MIDDLETOWN SAFETY SOUTH PROJECT

INITIAL STUDY

With Proposed Negative Declaration

LAKE COUNTY, CALIFORNIA

DISTRICT 1 – LAK – 29 — Post Miles 5.0 to 5.9

EA 01-0L590 / EFIS 0122000027

Prepared by the
State of California Department of Transportation

JUNE 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 Middletown Safety South Project on State Route 29 in Lake 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: Caltrans District 1 Office, 1656 Union Street, Eureka, CA 95501. Project information can be found at the following website: https://dot.ca.gov/caltrans-near-me/district-1/d1-projects/d1-middletown-safety-south
- Attend the open forum hearing at the Community Meeting Room, 21256 Washington Street, Middletown, CA 95461 on August 7, 2025, from 6:00 p.m. to 7:30 p.m.
- A physical copy of the document can be found during the public review period at the local public library, located at 21256 Washington St, Middletown, CA 95461.
- We'd like to hear what you think. If you have any comments about the proposed project, please attend the open forum hearing and/or 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 1
  Attention: Nicole Alber
  1656 Union Street
  Eureka, CA, 95501

- Send comments via e-mail to: nicole.alber@dot.ca.gov
- Be sure to send comments by the deadline: August 19, 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: Manny Machado, North Region Environmental-District 1, 1656 Union Street, Eureka, CA 95501; (707) 445-6600 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

MIDDLETOWN SAFETY SOUTH PROJECT

Improve the safety on State Route 29 in Lake County,
from Post Miles 5.0 to 5.9 through the city of Middletown.

INITIAL STUDY

with Proposed Negative Declaration

Submitted Pursuant to:

State: Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

6/25/2025
Date of Approval

Liza Walker
Liza Walker, Office Chief
North Region Environmental–District 1
California Department of Transportation
CEQA Lead Agency

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

Caltrans North Region Environmental–District 1
Nicole Alber
1656 Union Street
Eureka, CA, 95501
Nicole.alber@dot.ca.gov

or use the California Relay Service TTY number, 711, or 1-800-735-2922

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 Middletown Safety South Project on State Route 29 between Post Miles 5.0 and 5.9 in Lake County. The proposed project work includes shoulder widening to accommodate standard shoulder widths (8' width), left turn channelization, two way left turn lane (TWLTL), new and modified curb ramps, bulbouts, approximately 1,200 feet of new sidewalk, lighting, installation of two pedestrian-activated rectangular rapid flashing beacons (RRFB), and extending two existing culverts to maintain drainage (PM 5.24 and the system at PMs 5.37–5.45). Additional drainage system improvements include replacement of 1 culvert and repair to 1 drainage inlet.

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 the following resources:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services

- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance
- Cumulative Impacts

Based on the current scope of work, the proposed project would have *Less than Significant Impacts* to Greenhouse Gas Emissions and Noise.

_____ _____

Liza Walker, Office Chief
North Region Environmental–District 1
California Department of Transportation

Date

Table of Contents

List of Appendices

List of Figures

List of Tables

Acronyms and Abbreviated Terms

Acronym/Abbreviation	Description
AB	Assembly Bill
ADA	Americans with Disabilities Act
BC	Black carbon
BFE	Base Flood Elevation
BMPs	Best Management Practices
BSA	Biological Study Area
CAFE	Corporate Average Fuel Economy
CAL-CET	Caltrans Construction Emissions Tool
CAL FIRE	California Department of Forestry and Fire Protection
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
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
CH_4	methane
CIA	Cumulative Impact Analysis
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CTP	California Transportation Plan
CWA	Clean Water Act
dBA	Decibels
DBH	Diameter-at-Breast-Height
Department	Caltrans
DOT	Department of Transportation
DSA	Disturbed Soil Area
DWR	Department of Water Resources
EIR	Environmental Impact Report
EO(s)	Executive Order(s)
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESA(s)	Environmentally Sensitive Area(s)
ESL	Environmental Study Limits

Acronym/Abbreviation	Description
FED	Final Environmental Document
FEMA	Federal Emergency Management Agency
FERS	Floodplain Evaluation Report Summary
FESA	Federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone (CAL FIRE)
FHWA	Federal Highway Administration
FR	Federal Register
GHG	greenhouse gas
GWP	Global Warming Potential
H&SC	Health & Safety Code
HFCs	hydrofluorocarbons
IS	Initial Study
ISA	Initial Site Assessment
IS/ND	Initial Study / Negative Declaration
LAPC	Lake Area Planning Council
LRA	Local Responsibility Area
LSAA	Lake and Streambed Alteration Agreement (CDFW)
MATH	Middletown Area Town Hall
MBGR	Metal Beam Guardrail
MGS	Midwest Guardrail System
MMT	million metric tons
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act of 1990
NAHC	Native American Heritage Commission
NCRWQCB	North Coast Regional Water Quality Control Board
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environment Study
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
OHM	Ordinary High Water
OPR	Governor's Office of Planning and Research
PDT	Project Development Team

Acronym/Abbreviation	Description
PIR	Project Initiation Report
PLACs	Permits, Licenses, Agreements and Certifications
PM(s)	Post Mile(s)
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
Project	Middletown Safety South Project
PRC	(California) Public Resources Code
RHMA	Recycled Hot Mix Asphalt
RRFB	Rectangular Rapid Flashing Beacons
RSP	Rock Slope Protection
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	Sustainable Communities Strategy
SER	Standard Environmental Reference (Caltrans)
SF_6	sulfur hexafluoride
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
SRZ	Structural Root Zone
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
THPO	Tribal Historic Preservation Officer
THVF	Temporary High Visibility Fencing
TMP	Transportation Management Plan
TWLTL	Two Way Left Turn Lane
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
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled
WPCP	Water Pollution Control Program

Chapter 1. Proposed Project

1.1 Introduction/Project History

The California Department of Transportation (Caltrans) proposes the Middletown Safety South Project (project). The project is located on State Route (SR) 29 in Lake County, between Post Miles (PMs) 5.0 and 5.9. The total length of the project is 0.9 miles. Through the project limits, SR 29 in Lake County is a north-south route beginning at the Napa County line and terminating at the intersection with SR 20 near Upper Lake.

This project was identified on a Headquarters Traffic Safety Monitoring Report. District 1 personnel subsequently performed a Traffic Safety Investigation and produced a Traffic Safety Report.

The Project Initiation Report (PIR) originally proposed widening on both sides of SR 29; however, between Central Park Road and Lake Street there are cultural resources present that would be impacted by the scope of work. The scope of work was adjusted to avoid impacts to cultural resources.

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

1.2 Purpose and Need

Purpose

The purpose of this project is to improve safety for all roadway users and reduce the frequency and severity of collisions along this segment of SR 29.

Need

This segment of SR 29 has a collision rate that exceeds the statewide average, highlighting the need for effective countermeasures to reduce accidents. Proposed safety enhancements, such as left-turn channelization and shoulder widening, are aimed at addressing this issue. Additionally, Americans with Disabilities Act (ADA) improvements are necessary throughout the Middletown urban area to ensure equal access for individuals with disabilities. Many of the existing curb ramps and

sidewalks in Middletown do not meet ADA compliance standards, making these upgrades essential for improving accessibility.

1.3 Project Description

The proposed project is located on SR 29 in Lake County between Post Miles (PMs) 5.0 and 5.9 (Figure 1 and Figure 2). The project extends from the southern end, just south of the intersection with Central Park Road, to the northern end, just north of the intersection with Young Street. The proposed safety enhancements aim to benefit both motorized and non-motorized users.

The proposed project work includes shoulder widening to accommodate standard shoulder widths (8’ width), left turn channelization, two way left turn lane (TWLTL), new and modified curb ramps, bulbouts, approximately 1,200 feet of new sidewalk, lighting, installation of two pedestrian-activated rectangular rapid flashing beacons (RRFB), and extending two existing culverts to maintain drainage (PM 5.24 and the system at PMs 5.37–5.45). Additional drainage system improvements include replacement of 1 culvert and repair to 1 drainage inlet.

