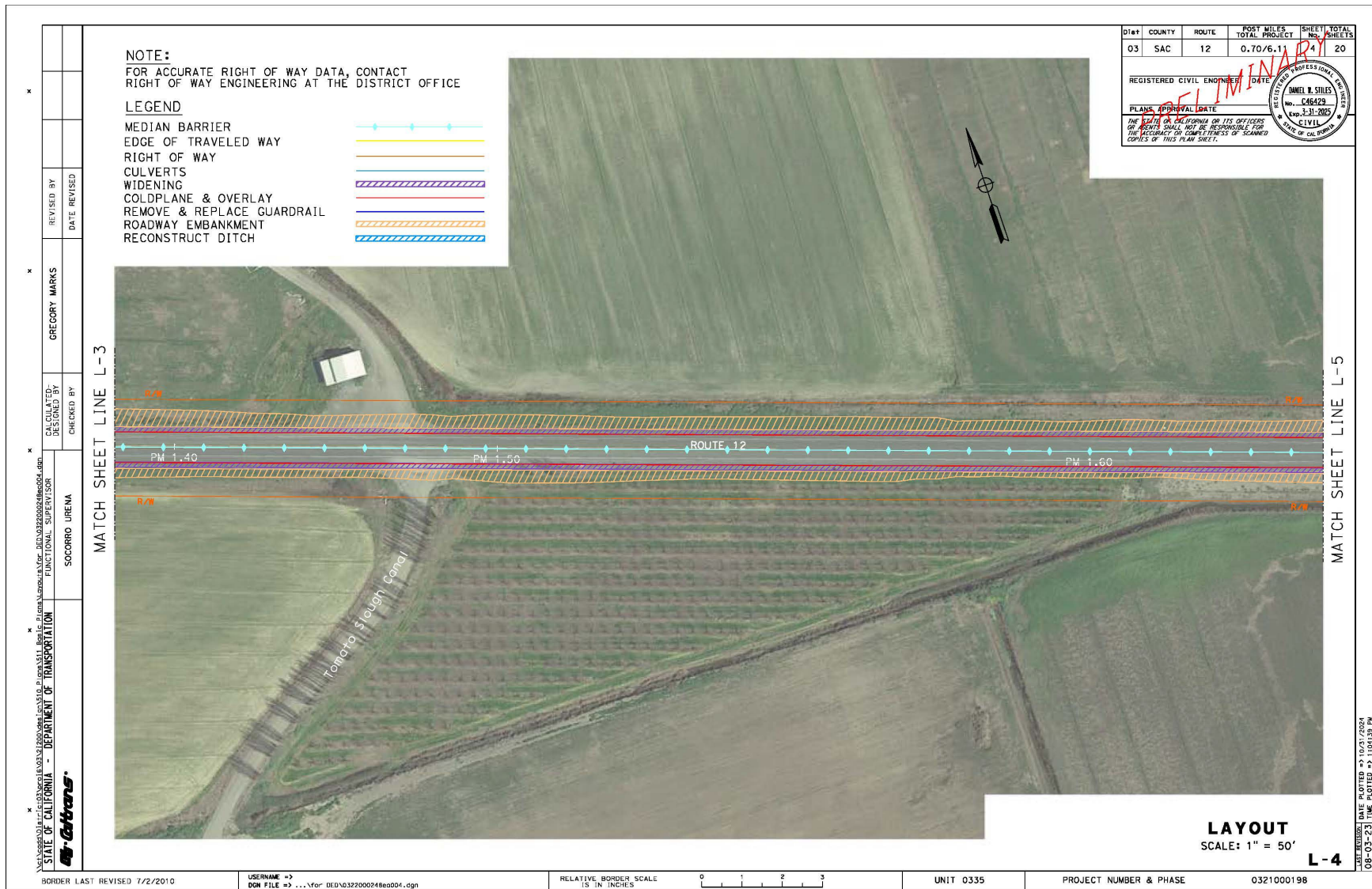
APPENDIX A. PROJECT LAYOUTS

















STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

FUNCTIONAL SUPERVISOR

SOCORRO URENA

CALCULATED-DESIGNED BY

CHECKED BY

GREGORY MARKS

REVISOR BY

DATE REVISED

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE

LEGEND

MEDIAN BARRIER

EDGE OF TRAVELED WAY

RIGHT OF WAY

CULVERTS

WIDENING

COLDPLANE & OVERLAY

REMOVE & REPLACE GUARDRAIL

ROADWAY EMBANKMENT

RECONSTRUCT DITCH

03

SAC

12

POST MILES
TOTAL PROJECT

0.70/6.11

SHEET
NO.

20

TOTAL
SHEETS

20

REGISTERED CIVIL ENGINEER

DATE

PRELIMINARY

PLANS APPROVAL DATE

THE SEAL OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

MATCH SHEET LINE L-9

MATCH SHEET LINE L-11

LAYOUT

SCALE: 1" = 50'

L-10

BORDER LAST REVISED 7/2/2010

USERNAME: ...For DED\0327000248ea010.dgn
DGN FILE: ...For DED\0327000248ea010.dgn

RELATIVE BORDER SCALE
IS IN INCHES

0 1 2 3

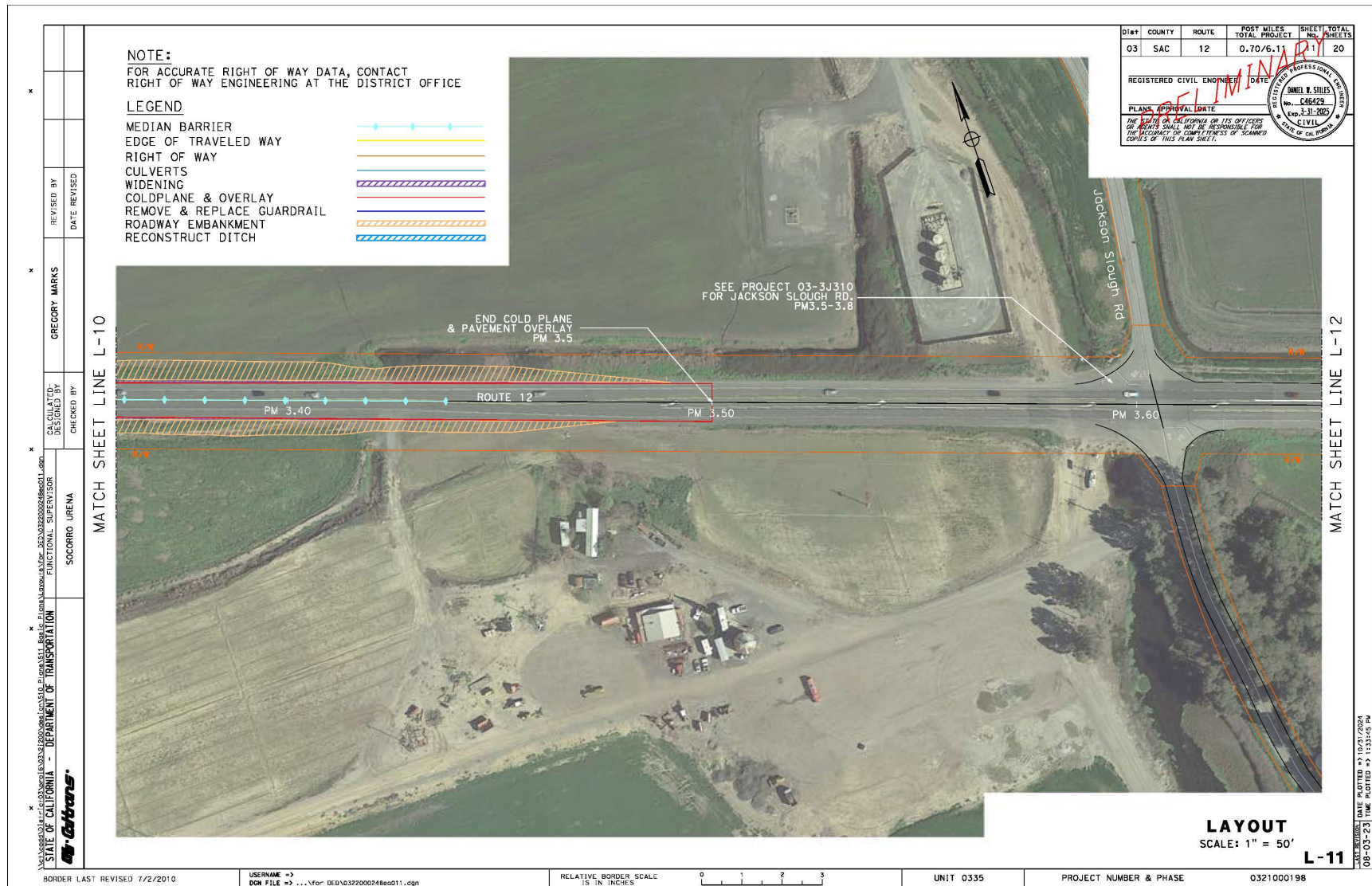
UNIT 0335

PROJECT NUMBER & PHASE

0321000198

DATE PLOTTED: 08-03-23
TIME PLOTTED: 11:22:27 PM

January 2025



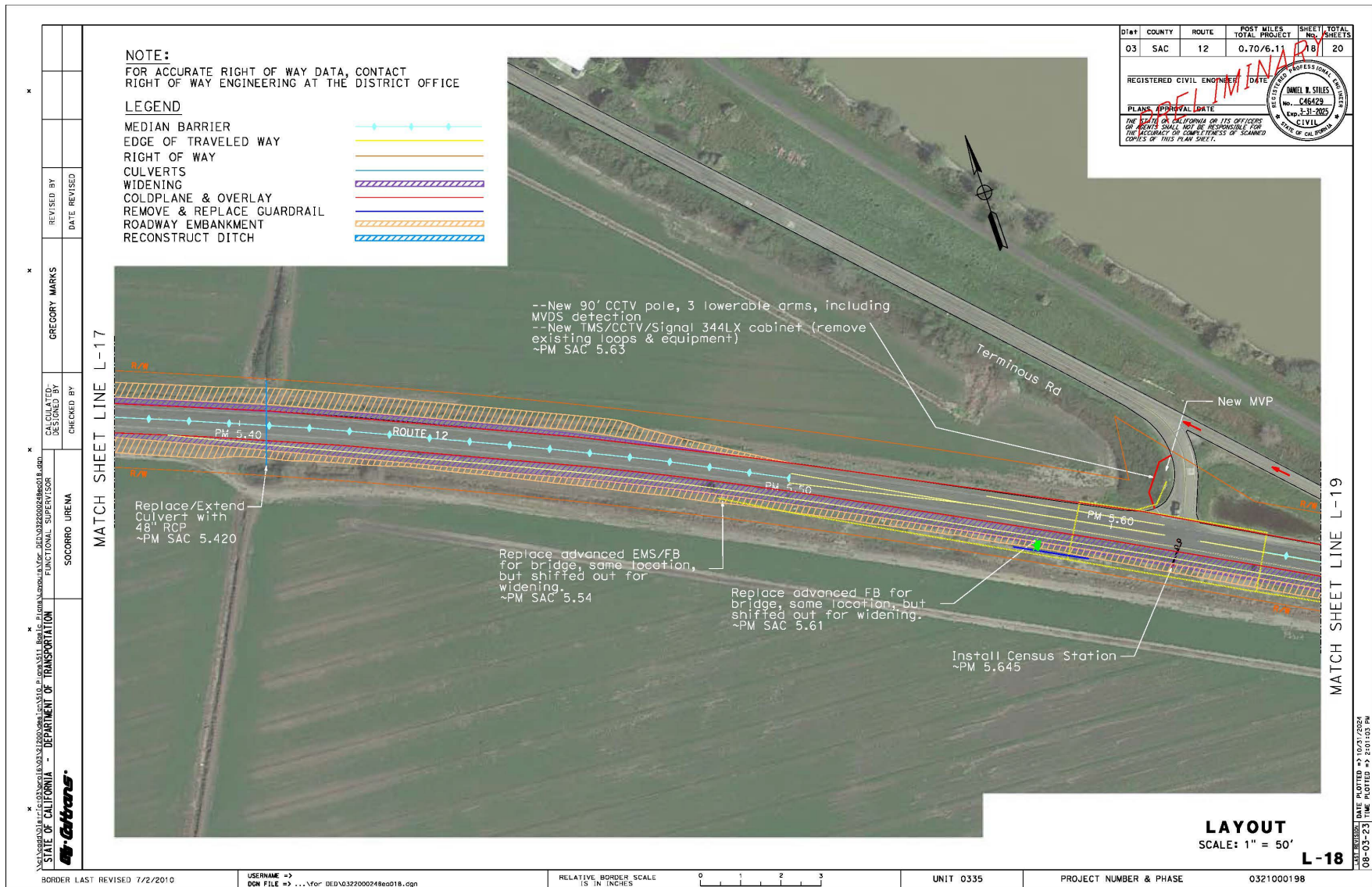


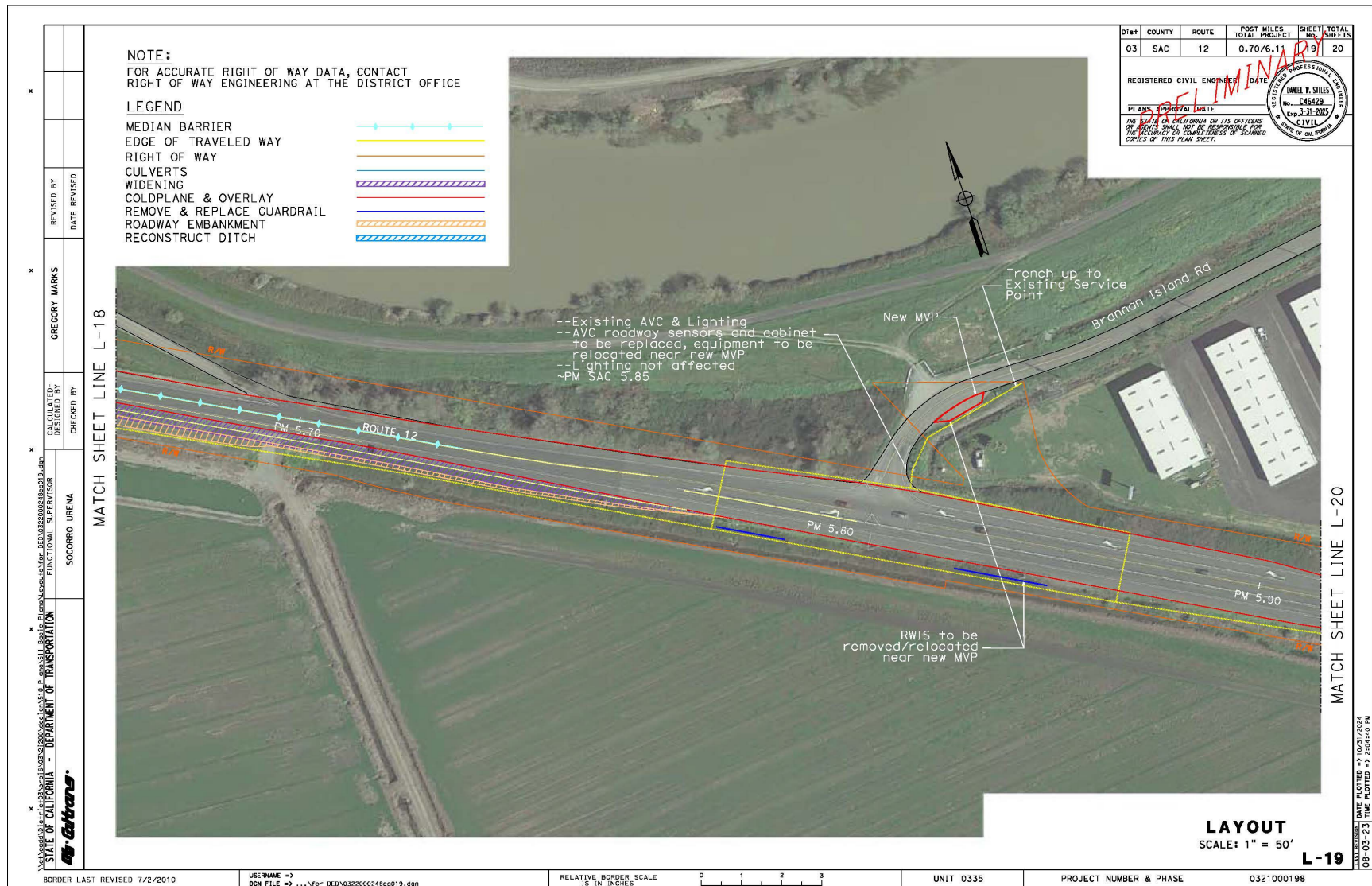














APPENDIX B. TITLE VI POLICY STATEMENT



California Department of Transportation

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49 | SACRAMENTO, CA 94273-0001
(916) 654-6130 | FAX (916) 653-5776 TTY 711
www.dot.ca.gov



September 2022

NON-DISCRIMINATION POLICY STATEMENT

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

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

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

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: <https://dot.ca.gov/programs/civil-rights/title-vi>.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