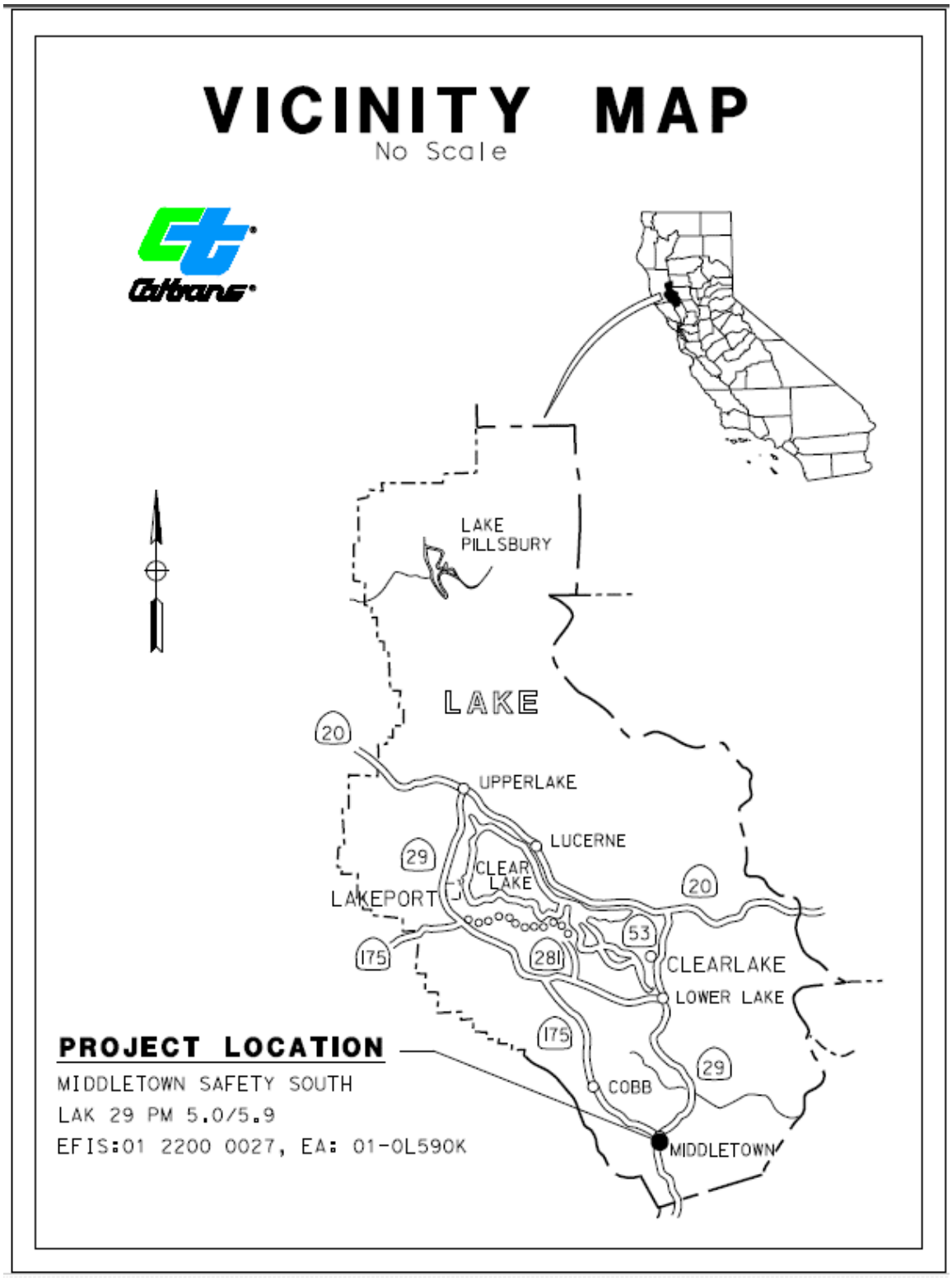


Figure 1. Project Vicinity

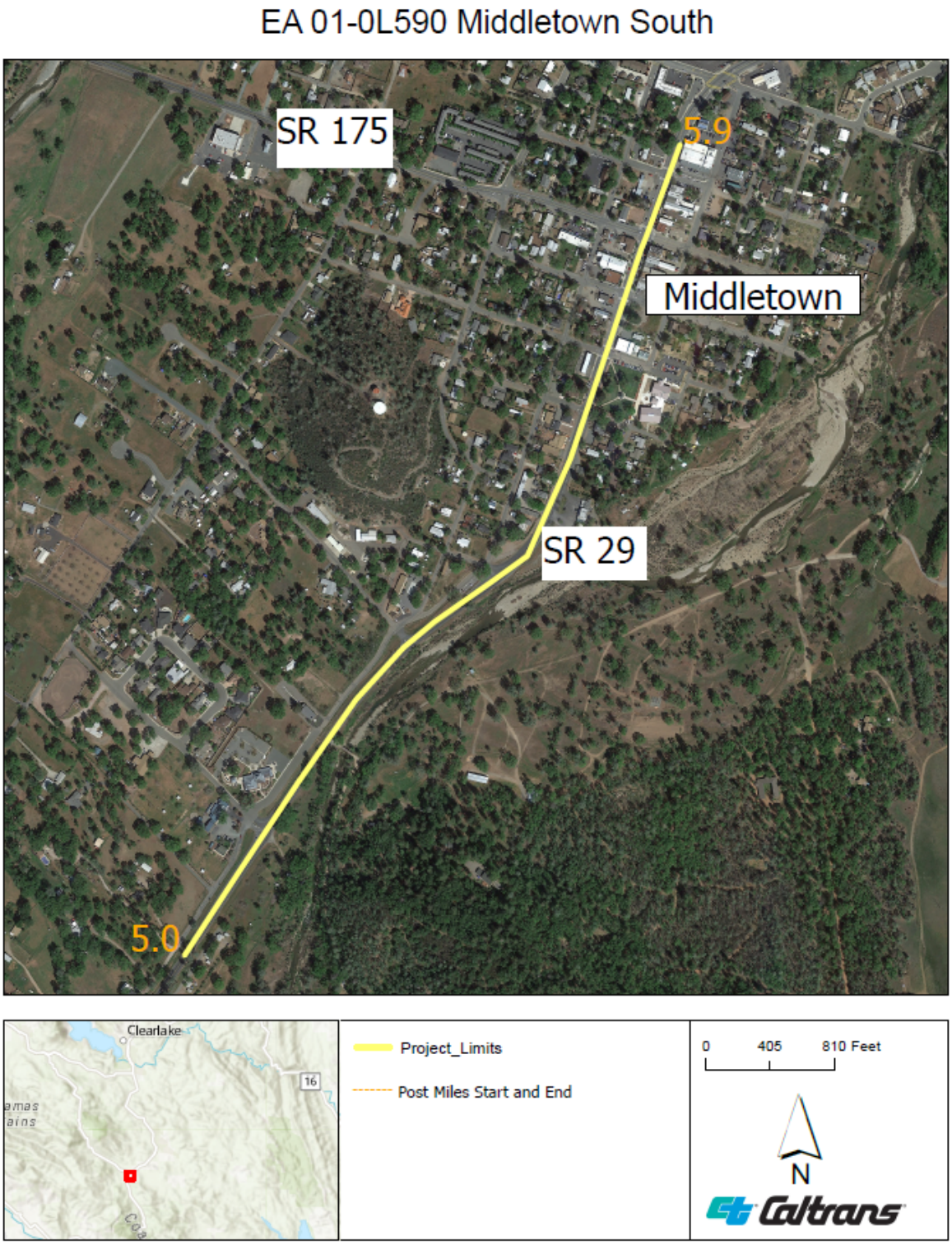


Figure 2. Project Location Map

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.

1.5 Permits and Approvals Needed

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

Table 1. Agency, Permit/Approval Needed and Status

Agency	PLACs	Status
U.S. Army Corps of Engineers (USACE)	Clean Water Act (CWA)– Section 404	Permit application would be submitted after final environmental document (FED) approval.
California Department of Fish and Wildlife (CDFW)	Lake and Streambed Alteration Agreement (LSAA)	Permit application to be submitted after FED approval.
Regional Water Quality Control Board (RWQCB)	Clean Water Act–Section 401	Permit application to be submitted after FED approval.

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 below.

Aesthetics Resources

AR-1: Temporary access roads, construction easements, and staging areas that were previously vegetated would be restored to a natural contour and revegetated with regionally-appropriate native vegetation.

AR-2: Where feasible, guardrail terminals would be buried; otherwise, an appropriate terminal system would be used, if appropriate.

AR-3: Where feasible, construction lighting would be temporary, and directed specifically on the portion of the work area actively under construction.

AR-4: Where feasible, the removal of established trees and vegetation would be minimized. To demarcate areas where vegetation would be preserved and root systems of trees protected, Temporary High Visibility Fencing (THVF) would be installed in Environmentally Sensitive Areas (ESAs) before start of construction.

Biological Resources

BR-1: General

Before start of work, as required by permit or consultation conditions, a qualified 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. Pre-construction surveys for active raptor nests within one-quarter mile of the construction area would be conducted by a qualified biologist within one week prior to initiation of construction activities. Areas to be surveyed would be limited to those areas subject to increased disturbance due to construction activities (i.e., areas where existing traffic or human activity is greater than or equal to construction-related disturbance need not be surveyed). If any active raptor nests are identified, appropriate conservation measures (as determined by a qualified biologist) would be implemented. These measures may include, but are not limited to, establishing a construction-free buffer zone around the active nest site, biological monitoring of the active nest site, and delaying construction activities near the active nest site until the young have fledged.

C. 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.

D. A qualified biologist would monitor in-stream construction activities that could potentially impact sensitive biological receptors (e.g., amphibians, fish). To ensure adherence to permit conditions, the biological monitor would be present during activities such as the installation and removal of culverts. In-water work restrictions would be implemented.

E. An *Aquatic Species Relocation Plan*, or equivalent, would be prepared by a qualified biologist and include provisions for pre-construction surveys and the appropriate methods or protocols to relocate any species found. If previously unidentified threatened or endangered species are encountered or anticipated incidental take levels are exceeded, work would either be stopped until the species is out of the impact area, or the appropriate regulatory agency would be contacted to establish steps to avoid or minimize potential adverse effects. This Plan may be included as part of the Temporary Creek Diversion System Plan identified in BR-5.

F. Preconstruction surveys would be performed for Northwestern pond turtle (NWPT), and foothill yellow-legged frog (FYLF) during the breeding season for each construction season (every year of construction). If species are discovered during construction, work would stop in the area of discovery and coordination with the appropriate resource agencies would occur.

G. A Limited Operating Period would be observed, whereby all in-stream work below ordinary high water (OHW) would be restricted to the period between June 15 and October 15 to protect water quality and vulnerable life stages of sensitive fish species.

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.

- All equipment would be thoroughly cleaned of all dirt and vegetation prior to entering the job site to prevent importing invasive non-native species. Project personnel would adhere to the latest version of the *California Department of Fish and Wildlife Aquatic Invasive Species Decontamination Protocol (Northern Region)* (CDFW 2022) for all field gear and equipment in contact with water.

BR-4: Plant Species, Sensitive Natural Communities, and ESHA

A. A *Revegetation Plan* would be prepared which would include a plant palette, establishment period, watering regimen, monitoring requirements, and invasive plant species control measures. The Revegetation Plan would also address measures for riparian areas temporarily impacted by the project.

B. Prior to the start of work, Temporary High Visibility Fencing (THVF) and/or flagging would be installed around sensitive natural communities, environmentally sensitive habitat areas, rare plant occurrences, intermittent streams and wetlands and other waters, where appropriate. No work would occur within fenced/flagged areas.

C. Where feasible, the structural root zone (SRZ) would be identified around each large-diameter tree (>2-foot diameter-at-breast height [DBH]) directly adjacent to project activities, and work within the zone would be limited.

D. When possible, excavation of roots of large diameter trees (>2-foot DBH) would not be conducted with mechanical excavator or other ripping tools. Instead, roots would be severed using a combination of root-friendly excavation and severance methods (e.g., sharp-bladed pruning instruments or chainsaw). At a minimum, jagged roots would be pruned away to make sharp, clean cuts.

E. Upon completion of construction, all superfluous construction materials would be completely removed from the site. The site would then be restored by regrading and stabilizing with a hydroseed mixture of native species along with fast growing sterile erosion control seed, as required by the Erosion Control Plan.

BR-5: Wetlands and Other Waters

A. In-stream work would be restricted to the period between June 15 and October 15 to protect water quality and vulnerable life stages of sensitive fish species (see also **BR-2L**). Construction activities restricted to this period include any work below ordinary high water (OHW). Construction activities performed above the ordinary high water mark (OHWM) of a watercourse that could potentially directly impact surface waters (i.e., soil disturbance that could lead to turbidity) would be performed during the dry season, typically between June through October, or as weather permits per the authorized contractor-prepared Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP), and/or project permit requirements.

B. See **BR-4** for Temporary High Visibility Fencing (THVF) information.

Cultural Resources

CR-1: Caltrans would coordinate with the Middletown Rancheria of Pomo Indians Tribe and incorporate measures to protect tribal resources, including potential work windows associated with tribal ceremonies.

CR-2: An archaeological monitor and a Middletown Rancheria of Pomo Indians tribal monitor would be used during ground-disturbing activities.

CR-3: If cultural materials are discovered during construction, work activity within a 60-foot radius of the discovery would be stopped and the area secured until a qualified archaeologist can assess the nature and significance of the find in consultation with the State Historic Preservation Officer (SHPO).

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.

Geology, Seismic/Topography, and Paleontology

GS-1: The project would be designed to minimize slope failure, settlement, and erosion using recommended construction techniques and Best Management Practices (BMPs). New earthen slopes would be vegetated to reduce erosion potential.

GS-2: In the unlikely event that paleontological resources (fossils) are encountered, all work within a 60-foot radius of the discovery would stop, the area would be secured, and the work would not resume until appropriate measures are taken.

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.

GHG-5: All areas temporarily disturbed during construction would be revegetated with appropriate native species, as appropriate. Landscaping reduces surface warming and, through photosynthesis, decreases CO_2. This replanting would help offset any potential CO_2 emissions increase.

GHG-6: Pedestrian and bicycle access would be maintained on State Route 29 during project activities.

Hazardous Waste and Material

HW-1: Per Caltrans requirements, the contractor(s) would 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.

HW-2: When identified as containing hazardous levels of lead, traffic stripes would be removed and disposed of in accordance with Caltrans Standard Special Provision "Remove Traffic stripes and Pavement Markings Containing Lead (84-9.03B).

HW-3: If treated wood waste (such as removal of sign posts or guardrail) is generated during this project, it would be disposed of in accordance with Standard Specification 14-11.14 "Treated Wood Waste."

Traffic and Transportation

TT-1: A Transportation Management Plan (TMP) would be prepared for the project. 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.

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 29 throughout the construction period.

UE-2: Caltrans would coordinate with utility providers to plan for relocation of any utilities to ensure utility customers would be notified of potential service disruptions before relocation.

UE-3: The project is located within the *Very High,* 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.
- 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* (Caltrans 2016). 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 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).

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	No
Biological Resources	No
Cultural Resources	No
Energy	No
Geology and Soils	No
Greenhouse Gas Emissions	**YES**
Hazards and Hazardous Materials	No
Hydrology and Water Quality	No
Land Use and Planning	No
Mineral Resources	No
Noise	**YES**
Population and Housing	No
Public Services	No
Recreation	No
Transportation	No
Tribal Cultural Resources	No
Utilities and Service Systems	No
Wildfire	No
Mandatory Findings of Significance	No

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 1.6]), 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 California Code of Regulations [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 it's 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 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.

The Biological Study Area (BSA) of the project is a 50-foot buffer area surrounding the Environmental Study Limits (ESL) for various biological resources (e.g. noise, visual, etc.) (Figure 3 below).

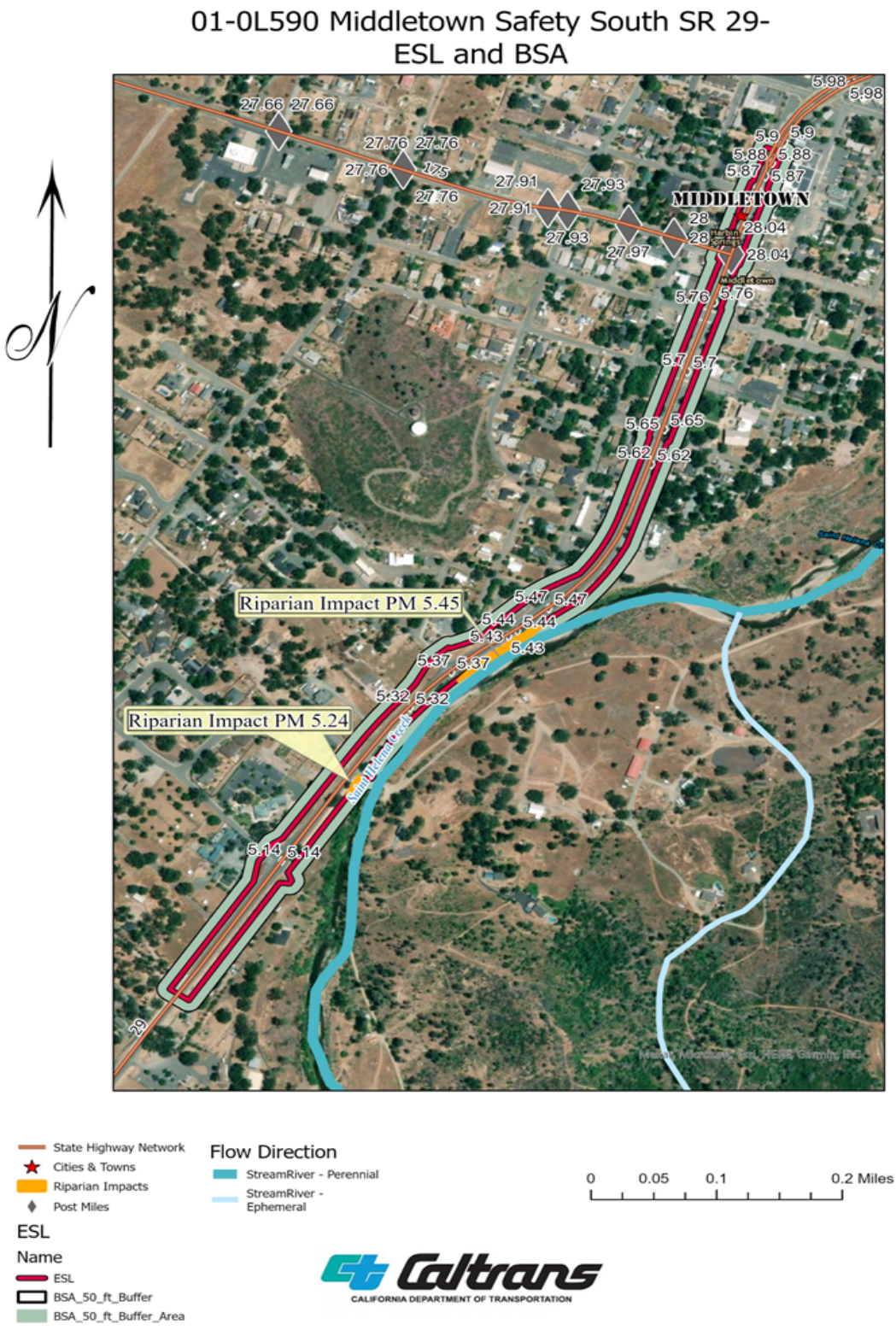


Figure 3. Environmental Study Limits and Biological Study Area

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?				✓

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 *Statement of No Visual Resource Impact Memo* dated December 4, 2024 (Caltrans 2024a).

This section of SR 29 is not designated a scenic highway but is listed as eligible by Lake County (Caltrans 2025a). The project corridor is divided into two types of landscape: one end of the project is partly rural with various businesses and properties on one side of the street and rural landscape on the other, and the other end is a developed town center complete with a small park (Caltrans 2024a).

The proposed removal of trees and shrubs within the project limits would not alter the overall view for highway users. Landscaping and permit-driven replanting would

be completed following construction, and Standard Measures and Best Management Practices (BMPs), as outlined in Section 1.6, would be implemented as part of the proposed project.

Potential impacts to visual resources are not anticipated because the project is consistent with the *Lake County General Plan* (County of Lake 2008) resource management policies that pertain to scenic resources, does not degrade the existing visual character or quality of Middletown and its surroundings, and has no adverse visual effects on a scenic vista. No new permanent sources of light or glare are included in the scope of the project. Any construction activities that require illumination sources would be temporary, and conditions would return to normal following construction.

Because no potential impacts to aesthetics are anticipated, no mitigation would be required.

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

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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, as well as the California Department of Conservation's Important Farmland Mapping tool site accessed, and a map produced on November 18, 2024 (California Department of Conservation 2024a).

Potential impacts to agricultural or forest resources are not anticipated as the project footprint is within the Caltrans existing right of way. The *Lake County General Plan* (County of Lake 2008) identifies the majority of Middletown as a low-density residential area with a small mix of public facilities and resource conservation areas; none of these parcels would be acquired temporarily or permanently for construction use.

Because no potential impacts to agriculture and forest resources are anticipated, no mitigation would be required.

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?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Air Quality and Greenhouse Gas Analysis Memo* dated February 28, 2025 (Caltrans 2025b).

The project does not conflict with or obstruct the implementation of the Lake County Air Quality Management District (County of Lake 2025). During construction, short term degradation of air quality may occur due to the release of particulate emissions. These emissions would be temporary and limited to the immediate area surrounding the construction site (Caltrans 2025b).

The analysis concluded that the project is exempt from conformity requirements as Lake County is designated as attainment/unclassified for all current National Air Quality Standards.

Sensitive receptors would not be exposed to substantial pollutant concentrations. During construction, particulate emissions, such as fugitive dust, would be generated during grading and construction operations. Sources of fugitive dust include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Implementation of Caltrans Standard Measures and Best Management Plans would ensure no substantial pollutant concentrations would impact sensitive receptors.

The project would not result in changes to traffic volume, fleet mix, speed, location of existing facilities, or any other factor that would cause an increase in emissions relative to the No-Build Alternative; therefore, the project would not cause an increase in long-term operational emissions.

Because no potential impacts to air quality is anticipated, no mitigation would be required.

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* dated May 5, 2025 (Caltrans 2025e).

Existing records from the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), the California Department of Fish and Wildlife (CDFW), and the California Native Plant Society (CNPS) of special status plant and animal occurrences were reviewed to determine which special status species could potentially occur in the project area. Seasonally-appropriate botanical surveys were conducted within the Environmental Study Limits (ESL) of the project in accordance with CDFW protocols. No rare or special status species would be impacted by the current proposed scope of work. There was no suitable habitat observed within the ESL for special status amphibians, reptiles, fish or terrestrial mammals. The potential for suitable habitat for insects would be present, but would return to normal upon completion of construction.

There would be no effect/no take to those federal and state special status species that could potentially occur in the Environmental Study Limits identified in the Plant and Animal Species tables in Appendix D.

There would be no substantial adverse effect on any riparian habitat or other sensitive natural communities because habitat or natural communities are not present, would be minimized by permit-driven measures, or avoided through Caltrans Standard Measures and Best Management Practices listed in Section 1.6.

There are no state or federally protected wetlands (marsh, vernal pools, coastal habitat, etc.) that would be impacted with the proposed project's scope of work. However, PM 5.24 and PMs 5.37–5.45 are Waters of the State jurisdictional culverts and would be extended. Temporary and permanent impacts on jurisdictional waters would be minimized with the incorporation of the Standard Measures and Best Management Practices found in Section 1.6 and by permit- driven measures. Permit-driven mitigation and tree removal required replanting would be addressed onsite or on the adjoining designated mitigation parcel.

The project is not anticipated to affect fish passage and none of the culverts scoped for work are barriers to fish passage. Caltrans does not anticipate any changes to habitat connectivity due to construction of the proposed project. The proposed project is not expected to decrease habitat connectivity for wildlife migration or fish passage.

Potential impacts to biological resources are not anticipated due to the developed urban setting of the project, the absence of sensitive resources (e.g. special status plant and wildlife species) within the ESL, and the scope of the project. By implementing Caltrans standard measures and BMPs (Section 1.6) there would be no impact to 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 draft Historic Properties Survey Report for Middletown Safety South dated June 2025 (Caltrans 2025g).

The proposed project would not create substantial adverse changes in the significance of historical or archaeological resources pursuant to code § 15064.5. Cultural resources are located within the project limits; however, Extended Phase I and Phase II surveys have determined the cultural sites to be highly disturbed and not likely to be eligible for the National Register of Historic Places. Potential impacts to cultural resources are not anticipated due to the developed urban and disturbed setting of the project, the absence of sensitive resources (e.g. cultural artifacts, historically significant artifacts) within the ESL, and the scope of the project. Incorporation of the Standard Measures and Best Management Practices, found in Section 1.6, would ensure no impacts to cultural resources would occur.

No disturbance of any human remains would be anticipated. Incorporation of the Standard Measures and Best Management Practices, found in Section 1.6, would ensure no impacts to human remains would occur.

Because no potential impacts to cultural resources are anticipated, no mitigation would be required.

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, Noise, GHG, and Energy Memo dated February 28, 2025 (Caltrans 2025b).

The project would not increase capacity or provide congestion relief when compared to the No-Build Alternative; therefore, potential impacts to direct energy (mobile sources) are not anticipated. The project does not include maintenance activities which would result in long-term indirect energy consumption by equipment required to operate and maintain the roadway, and is thus unlikely to increase indirect energy consumption through increased fuel usage. Potential impacts to indirect energy (construction) are therefore not anticipated.

Project construction would primarily consume diesel and gasoline through operation of construction equipment, material deliveries and debris hauling. Energy use associated with project construction is estimated to result in the short-term consumption of diesel- and gasoline-powered equipment, which represents a small and temporary demand on local and regional fuel supplies. This temporary demand for fuel would have no noticeable effect on peak or baseline demands for energy. The project would therefore not result in an inefficient, wasteful, and unnecessary consumption of energy.

The proposed project does not conflict or obstruct state or local plans for energy or renewable energy. The final project would not result in maintenance activities, which would result in long-term indirect energy consumption by equipment required to operate and maintain the roadway. It would improve the condition of the roadway, therefore would be unlikely to increase energy consumption through increased fuel usage. Construction would result in short-term increases in energy use, but construction design features would help to conserve energy. Some methods of conserving energy through construction would be using recycled and energy-efficient building materials, energy-efficient tools and construction equipment, and renewable energy sources in the construction and operation of the project.

Because no potential impacts to energy resources are anticipated, no mitigation would be required.

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: 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, as well as the Department of Conservation's California Geological Survey website accessed November 18, 2024 (Department of Conservation 2024b), and a records search of paleontological databases performed on January 10, 2023 (Caltrans 2023a).

Potential impacts to Geological or Soil resources are not anticipated due to the project scope being restricted to the disturbance of the existing road prism fill and/or cut soil. The proposed project would include shoulder and left-turn lane widening, guardrail replacement, and sidewalk refurbishing. The excavated fill would be reused on-site, as much as possible, and managed using the Standard Measures and BMPs discussed in Section 1.6 to ensure no soil erosion occurs.

The project would be unlikely to directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature due to the project location being a relatively young geologic age, and no previously identified resources have been discovered in the area. If resources were discovered during construction, Standard Measures and BMPs, discussed in Section 1.6, would ensure resources are not impacted.

Because no potential impacts to geology and soils are anticipated, no mitigation would be required.

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 (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 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 CO_2 that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO_2.

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, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

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

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea level 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 U.S. 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 (U.S. EPA 2021). 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.

Affected Environment / Environmental Setting

The proposed project is 26 miles south of Clearlake, in and south of the town of Middletown, within a rural part of Lake County on SR 29. The project area consists primarily of a natural agricultural-based tourism economy. SR 29 is one of the main transportation routes to and through the area for both passenger and commercial vehicles. The nearest alternative northbound route is SR 175, accessible within the town limits of Middletown at the SR 29/SR 175 junction.

The project area is not within the jurisdiction of an Metropolitan Planning Organization (MPO) and therefore not subject to CARB GHG reduction targets. However, the *Lake County Final Regional Transportation Plan/Active Transportation Plan* (County of Lake 2022) is the Regional Transportation Planning Agency (RTPA) for the project area. The area experiences daytime congestion with residents heading to and from school and work. Businesses requiring access to SR 29 would still have access during construction.

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 CO_2, 11% were CH_4, and 6% were N_2O; the balance consisted of fluorinated gases. From 1990 to 2022, CO_2 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)).

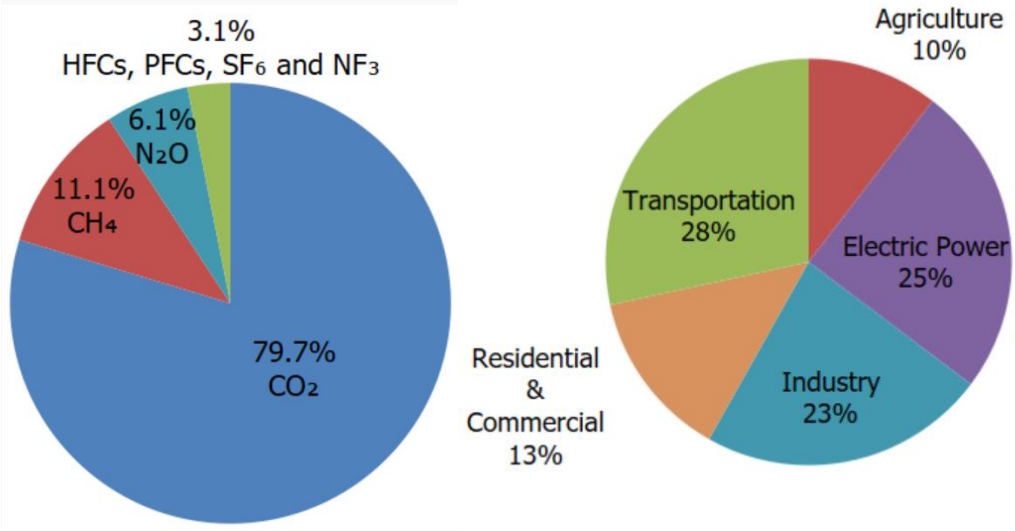


Figure 4. U.S. 2022 Greenhouse Gas Emissions

(Source: U.S. EPA 2024b)

STATE GHG INVENTORY

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

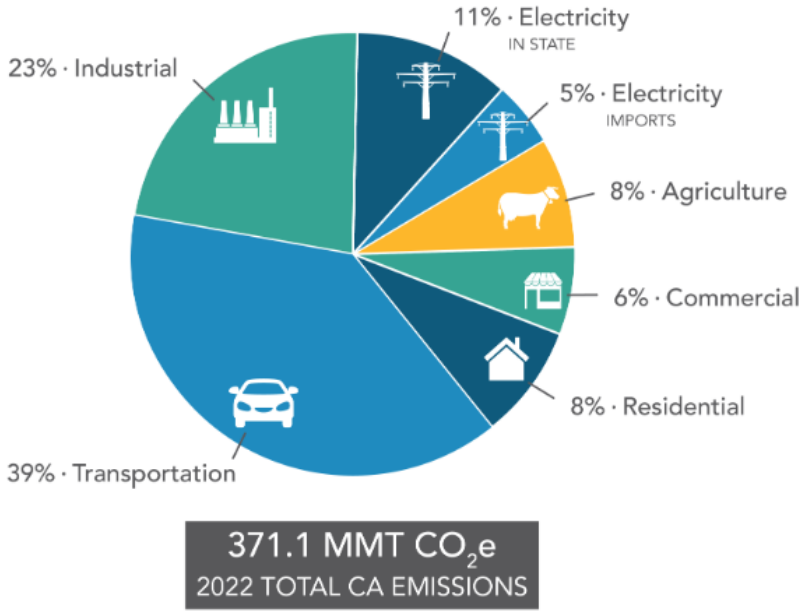


Figure 5. California 2022 Greenhouse Gas Emissions by Economic Sector

(Source: CARB 2023)