A handwritten signature in black ink, appearing to read 'Tony Tavares'.

TONY TAVARES
Director

"Provide a safe and reliable transportation network that serves all people and respects the environment"



APPENDIX C. USFWS, NMFS, CDFW-CNDDB, AND CNPS SPECIES LISTS





United States Department of the Interior

FISH AND WILDLIFE SERVICE
San Francisco Bay-Delta Fish And Wildlife
650 Capitol Mall
Suite 8-300
Sacramento, CA 95814
Phone: (916) 930-5603 Fax: (916) 930-5654



In Reply Refer To:
Project Code: 2024-0117556
Project Name: Sac-12 Terminous Safety

07/17/2024 16:43:32 UTC

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

To Whom It May Concern:

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

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

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (<https://www.fws.gov/program/eagle-management/working-around-eagles>). Additionally, wind energy projects should follow the wind energy guidelines (<https://www.fws.gov/node/266177>) for minimizing impacts to migratory birds and

bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation>; and <http://www.towerkill.com>.

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

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

San Francisco Bay-Delta Fish And Wildlife
650 Capitol Mall
Suite 8-300
Sacramento, CA 95814
(916) 930-5603

PROJECT SUMMARY

Project Code: 2024-0117556

Project Name: Sac-12 Terminous Safety

Project Type: Road/Hwy - Maintenance/Modification

Project Description: This Project examined three alternatives:

Alternative 1 – Programmable Project Alternative (Current Capital Cost Estimate: \$34.1M)

Pavement

- Cold plane a depth of 0.25' from the edge of pavement (EP) to EP and overlay 0.25' Rubberized Hot Mix Asphalt(RHMA-G), excluding at the intersection of Jackson Slough Road from PM 3.5 to PM 3.8.
- Repair locations of severe existing asphalt pavement failure with digouts.
- Widen existing inside shoulders to 5' standard width. Outside shoulders are proposed to be kept at 8'. Widening will be a total of 6' for each direction.
- Place imported shoulder backing material at the outside edge of shoulders where needed.
- Restripe lanes and shoulders with 6" thermoplastic traffic stripes, pavement markings and raised retroreflective pavement markers.

Drainage

- Rehabilitate culvert at PM 5.42 and extend due to the shoulder widening.
- Extend culverts at three (3) other locations due to the shoulder widening.
- Reconstruct drainage ditches due to the shoulder widening as needed.

Signs

- Replace existing roadside signs with signs that comply with current standards at various locations.
- Add merge delineation and signage on eastbound SR 12 at Brannan Island Road.

Safety

- Construct concrete median barrier within the project limits excluding at the intersection of Jackson Slough Road intersection from PM 3.5 to PM 3.8.
- Upgrade all existing metal beam guardrail to steel post Midwest Guardrail Systems with end treatments that comply with the current MASH standards to meet minimum length as needed.
- Place inside shoulder rumble strip and replace rumble strip for outside shoulders throughout the project limits, excluding at the intersection of Jackson Slough Road intersection from PM 3.5 to PM 3.8.

Transportation Management System (TMS)

- Install one new Census Station at SR 12 PM 5.645.
- Replace/repair loops in kind for Vehicle Detection Systems at PM 5.575, PM 5.630, PM 5.772, and PM 5.857, if damaged by pavement cold

planing.