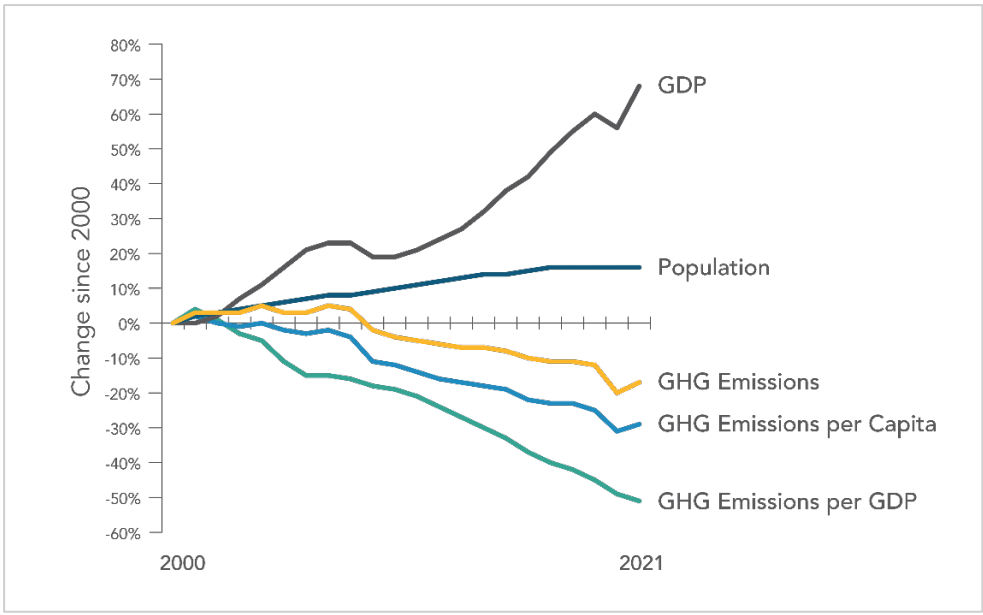


Figure 6. Change in California Gross Domestic Product (GDP), Population, and GHG Emissions since 2000

(Source: CARB 2023)

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. 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 project area is not within the jurisdiction of an MPO and therefore not subject to CARB GHG reduction targets. However, the *Lake County Final Regional Transportation Plan/Active Transportation Plan* is the Regional Transportation Planning Agency (RTPA) for the project area (Lake Area Planning Council 2022). The 2022 RTP identifies a 20-year horizon with an overall goal of promoting the safe and efficient management, operation, and development of a multi-modal transportation system that, when linked with appropriate land use planning, will serve the mobility needs of people and goods movement throughout the region.

The 2022 RTP was developed with the guidance of a number of documents adopted over the past several years, including the California Transportation Plan 2050, the Climate Action Plan for Transportation Infrastructure, and Senate Bill 743 Vehicle Miles Traveled Regional Baseline Study (County of Lake 2008). Implementation of the 2022 RTP GHG emissions reduction goals and policies is intended to be consistent with these plans and programs:

The *California Transportation Plan* (CTP 2050) is a long-range policy plan that presents a vision for a safe, integrated and multimodal transportation system throughout the state that is equitable, accessible and sustainable. The CTP 2050 defines goals, policies, and strategies that are intended to meet the mobility needs of its population while also meeting its greenhouse gas emissions reduction targets. The RTP was developed with the eight goals of the CTP in mind, emphasizing, 1) improved multimodal mobility and accessibility, 2) maintenance of the existing transportation system, 3) support of a vibrant and resilient economy, 4) improved public safety and security, 5) livable and healthy communities, 6) environmental stewardship, 7) greenhouse gas reducing and resilient to climate change, and 8) transportation needs of disadvantaged populations in the region.

The Climate Action Plan for Transportation Infrastructure (CAPTI) was prepared by the California State Transportation Agency to provide guidance for focusing funds on combating and adapting to climate change (California State Transportation Agency 2021). The primary purpose of the CAPTI is to reduce GHG emissions. Senate Bill 743 Vehicle Miles Traveled Regional Baseline Study assists local jurisdictions in complying with reducing GHG emissions as outlined in SB 743. Additionally, the 2022 RTP cites the need to address GHG emissions through the reduction in the number of vehicle miles traveled by developing goals that facilitate multi-modal transportation by increasing public transit, bicycle and pedestrian travel in Lake County. Greenhouse gas emissions reduction policies and strategies from the Lake County 2022 Regional Transportation Plan are summarized below in Table 2.

Table 2. Final 2022 Lake County Regional Transportation Plan/Active Transportation Plan Greenhouse Gas Goals, Objectives and Policies.

Title	GHG Reduction Policies or Strategies
OI-2: Support Complete Streets planning to improve multi-modal forms of connectivity within the transportation system.	Pursue funding, encourage adoption, and support efforts to reduce dependency on automobile use by incorporating multi-modal transportation options into planning.
OI-3: Reduce Greenhouse Gas emissions by promoting and facilitating transit use and increasing active transportation alternatives.	Support planning projects that further greenhouse gas-reducing efforts at the State level such as SB 32, SB 375, and SB 743.
OI-4: Reduce and mitigate environmental impacts of current and future transportation projects.	Develop project-specific mitigation measures as a means of reducing Vehicle Miles Traveled (VMT) resulting from land use development.
OI-6: Support planning projects that will benefit public health in the region.	Encourage non-motorized planning activities that result in lower GHG emissions and other air pollutants as a means of improving air quality in the region.

Title	GHG Reduction Policies or Strategies
LSR-2: Develop multimodal transportation facilities as needed to adequately serve the mobility needs of residential, commercial and industrial development.	Ensure that multi-modal transportation alternatives, consistent with the Complete Streets Act, are considered in the design and construction of transportation projects.
AT-2: Reduce Greenhouse Gas emissions and Vehicle Miles Traveled (VMT).	Act to reduce greenhouse gas emissions and VMT by increasing pedestrian and bicycle trips.
PT-4: Improve the efficiency of the transit system.	Continue to seek ways in which to reduce greenhouse gas emissions from public transit sources.

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 CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH_4 and N_2O. 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. CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called “carbon dioxide equivalent”, or CO_2e. The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.)

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

Non-Capacity-Increasing Projects

As the purpose of the proposed project is to improve safety for all road users and reduce the frequency and severity of collisions, it would not increase the vehicle capacity of the roadway. This type of project generally creates minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on SR 29, no increase in vehicle miles traveled (VMT) would occur. While some GHG emissions during the construction period would be unavoidable, construction would be temporary and 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 will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. 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 anticipated to begin in 2027 and occur over approximately 120 working days. Construction would result in the generation of short-term, construction-related GHG emissions. Construction GHG emissions consist of emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays and detours due to construction. These emissions would be generated at different levels through the construction phase. The CAL-CET2021 v1.0.2 was used to estimate average carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), Black Carbon (BC), and hydrofluorocarbon-134a (HFC-134a) emissions from construction activities. Table 3 below summarizes estimated GHG emissions generated by on-site equipment for the project. The total CO_{2e} produced during construction is estimated to be 107 metric tons.

All construction contracts include Caltrans Standard Specifications related to air quality. Sections 7-1.02A and 7 1.02C, Emissions Reduction, require 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, and Caltrans BMPs (such as utilizing Transportation Management Plans to minimize vehicle delays and maintaining equipment in proper working conditions to reduce construction vehicle emissions) also help reduce GHG emissions.

Table 3. CAL-CET Estimates of GHG Emissions During Construction

Construction Year	CO_2	CH_4	N_2O	BC	HFC-134a	CO_{2e}
2027	52	0.001	0.002	0.002	0.001	50
2028	58	0.001	0.004	0.002	0.002	57
Total	**110**	**0.002**	**0.006**	**0.004**	**0.003**	**107**

* A quantity of GHG is expressed as carbon dioxide equivalent (CO_{2e}) that can be estimated by the sum after multiplying each amount of CO_2, CH_4, N_2O, and HFCs by its global warming potential (GWP). Each GWP of CO_2, CH_4, N_2O, and HFCs is 1, 25, 298, and 14,800, respectively.

CEQA Conclusion

While the proposed project would result in GHG emissions during construction, it is anticipated the project would not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Caltrans has determined project impacts would be less than significant.

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 (OPR) 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 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 vehicle miles traveled (VMT). Reducing today's petroleum use in cars and trucks is a key state goal for reducing greenhouse gas emissions by 2030 (California Environmental Protection Agency 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 in 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% 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 2021).

Caltrans Strategic Plan

The *Caltrans 2024-2028 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 2024d).

Caltrans Policy Directives And Other Initiates

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 2020) 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 Greenhouse Gas Reduction Strategies

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

- The construction contractor must comply with the Caltrans Standard Specifications in Section 14-9, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statues.
- Compliance with Title 13 of the California Code of Regulations, which includes idling restrictions of construction vehicles and equipment to no more than 5 minutes.
- Caltrans Standard Specification 7-1.02C “Emissions Reduction” ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board.
- Utilize a Transportation Management Plan to minimize vehicle delays.
- All areas temporarily disturbed during construction would be revegetated with appropriate native species, as appropriate. Landscaping reduces surface warming and, through photosynthesis, decreases CO_2. This replanting would help offset any potential CO_2 emissions increase.
- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- Maintain equipment in proper tune and working condition.
- Pedestrian and bicycle access will be maintained during project activities.

Adaptation Strategies

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 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 (U.S. DOT) 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 (NOAA) 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–2018) provides information to help decision makers across sectors and at state, regional, and local levels 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 EFFORTS

Sea Level Rise

The proposed project is outside the Coastal Zone and not in an area subject to sea level rise. Accordingly, direct impacts to transportation facilities due to projected sea level rise are not expected (Figure 7).

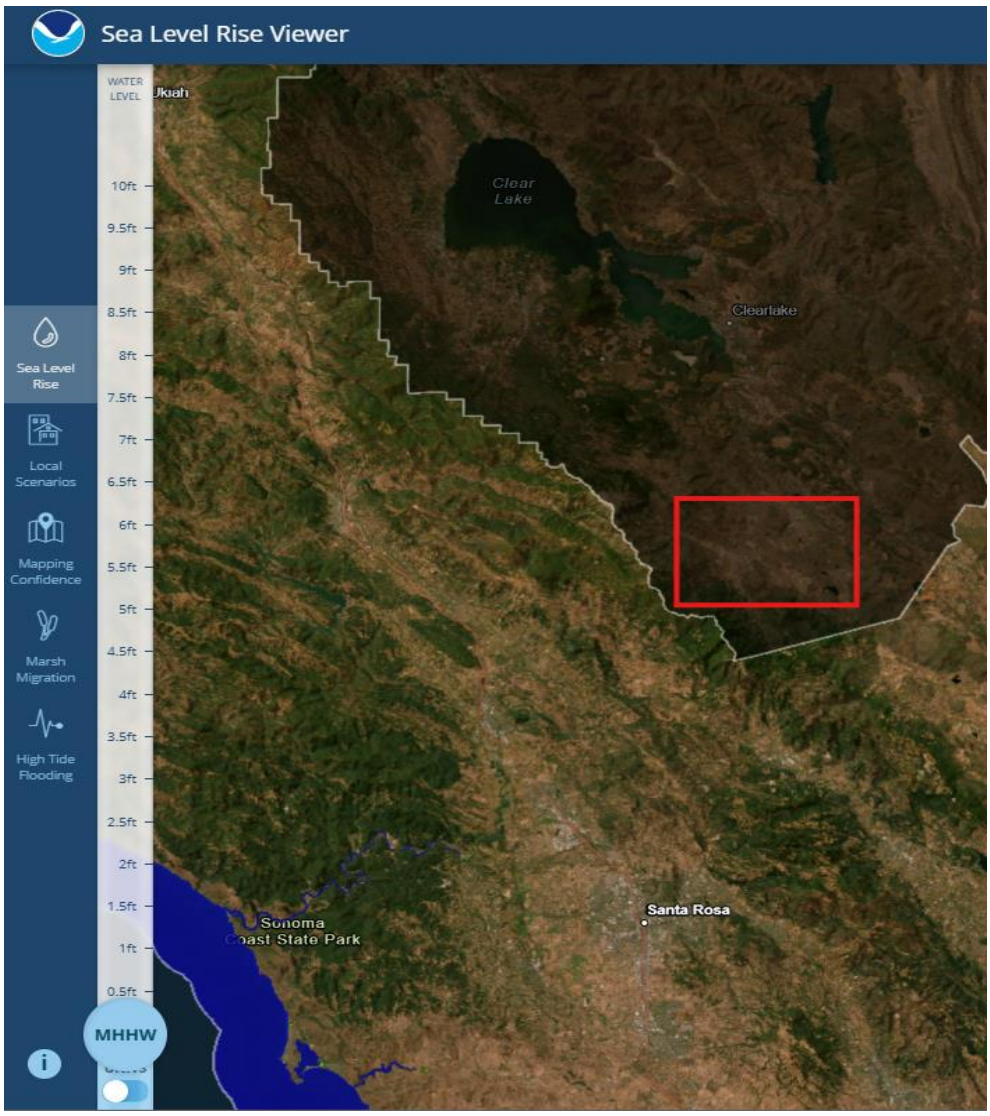


Figure 7. Sea Level Rise within Project Study Area from NOAA Sea Level Rise Viewer

Source: NOAA 2024

Precipitation and Flooding

It is known that changes in precipitation scenarios under future climate conditions include more-extreme precipitation events and more precipitation falling as rain than snow, depending on geographic location. These factors and others (such as land use changes) that increase impervious surface in the watershed can affect flood magnitude and frequency.

The project site lies within the floodplain of the adjacent St. Helena Creek and is within the Federal Emergency Management Agency (FEMA) mapped area shown on the FIRMette and is classified within two flood hazard zones. The majority of the site is located within Zone A and Zone AE, a Special Flood Hazard Area with a determined Base Flood Elevation (BFE) or depth. This project is not anticipated to have significant impacts to the floodplain given the large floodplain area relative to the project area and scope.

Drainage work would be necessary for the construction of the roadway widening to ensure proper drainage is provided. The proposed project would improve existing storm drain facilities to better protect roadways and increase resiliency to localized flooding. Drainage pipes would be extended to reach the new appropriate outlet location. A Hydraulic Recommendations Memo was prepared to evaluate site-specific hydrology and the existing storm drain systems (Caltrans 2024c). Precipitation frequency estimates were reviewed using NOAA Atlas 14. This information is used to estimate flows at culverts for discharge events, based on the storm duration and average recurrence interval.

Wildfire

According to the Caltrans Climate Change Vulnerability Assessment for District 1 (Caltrans 2019), wildfire extent and severity increase as temperatures rise. The recently released *California Fourth National Assessment of Climate Change* reported that climate change factors alone roughly doubled the area burned by wildfire in the west between 1984 and 2015.

The project limits are within a State Responsibility Area (SRA) served by CAL FIRE . Project limits within the SRA are classified as *Very High* Fire Hazard Severity Zones (FHSZs) according to the CAL FIRE FHSZ Viewer accessed on February 6, 2025 (Figure 8).

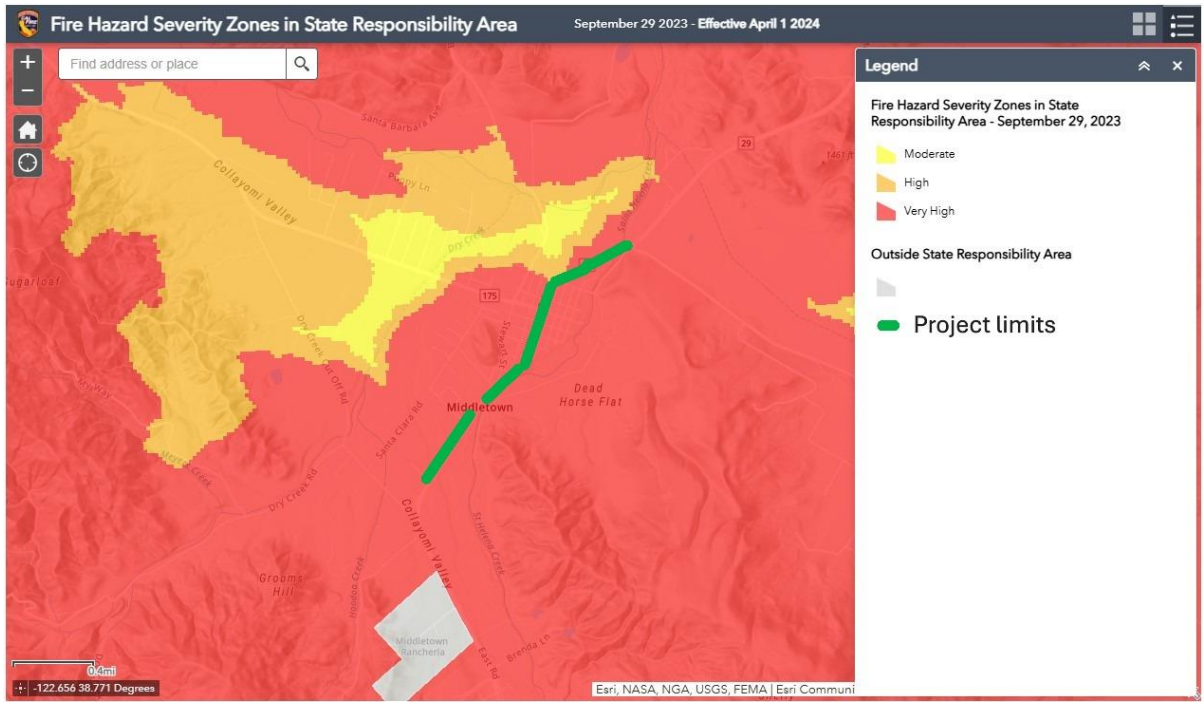


Figure 8. Fire Hazard Severity Zone Map

Although there is work proposed in a *Very High* FHSZ, project elements would assist in building a wildfire resilient highway system. The project would incorporate fire hardening components into the project scope including the following installation and upgrades:

- Corrugated steel pipes
- Steel post Midwest Guardrail System (MGS)
- Minor concrete vegetation control under guardrail areas
- Clearing and/or trimming of certain natural vegetation and roadside weedy annuals (vegetation removal)
- Removal of weeds and/or annual vegetation within and around culverts, which are potentially combustible in dry months

Temperature

The *District Climate Change Vulnerability Assessment in D01* (Caltrans 2025d) does not indicate temperature changes during the project's design life that would require adaptive changes in pavement design or maintenance practices.

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?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Initial Site Assessment* (ISA) prepared on January 6, 2025 (Caltrans 2025f).

Although the project scope does include the disturbance, removal, and transportation of elements such as aerially deposited lead, naturally occurring asbestos, treated wood waste, and thermoplastic paint/striping, these would be handled using Caltrans Standard Measures and Best Management Practices (BMPs) as outlined in Section 1.6, which ensures that hazardous emissions and materials are either contained within the project area or are safely disposed of, so as not to release into the environment, following all applicable laws and/or regulations (Caltrans 2025f).

The project is located within a quarter mile buffer of Minnie Cannon Elementary School. Hazardous materials such as Aerially Deposited Lead may have presence within the project limits as well as the project's general area surrounding geology which may have naturally occurring asbestos. Caltrans Standard Measures and BMPs outlined in Section 1.6, which ensures that hazardous emissions and materials are either contained within the project area or are safely disposed of so as not to release into the environment, would be implemented and would not impact schools within a quarter mile buffer.

This project is not located on the "Cortese" list.

This project is not located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport of public use. During construction, noise may be generated from the contractor's equipment and vehicles. Standard Measures and BMPs found in Section 1.6 would be followed to minimize or eliminate the substantial impacts of construction-related noise.

This project scope would not change the highway access, use, configuration, or location, so it would not affect the implementation or physically interfere with any emergency response plan(s) or emergency evacuation plan(s) (Caltrans 2024e, MCOG 2022).

Caltrans' Transportation Management Plan (Caltrans 2024e) would ensure that emergency response agencies and service providers would be notified of the project construction schedule, would have access to SR 29 throughout the construction period, and receive prior notification of lane closures. Emergency vehicles would be accommodated through any temporary lane closures and, if a wildland fire were to affect the area, work would stop and evacuation routes would be accessible.

No changes to road slope that would affect prevailing winds or other factors are in the scope of work; thus, this project would not exacerbate wildfire risks and would not expose project occupants to pollutant concentrations from a wildland fire or the uncontrolled spread of a wildfire.

Because no potential impacts from hazards or hazardous materials are anticipated, no mitigation would be required.

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?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the W*ater Quality Assessment Report for Middletown Safety South* dated December 4, 2024 (Caltrans 2024b) and the *Floodplain Evaluation Report Summary* (FERS) dated December 22, 2022 (Caltrans 2022).

The project would not substantially decrease groundwater supplies as the proposed work would not impact any groundwater supplies or interfere with groundwater recharge.

The project would not substantially alter the existing drainage pattern where it would cause substantial erosion, increase the rate or amount of surface runoff, create or contribute runoff that would exceed capacity, or impede or redirect flood flows. The project is proposing to complete some drainage work by extending 2 culverts to the newly widened roadway length, replace 1 culvert, and repair 1 existing drainage inlet. None of these actions would substantially alter the existing drainage pattern.

The project boundaries fall within three defined flood zones along SR 29, including Zone AE, a Special Flood Hazard Area; however, project activities would not occur in the floodway. The FERS finds that construction activities are not expected to have any significant adverse floodplain impacts. Drainage work would be necessary for the construction of road widening to ensure proper drainage is provided, including extension of drainage pipes.

The disturbed soil area (DSA) is estimated at 1.19 acres, requiring compliance with the SWRCB Construction General Permit (CGP), including a Stormwater Pollution Prevention Plan (SWPPP). If the actual DSA were to drop below one acre, a Water Pollution Control Program would be required in lieu of a SWPPP. Appropriate construction site BMPs would be specified in the Stormwater Plan and deployed by the contractor to avoid or minimize water quality impacts.

Because no potential impacts to hydrology and water quality resources are anticipated, no mitigation would be required.

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 *Lake County General Plan–Chapter 3: Land Use* dated September 2008 (County of Lake 2008).

The proposed project would not create any additional division of an established community. Currently, SR 29 runs through the length of Middletown with houses, businesses, and other established community features along both sides of the highway.

Potential impacts to Land Use or Planning are not anticipated as the project is a non-capacity increasing safety project on an existing facility. The proposed project is consistent with state, regional, and local planning goals.

Because no potential impacts to land use and planning resources are anticipated, no mitigation would be required.

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 Department of Conservation Mineral Resources Map accessed January 22, 2025 (California Department of Conservation 2024c), and the Lake County General Plan–Chapter 9: 9.4 Mineral Resources dated September 2008 (County of Lake 2008).

Potential impacts to Mineral Resources are not anticipated due to the limited project scope, previous road cut and fill activities, and lack of identified mineral resources within the project limits. There are no designated mineral resource areas of state or regional importance in the project area, and the project would not reduce the availability of a locally important mineral resource recovery site.

Because no potential impacts to mineral resources are anticipated, no mitigation would be required.

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?				✓

Regulatory Setting

The primary laws governing noise are NEPA and CEQA.

Affected Environment

A Less than Significant determination in this section is based on the location of the proposed project, as well as the Noise Analysis for the Middletown Safety Project Memo dated February 28, 2025 (Caltrans 2025c). The project area is surrounded by a mix of residential and commercial land uses. Numerous residences are located within 100 feet of the roadway.

Environmental Consequences

The proposed change in alignment would not significantly change the existing receptors' exposure to traffic noise. Traffic volumes, composition, and speeds would remain the same in the build and no build condition.

Avoidance, Minimization and Mitigation Measures

In addition to the implementation of the Caltrans Standard Measures and BMPs, the following measures would be followed to minimize the impacts of construction-related noise:

- Limit operation of pile driver, jackhammer, concrete saw, pneumatic tools and demolition equipment to daytime hours.
- Unnecessary idling of internal combustion engines should be prohibited.
- Stationary equipment, such as compressors and generators, should be shielded and located as far away from residential and park uses as practical.
- Locate equipment and materials storage sites as far away from residential and park uses as practicable.
- Notify residents within 100 feet of the project area at least two weeks prior to the start of nighttime construction

Discussion of CEQA Environmental Checklist Question 2.13—Noise

a) Would the project result in 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?

During construction, noise may be generated from the contractor's equipment and vehicles. Construction noise levels would vary on a day-to-day basis during each phase of construction depending on the specific task being completed. Based on the scope of work, the project is considered a Type III project, which does not require a noise analysis. Incorporation of the Caltrans Standard Specification Section 14-8.02 "Noise Control," which states:

Control and noise monitoring resulting from work activities would be required.

Work would not exceed 86 dBA Lmax at 50 feet from the job site from 9 p.m. to 6 a.m.

would ensure that no substantial temporary or permanent increase in ambient noise levels would take place.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

The proposed project is not expected to generate excessive groundborne vibration or groundborne noise. Vibration levels could be perceptible and cause disturbances at residences near the project area during operation of heavy equipment, such as vibratory rollers. However, these effects would be short-term and intermittent and would cease once construction is completed.

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?

This project is not located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport of public use. During construction, noise may be generated from the contractor's equipment and vehicles. Caltrans Standard Measures and BMPs, would be implemented to minimize or eliminate the substantial impacts of construction-related noise.

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

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, as well as the *Lake County General Plan–Chapter 4: Housing* dated April 2016, revised 2019 (County of Lake 2019).

Potential impacts to Population and Housing are not anticipated as the project would not extend roads or other infrastructure and would not require right of way acquisition.

The project would not cause any displacement of people or housing, nor would businesses in the project location be impacted by the proposed construction of the project. Therefore, there would be no impact.