Alternative 1 assumes a traffic signal will be constructed at Jackson Slough Road under Project 03-3J310 "Jackson Slough Road Intersection Improvement".

Alternative 2 (Current Capital Cost Estimate: \$34.1M)

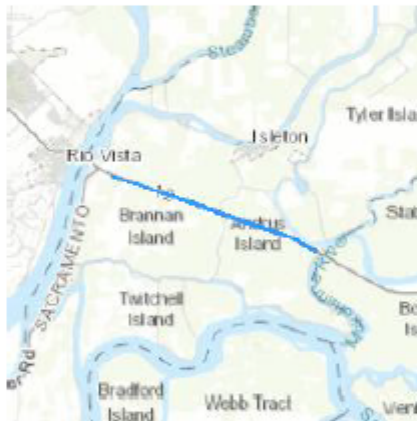
Alternative 2 is similar to Alternative 1 but assumes a grade separation will be constructed at Jackson Slough Road under Project 03-3J310 "Jackson Slough Road Intersection Improvement". This alternative will construct a concrete median barrier within the project limits excluding from PM 3.5 to PM 3.8. Under this alternative, concrete median barriers will be connected to concrete median barriers constructed under project 03-3J310 along realigned SR 12 crossing over Jackson Slough Road.

Alternative 3 - No Build Alternative

This "No-Build" alternative retains the existing condition of the facility, does not meet the need and purpose of the project, and is not recommended.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.1414761,-121.6290807,7334212,14z>



Counties: Sacramento County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
California Ridgway's Rail <i>Rallus obsoletus obsoletus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4240	Endangered

REPTILES

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

AMPHIBIANS

NAME	STATUS
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot <i>Spea hammondi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

FISHES

NAME	STATUS
Longfin Smelt <i>Spirinchus thaleichthys</i> Population: San Francisco Bay-Delta DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9011	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

FLOWERING PLANTS

NAME	STATUS
Large-flowered Fiddleneck <i>Amsinckia grandiflora</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5558	Endangered

CRITICAL HABITATS

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> For information on why this critical habitat appears for your project, even though Delta Smelt is not on the list of potentially affected species at this location, contact the local field office. https://ecos.fws.gov/ecp/species/321#crithab	Final

IPAC USER CONTACT INFORMATION

Agency: California Department of Transportation District 3

Name: Jonathan Edwards

Address: 703 B street

City: Marysville

State: CA

Zip: 95901

Email jonathan.edwards@dot.ca.gov

Phone: 5307203945

From: [Edwards, Jonathan@DOT](mailto:Edwards.Jonathan@DOT)
To: nmfs.wcra.specieslist@noaa.gov
Subject: Project Sac-12 Terminus needs nmfs species list
Date: Wednesday, July 17, 2024 9:45:00 AM

Quad Name **Isleton**

Quad Number **38121-B5**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) - **X**

SRWR Chinook Salmon ESU (E) - **X**

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

CCV Steelhead DPS (T) - **X**

Eulachon (T) -

sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat - **X**

SRWR Chinook Salmon Critical Habitat - **X**

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat - **X**

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat - **X**

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH - X
Groundfish EFH - X
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult Monica DeAngelis

monica.deangelis@noaa.gov

562-980-3232

MMPA Cetaceans -
MMPA Pinnipeds -

Quad Name **Rio Vista**

Quad Number **38121-B6**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) - X
SRWR Chinook Salmon ESU (E) - X
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -
CCV Steelhead DPS (T) - X
Eulachon (T) -
sDPS Green Sturgeon (T) - X

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat - X
SRWR Chinook Salmon Critical Habitat - X
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat - X
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat - X

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH - X

Groundfish EFH - X

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult Monica DeAngelis

monica.deangelis@noaa.gov

562-980-3232

MMPA Cetaceans -

MMPA Pinnipeds -

Jonathan (John) Edwards
Associate Environmental Planner, N.S.
Jonathan.Edwards@dot.ca.gov
Caltrans Environmental M5
703 B Street
Marysville, CA 95901
(530) 720-3945 (Work Cell)