Because no potential impacts to population and housing are anticipated, no mitigation would be required.

2.15 Public Services

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
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 *Lake County General Plan–Chapter 5: Public Facilities and Services* dated September 2008 (County of Lake 2019).

Potential impacts to fire protection, police protection, schools, parks, or other public facilities are not anticipated since temporary construction delays are expected to be 20 minutes or less in each direction during the construction period, due to the traffic control measures within the Transportation Management Plan. Notification of

construction would be provided to the public before construction starts so alternative routes or detours can be planned by the public once construction is underway.

Potential impacts to public services are not anticipated due to the project being a non-capacity increasing safety project that would not increase vehicle miles traveled (VMT). Emergency service providers would receive prior notification of lane closures, and emergency vehicles and public transit would be accommodated through the project area during construction.

Because no potential impacts to public services are anticipated, no mitigation would be required.

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, as well as the *Lake County General Plan–Chapter 9: Open Space, Conservation, and Recreation* dated September 2008 (County of Lake 2019).

Potential impacts to existing neighborhood parks are not anticipated as the project scope does not include any recreational facilities, nor would it require the construction or the expansion of any recreational facilities. There is currently a neighborhood park near the project limits, however the scope of work would not have any adverse physical effect on the environment.

Because no potential impacts to recreational resources are anticipated, no mitigation would be required.

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?				✓

"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* dated October 9, 2024 (Caltrans 2024e).

Caltrans Standard Plans would ensure that the proposed project would not conflict with any program, plan, ordinance, or policy relating to traffic circulation, including transit, roadway use, and bicycle and pedestrian facilities.

The Middletown Safety South Project does not increase capacity and is not expected to be traffic inducing; therefore, the project is consistent with CEQA Guidelines § 15064.3, subdivision (b) and an analysis of vehicle miles traveled (VMT) is not warranted.

Potential impacts to transportation and traffic are not anticipated because project aspects are intended to improve safety and, as such, would not result in a change to the geometric design of the roadway such that there would be increased hazards.

Although there would be temporary traffic delays during construction, there would not be any permanent changes to transportation or traffic. Construction traffic would be scheduled and routed to reduce congestion. Local businesses and the general public would be notified at least 10 business days before the start of work for temporary closures that could potentially affect this route. Bicycles and pedestrians would be accommodated through the construction area. All emergency response agencies in the project area would be notified of the project construction schedule and would have access through the construction zone and access to SR 29/SR 175 throughout construction.

Because no potential impacts to transportation or traffic are anticipated, no mitigation would be required.

2.18 Tribal Cultural Resources

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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: 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				✓
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.				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the draft Historic Properties Survey Report for the Middletown Safety South Project dated June 2025 (Caltrans 2025g).

Potential impacts to Tribal Cultural resources are not anticipated due to existing resources in the project impact area already being highly disturbed and not eligible for the National Register of Historic Places, and with implementation of the Standard Measures and Best Management Practices (Section 1.6) to protect any previously undiscovered resources. Current undisturbed resources would be protected in place by Environmentally Sensitive Area (ESA) fencing, and Caltrans would consult with the tribes if any new resources are discovered. Tribal consultation has taken place and would continue throughout the life of the project. Tribal monitoring would be necessary during construction or ground-disturbing activities.

The Native American Heritage Commission (NAHC) was contacted on November 16, 2023, for a search of their Sacred Lands File database. They responded with a negative search result; however, lack of information in the Sacred Lands Files does not indicate the absence of resources in the project area. Certified letters describing the project were sent to the locally involved Tribes on January 2, 2024. The Middletown Rancheria of Pomo Indians responded that they would become the official consulting party for the project. The Tribal Historic Preservation Officer has been consulting with Caltrans since the beginning of the project, and has been actively involved in the archaeological studies and will continue to be consulted with until completion of construction.

No significant tribal cultural resources were identified as a result of Section 106 consultation. Potential impacts to tribal cultural resources are not anticipated. Caltrans will continue to consult with the Middletown Rancheria of Pomo Indians for the life of the project.

Because no potential impacts to tribal cultural resources are anticipated, no mitigation would be required.

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, as well as the *Lake County General Plan–Chapter 5: 5.6 Public Utilities* dated September 2008 (County of Lake 2008) and Caltrans' "Water Quality Report for Middletown Safety South" (Caltrans 2024b).

Potential impacts to utilities are not anticipated as the scope of the project is restricted to work within the existing state right of way and does not include relocation, extension or expansion of a highway system and does not include any highway elements requiring expanded utility needs. Therefore, no new or expanded water or water supplies, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities would be required.

The project would not generate an excess of solid waste more than the capacity of existing local infrastructure.

The project would comply with all federal, state, and local statutes and regulations related to solid waste.

Additionally, no temporary impacts are anticipated to existing utility services since no utility relocations are required. Because no potential impacts to utilities and service systems are anticipated, no mitigation would be required.

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 *very high* 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 Governor's Office of Planning and Research, the California 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 Lake County Fire Safe Council's *Lake County Community Wildfire Protection Plan* (CWPP) accessed on May 23, 2025, the Transportation Management Plan (TMP) dated October 9, 2024 (Caltrans 2024e), and Fire Hazard Severity Zones in State Responsibility Area (Figure 9) (CAL FIRE 2025). Standard Measures and Best Management Practices (BMPs), as outlined in Section 1.6 of this document, would be implemented as part of the proposed project.

The proposed work would not impair an adopted emergency response plan or emergency evacuation plan (Mendocino Council of Governments [MCOG] 2022). The Caltrans Transportation Management Plan would ensure emergency response agencies and service providers would be notified of the project construction schedule, would have access to SR 29 throughout construction, and receive prior notification of lane closures. Emergency vehicles would be accommodated through any temporary lane closures and, if an emergency were to affect the area, work would stop and evacuation routes would be accessible. Thus, there would be no impact.

No changes to road slope that would affect prevailing winds or other factors are in the scope of work; thus, this project would not exacerbate wildfire risks and would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Furthermore, the road widening would provide a larger buffer during wildfire events, and project features identified and outlined in the *Wildfire* subsection of Section 2.8 "Greenhouse Gas Emissions." Thus, there would be no impact.

No installation or maintenance of associated infrastructure (such as new roads, fuel breaks, emergency water sources, power lines or other utilities) would be required for this project; therefore, it would not exacerbate fire risk nor result in temporary or ongoing impacts to the environment. Thus, there would be no impact.

Preservation of the existing vegetation on all slopes, and other related surroundings, would be done in accordance with any environmental permits and/or agreements. All slopes and Disturbed Soil Areas (DSAs) would be stabilized and vegetated in accordance with plans approved by the District Landscape Architect, and site features that would increase the perviousness of the treated area(s) would be implemented, as feasible. Additionally, all drainages would retain their current pattern flow, with operation improvement expected for two extended culverts at PM 5.18 and PM 5.38 as compared to pre-construction levels. These efforts, combined with the statements above, ensure downslope-downstream flooding or landslides (due to runoff, post-fire slope instability, or drainage changes) would not be due to project activities, neither during construction nor post-construction. Thus, there would be no impact.

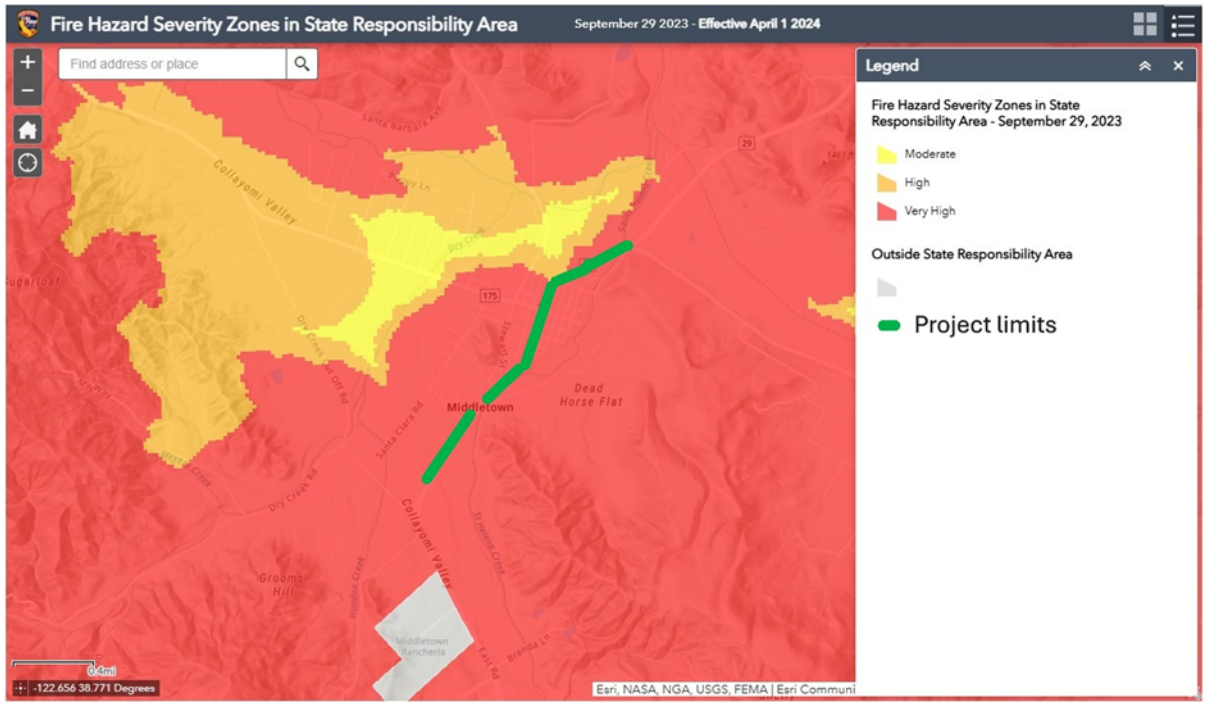


Figure 9. Fire Hazard Severity Zone-State Responsibility Area

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. Due to the limited project scope, and with implementation of the Standard Measures and Best Management Practices (Section 1.6) and permit requirements, the project would have no impact on Aesthetics, Agriculture and Forest Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire. Because the Initial Study finds the project would have no significant impacts to the environment, habitat of fish or wildlife, cause fish or wildlife populations to drop, threaten to eliminate plant or animal communities, reduce or restrict rare or endangered plant or animals, or eliminate important California history or prehistory, the overall project impact to the environment would be considered 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. The Initial Study finds the project would have no significant impacts in any subject area. All impacts would be temporary in nature, occurring during construction of the project, approximately one construction season. Therefore, the project would have no impact.

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

LESS THAN SIGNIFICANT. The Initial Study finds the project would have less than significant effects from Noise and Greenhouse Gas impacts, which would cause minimal to no adverse effects on human beings. Noise impacts would be avoided an minimized by monitoring noise levels during construction and having a noise restriction window from 9 p.m. to 6 a.m. Greenhouse Gas emission impacts would be reduced by the following measures:

- The construction contractor must comply with the Caltrans Standard Specifications in Section 14-9, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statues.
- Compliance with Title 13 of the California Code of Regulations, which includes idling restrictions of construction vehicles and equipment to no more than 5 minutes.
- Caltrans Standard Specification 7-1.02C “Emissions Reduction” ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board.
- Utilize a Transportation Management Plan to minimize vehicle delays.
- All areas temporarily disturbed during construction would be revegetated with appropriate native species, as appropriate. Landscaping reduces surface warming and, through photosynthesis, decreases CO_2. This replanting would help offset any potential CO_2 emissions increase.
- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- Maintain equipment in proper tune and working condition.
- Pedestrian and bicycle access will be maintained during project activities.

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 Initial Study finds the project would have no significant impacts in any subject area; no impact with mitigation required in 1 subject area (Greenhouse Gas Emissions) and no impact in the remaining 20 subjects. All impacts would be temporary in nature, occurring during construction of the project, approximately one construction season. Therefore, the project would have no impact. 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, the Lake Area Planning Council (LAPC) Technical Advisory Committee Meeting, and the Middletown Area Town Hall (MATH) monthly meeting. 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.

Circulation

Public circulation will commence on July 21, 2025, and will run for a period no shorter than 30 days. In addition, a list of interested parties has been identified, and this document will be accessible to all parties. All comments will be addressed in the final environmental document.

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 1

Julie McFall	Senior Environmental Scientist
Nicole Alber	Environmental Coordinator
Jana Marquardt	Biologist
Kim Tanksley	Archaeologist
Gwen Erickson	Water Quality Specialist
Paul Sundberg	Hazardous Waste Specialist/Paleontologist
Aaron Bali	Air/Noise/GHG Specialist
Michael Sterle	Visual Specialist
Angel Pham	Project Engineer
Steve Heryford	Senior Engineer
Yvonne Becker	Right of Way Coordinator
Kevin Waxman	Right of Way Agent

Tribal Partners

Elem Indian Colony Pomo Tribe	Tribal Historic Preservation Officer (THPO)
Habematolel Pomo of Upper Lake	Cultural Resources Administrator/ THPO
Pinoleville Pomo Nation	THPO
Yocha Dehe Wintun Nation	THPO, Cultural Resources Chairman

Chapter 5. Distribution List

Federal and State Agencies

Governor's Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

California Transportation Commission
1120 N Street, MS 52
Sacramento, CA 95814

Olivia Ilsley
C/O Central Valley Waterboard
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Mary Xiong
CDFW North Central Region
1701 Nimbus Rd,
Rancho Cordova, CA 95670

Regional/County/Local Agencies

County of Lake Administrative Office
255 N Forbes Street
Lakeport, CA 95453

Monica Rosenthal, Middletown Area Town Hall
21256 Washington Street
Middletown, CA 95461

Interested Groups, Organizations and Individuals

Middletown Rancheria of Pomo Indians of California
PO Box 1035
22223 Hwy 29 @ Rancheria Rd
Middletown, CA 95461

Utilities, Service Systems, Businesses, and Other Property Owners

Pacific Gas & Electric Company
111 Stony Circle
Santa Rosa, CA 95401

Chapter 6. References

California Air Resources Board (CARB). 2008. *Climate Change Scoping Plan Appendices. Volume II: Analysis and Documentation*. Appendix I, p. I-19. December. https://ww3.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm. Accessed: June 14, 2024.

_____. 2021. *SB 375 Regional Plan Climate Targets*. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed: June 14, 2024.

_____. 2022a. *2022 Scoping Plan for Achieving Carbon Neutrality*. Executive Summary. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed: June 14, 2024.

_____. 2022b. *Climate Change*. https://ww2.arb.ca.gov/our-work/topics/climate-change. Accessed: June 14, 2024.

_____. 2023. *California Greenhouse Gas Emissions Inventory Data–2023 Edition, 2000-2021*. https://ww2.arb.ca.gov/ghg-inventory-data. Accessed: June 14, 2024.

California Department of Conservation. 2024a. *California Important Farmland Mapper*. https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed on: November 18, 2024.

_____. California Geological Survey. 2024b. https://www.conservation.ca.gov/cgs/pages/index.aspx. Accessed: November 18, 2024.

_____. California Geological Survey. 2024c. https://maps.conservation.ca.gov/cgs/minerals/?page=Mineral-Land-Classification. Accessed: January 22, 2025.

California Department of Forestry and Fire Protection (CAL FIRE). 2025. https://www.fire.ca.gov/. Accessed: June 6, 2025

California Department of Fish and Wildlife. 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.*

_____. 2022. *Northern Region California Department of Fish and Wildlife Aquatic Invasive Species Decontamination Protocol*. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=43333&inline

California Department of Transportation (Caltrans). 2016. Caltrans Storm Water Management Plan. https://dot.ca.gov/-/media/dot media/programs/environmental-analysis/documents/env/swmp-070116-a11y.pdf. Accessed: June 6, 2025

_____. 2020. *Caltrans Greenhouse Gas Emissions and Mitigation Report*. Final. August. Prepared by ICF, Sacramento, CA. https://dot.ca.gov/programs/public-affairs/mile-marker/summer-2021/ghg. Accessed: November 13, 2023.

_____. 2021. *California Transportation Plan* 2050. February. https://dot.ca.gov/programs/transportation-planning/division-of-transportation-planning/state-planning-equity-and-engagement/california-transportation-plan. Accessed: November 13, 2023.

_____. 2022. “Floodplain Evaluation Report Summary.” Final Author: Philip Zerkel. December 22, 2022.

_____. 2023a. “Paleo Clearance Memo.” Final Author: Paul Sundberg. January 10, 2023.

_____. 2023b. *Sustainable Operations at Caltrans–Sustainability Roadmap.* https://dot.ca.gov/programs/esta/sustainable-caltrans. Accessed: November 13, 2023.

_____. 2024a. “Statement of No Visual Resource Impact.” Final. Author: Mike Sterle. December 4, 2024.

_____. 2024b. “Water Quality Assessment Report for Middletown Safety South.” Final. Author: Gwen Erickson. December 4, 2024.

_____. 2024c. “Hydraulics Recommendations-0 Phase.” Final. Author: Muthuraja Thangamuthu. November 8, 2024.

_____. 2024d. Caltrans 2024-2028 Strategic Plan. https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/2024-28-caltrans-strategic-plan-final-a11y.pdf Accessed: June 17, 2025.

_____. 2024e. “Transportation Management Plan.” Final. Author: Paul Hailey. October 9, 2024.

_____. 2025a. California State Scenic Highways. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed: January 22, 2025.

_____. 2025b. “Air Quality and Greenhouse Gas Analysis for the Middletown Safety South Project.” Final. Author: Aaron Bali. February 28, 2025.

_____. 2025c. “Noise Analysis for the Middletown Safety South Project.” Final. Author: Aaron Bali. February 28, 2025.

_____. 2025d. *Caltrans Climate Change Vulnerability Assessments.* https://www.arcgis.com/apps/webappviewer/index.html?id=2010cae9c8af4bbf94addc5f5b03f5fd. Accessed: March 2025.

_____. 2025e. “Natural Environmental Study Minimal Impacts.” Final. Author: Jana Marquardt. April 2025.

_____. 2025f. “Caltrans Initial Site Assessment Middletown Safety South.” Final. Author: Paul Sundberg. January 6, 2025.

_____. 2025g. “draft Historic Properties Survey Report for the Middletown Safety South Project.” Draft. Author: Kim Tanksley. June 2025.

California Environmental Protection Agency. 2015. *California Climate Strategy–An Integrated Plan for Addressing Climate Change.*

California Governor’s Office of Planning and Research (OPR). 2015. *A Strategy for California @ 50 Million*. November. https://opr.ca.gov/planning/environmental-goals/. Accessed: November 13, 2023.

California Natural Resources Agency. 2022. *Nature-Based Climate Solutions: Natural and Working Lands Climate Smart Strategy.* https://resources.ca.gov/Initiatives/Expanding-Nature-Based-Solutions. Accessed: November 13, 2023.

_____. 2023. *California Climate Adaptation Strategy.* https://resources.ca.gov/Initiatives/Building-Climate-Resilience/2021-State-Adaptation-Strategy-Update. Accessed: November 13, 2023.

California Ocean Protection Council. 2022. *State Agency Sea-Level Rise Action Plan for California.* February. https://www.opc.ca.gov/climate-change/sea-level-rise-2/. Accessed: November 13, 2023.

California State Transportation Agency. 2021. *Climate Action Plan for Transportation Infrastructure (CAPTI).* https://calsta.ca.gov/subject-areas/climate-action-plan. Accessed: November 13, 2023.

Climate-Safe Infrastructure Working Group. 2018. *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. September. https://resources.ca.gov/CNRALegacyFiles/docs/climate/ab2800/AB2800_Climate-SafeInfrastructure_FinalNoAppendices.pdf. Accessed: November 13, 2023.

County of Lake. 2008. *Lake County General Plan.* https://www.lakecountyca.gov/554/Lake-County-General-Plan. Last updated 2008. Accessed: January 22, 2025.

_____. 2019. *General Plan Housing Element Administrative Draft*. https://www.lakecountyca.gov/DocumentCenter/View/1669/Chapter-4---Housing-PDF. Accessed: January 22, 2025.

County of Lake. 2025. Lake County Air Quality Management District. https://www.lcaqmd.net/ Accessed: June 5, 2025.

Federal Highway Administration (FHWA). 2022. *Sustainability*. https://www.fhwa.dot.gov/environment/sustainability/resilience/. Accessed: November 13, 2023.

_____. No date. *Sustainable Highways Initiative*. https://www.fhwa.dot.gov/environment/sustainability/initiative/. Accessed: November 13, 2023.

Lake County Final Regional Transportation Plan/Active Transportation Plan. 2022. Lake Area Planning Council. https://www.lakeapc.org/wp-content/uploads/2022/02/Final-2022-RTP-ATP-2-9-22.pdf. Prepared by: Dow & Associates. Accessed: March 14, 2025.

Lake County Fire Safe Council. 2025. Community Wildfire Protection Plan. https://www.lakecountyca.gov/DocumentCenter/View/14037/Lake-County-Community-Wildfire-Protection-Plan-042225. Accessed: June 6, 2025

Mendocino Council of Governments (MCOG). 2022. https://www.mendocinocog.org/mendocino-county-regional-plans. Accessed: June 6, 2025

National Oceanic and Atmospheric Administration (NOAA). 2022. *2022 Sea Level Rise Technical Report.* https://oceanservice.noaa.gov/hazards/sealevelrise/sealevelrise-tech-report.html. Accessed: November 13, 2023.

State of California. 2018. *California's Fourth Climate Change Assessment.* http://www.climateassessment.ca.gov/. Accessed: November 13, 2023.

U.S. Department of Transportation (U.S. DOT). 2014. *Corporate Average Fuel Economy (CAFE) Standards*. https://www.transportation.gov/mission/sustainability/corporate-average-fuel-economy-cafe-standards. Accessed: November 13, 2023.

_____. 2023. *Climate Action*. January. https://www.transportation.gov/priorities/climate-and-sustainability/climate-action. Accessed: November 13, 2023.

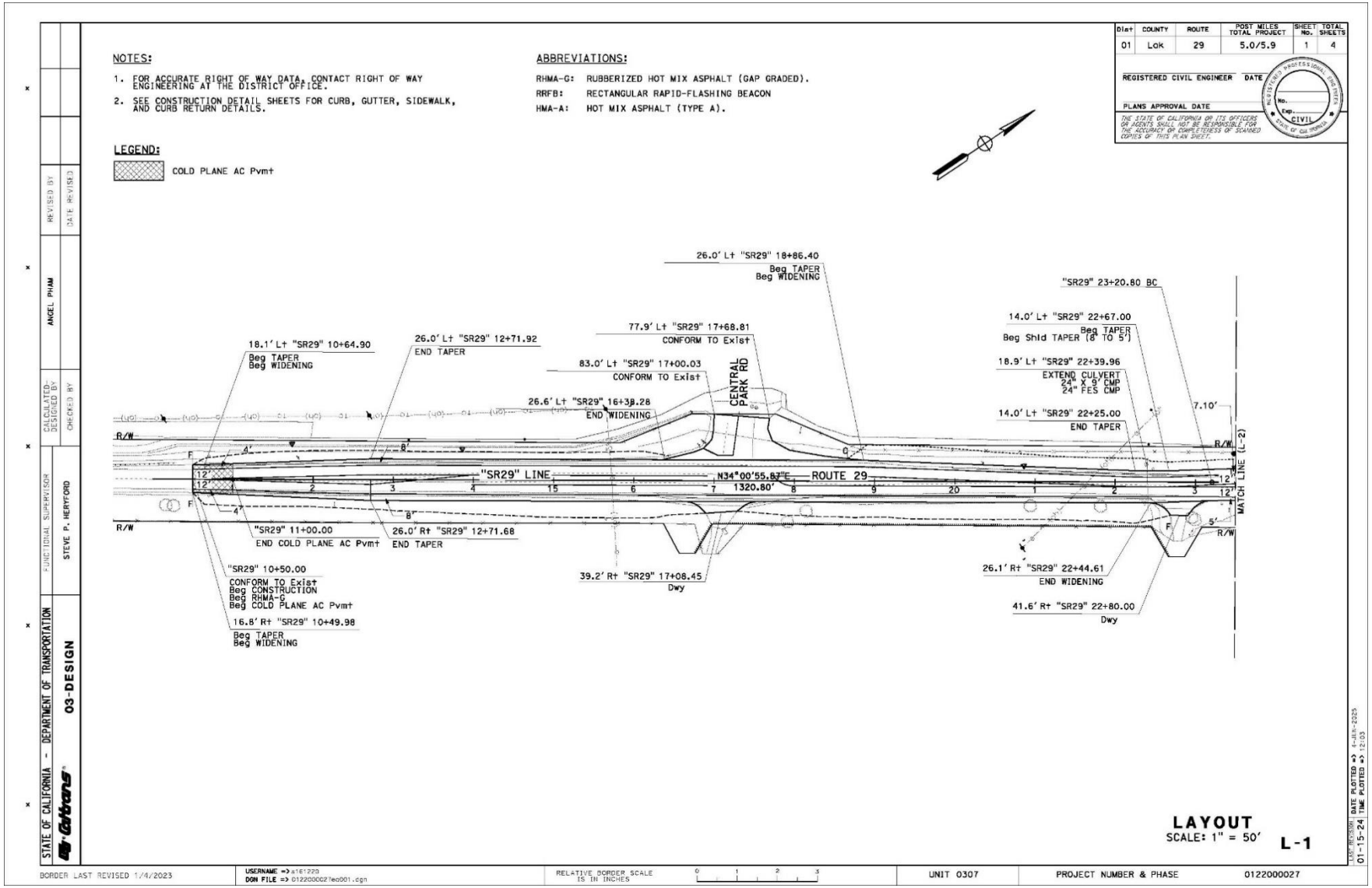
U.S. Environmental Protection Agency (U.S. EPA). 2021. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. December. https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed: November 13, 2023.