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad> IS >(Isleton (3812125)> OR >Rio Vista (3812126))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Acipenser medirostris</i> pop. 1 green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	SSC
<i>Actinemys marmorata</i> northwestern pond turtle	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
<i>Anthicus antiochensis</i> Antioch Dunes anthicid beetle	IICOL49020	None	None	G3	S3	
<i>Anthicus sacramento</i> Sacramento anthicid beetle	IICOL49010	None	None	G4	S4	
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S2	SSC
<i>Bombus pensylvanicus</i> American bumble bee	IIHYM24260	None	None	G3G4	S2	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
<i>Charadrius montanus</i> mountain plover	ABNNB03100	None	None	G3	S2	SSC
<i>Cicuta maculata</i> var. <i>bolanderi</i> Bolander's water-hemlock	PDAPIM051	None	None	G5T4T5	S2?	2B.1
<i>Circus hudsonius</i> northern harrier	ABNKC11011	None	None	G5	S3	SSC
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Extriplex joaquinana</i> San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
<i>Falco peregrinus anatum</i> American peregrine falcon	ABNKC06071	Delisted	Delisted	G4T4	S3S4	
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
<i>Hypomesus transpacificus</i> Delta smelt	AFCHB01040	Threatened	Endangered	G1	S1	
<i>Lasiurus cinereus</i> hoary bat	AMACC05032	None	None	G3G4	S4	
<i>Lasiurus frantzii</i> western red bat	AMACC05080	None	None	G4	S3	SSC
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	PDFAB250D2	None	None	G5T2	S2	1B.2
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	PDAP119030	None	Rare	G2	S2	1B.1
<i>Limosella australis</i> Delta mudwort	PDSCR10030	None	None	G4G5	S2	2B.1



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Linderiella occidentalis</i> California linderiella	ICBRA08010	None	None	G2G3	S2S3	
<i>Melospiza melodia</i> pop. 1 song sparrow ("Modesto" population)	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
<i>Oncorhynchus mykiss irideus</i> pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	SSC
<i>Sagittaria sanfordii</i> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<i>Scutellaria lateriflora</i> side-flowering skullcap	PDLAM11U0Q0	None	None	G5	S1S2	2B.2
<i>Spirinchus thaleichthys</i> longfin smelt	AFCHB03010	Proposed Endangered	Threatened	G5	S1	
<i>Symphotrichum lentum</i> Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2

Record Count: 27



CALIFORNIA
NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

Search Results

9 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3812125:3812126]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Cicuta maculata var. bolanderi	Bolander's water-hemlock	Apiaceae	perennial herb	Jul-Sep	None	None	G5T4T5	S2?	2B.1		1974-01-01	 © 2007 Doreen L. Smith
Eriogonum joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	Yes	1988-01-01	No Photo Available
Hibiscus lasiocarpus var. occidentalis	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	None	None	G5T3	S3	1B.2	Yes	1974-01-01	 © 2020 Steven Perry
Lathyrus jepsonii var. jepsonii	Delta tulle pea	Fabaceae	perennial herb	May-Jul(Aug-Sep)	None	None	G5T2	S2	1B.2	Yes	1974-01-01	 © 2003 Mark Fogliel
Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	None	CR	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
Limnolobos australis	Delta mudwort	Scrophulariaceae	perennial stoloniferous herb	May-Aug	None	None	G4G5	S2	2B.1		1994-01-01	 © 2020 Richard Sage
Sagittaria sanfordii	Sanford's arrowhead	Alismaceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook
Scutellaria lateriflora	side-flowering skullcap	Lamiaceae	perennial rhizomatous herb	Jul-Sep	None	None	G5	S1S2	2B.2		1994-01-01	No Photo Available

7/17/24, 9:43 AM

CNPS Rare Plant Inventory | Search Results

<u><i>Symphoricarum</i></u>	Suisun	Asteraceae	perennial	(Apr)May-	None	None	G2	S2	18.2	Yes	1974-	
<u><i>lentum</i></u>	Marsh aster		rhizomatous	Nov							01-01	No Photo
			herb									Available

Showing 1 to 9 of 9 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2024. Rare Plant Inventory (online edition, v9.5). Website <https://www.rareplants.cnps.org> [accessed 17 July 2024].