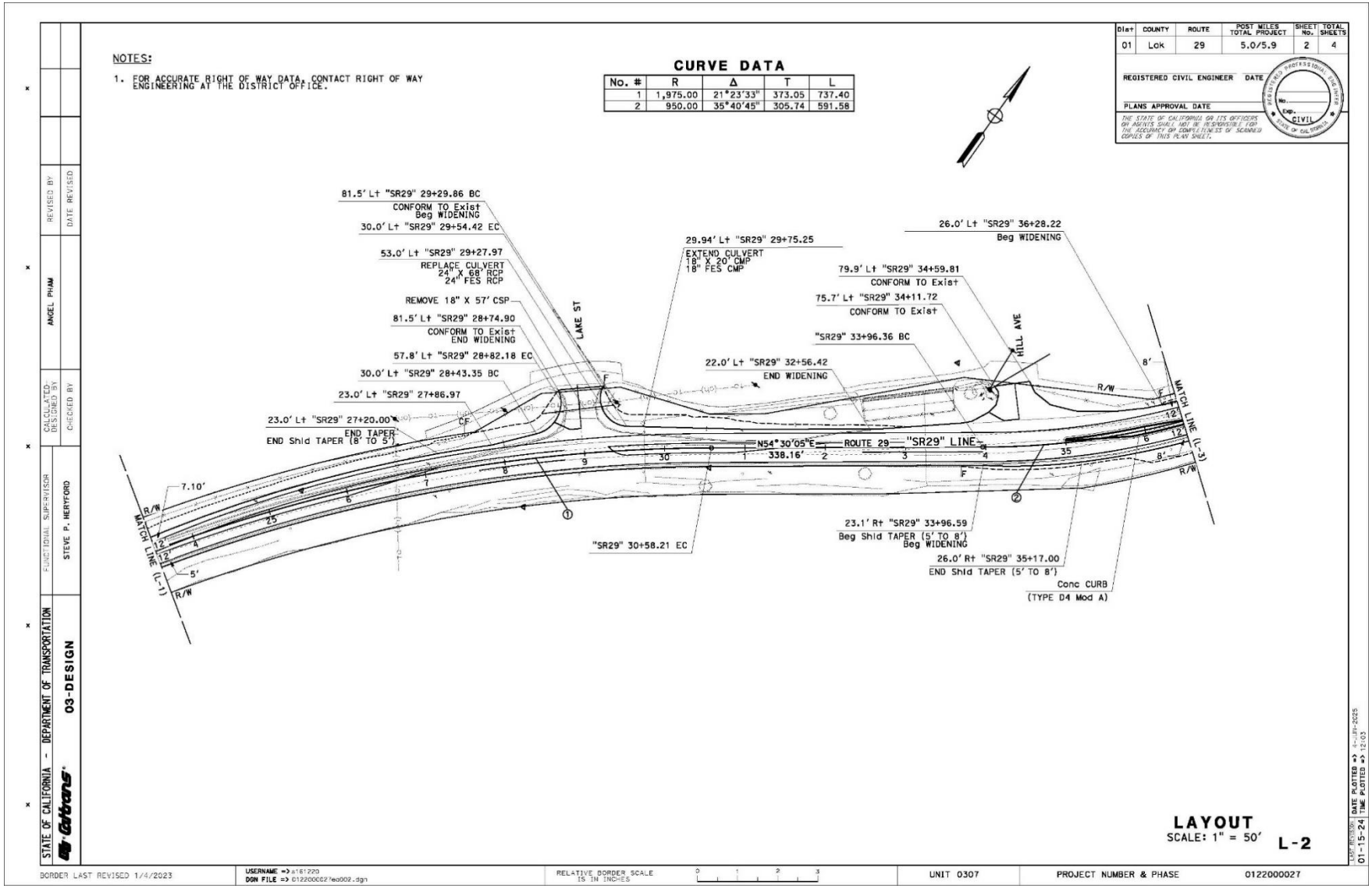
_____. 2024a. *Data Highlights*. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed: November 13, 2023.

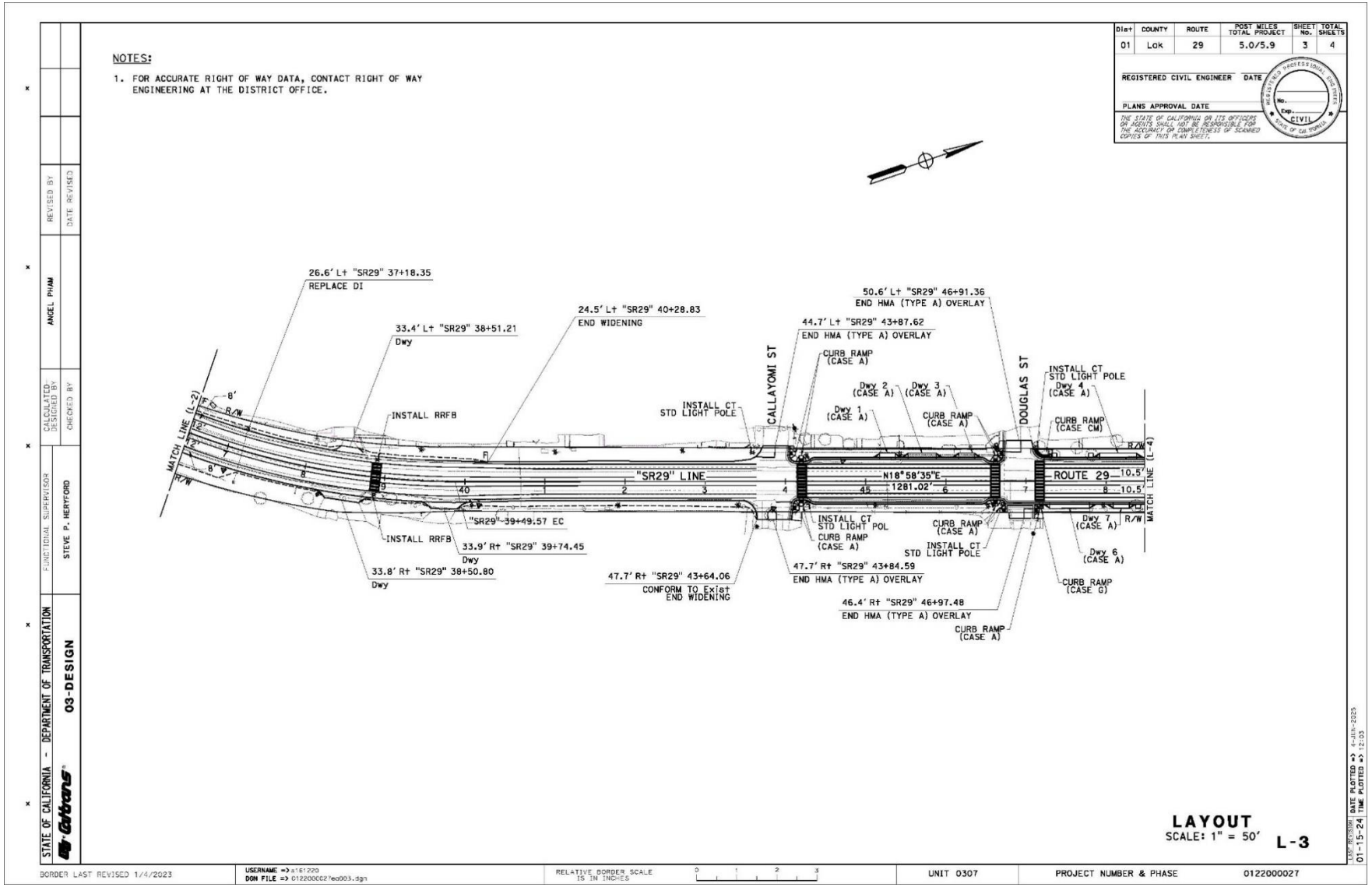
_____. 2024b. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021*. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed: November 13, 2023.

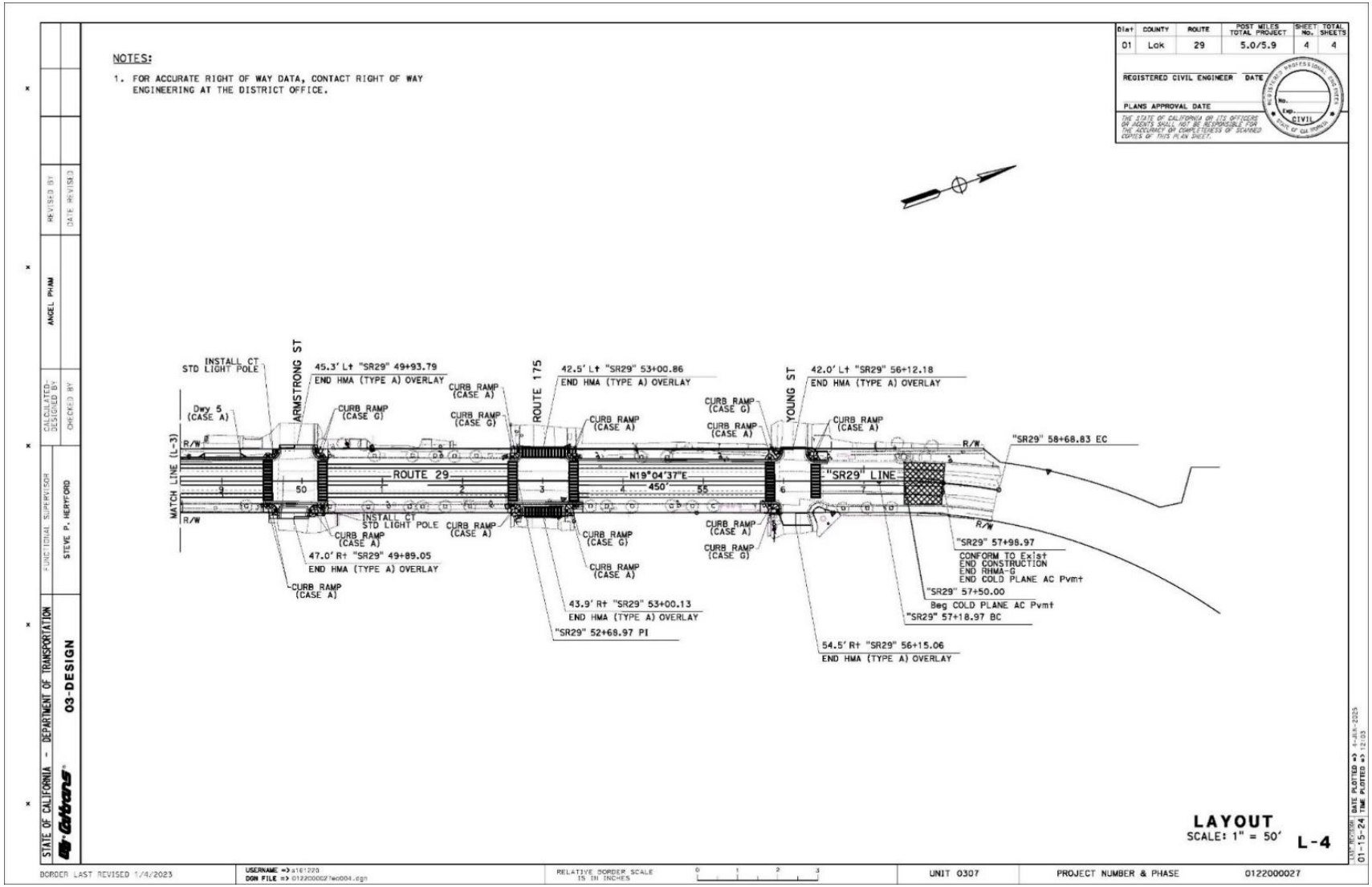
U.S. Global Change Research Program. 2023. *Fifth National Climate Assessment.* https://nca2023.globalchange.gov/chapter/front-matter/. Accessed: November 21, 2023.

Appendix A. Project Layouts


NOTES:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. SEE CONSTRUCTION DETAIL SHEETS FOR CURB, GUTTER, SIDEWALK, AND CURB RETURN DETAILS.
ABBREVIATIONS:
RHMA-G: RUBBERIZED HOT MIX ASPHALT (GAP GRADED).
RRFB: RECTANGULAR RAPID-FLASHING BEACON
HMA-A: HOT MIX ASPHALT (TYPE A).
LEGEND:
COLD PLANE AC Pvmt
Dist COUNTY ROUTE POST MILES TOTAL PROJECT SHEET No. TOTAL SHEETS
01 Lak 29 5.0/5.9 1 4
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
26.0' Lt "SR29" 18+86.40
Beg TAPER
Beg WIDENING
"SR29" 23+20.80 BC
14.0' Lt "SR29" 22+67.00
Beg TAPER
Beg Shld TAPER (8' TO 5')
77.9' Lt "SR29" 17+68.81
CONFORM TO Exist
18.1' Lt "SR29" 10+64.90
Beg TAPER
Beg WIDENING
26.0' Lt "SR29" 12+71.92
END TAPER
83.0' Lt "SR29" 17+00.03
CONFORM TO Exist
CENTRAL PARK RD
18.9' Lt "SR29" 22+39.96
EXTEND CULVERT
24" X 9' CMP
24" FES CMP
26.6' Lt "SR29" 16+38.28
END WIDENING
14.0' Lt "SR29" 22+25.00
END TAPER
7.10'
R/W
"SR29" LINE
N34°00'55.87"E
1320.80'
ROUTE 29
MATCH LINE (L-2)
"SR29" 11+00.00
END COLD PLANE AC Pvmt
26.0' Rt "SR29" 12+71.68
END TAPER
"SR29" 10+50.00
CONFORM TO Exist
Beg CONSTRUCTION
Beg RHMA-G
Beg COLD PLANE AC Pvmt
16.8' Rt "SR29" 10+49.98
Beg TAPER
Beg WIDENING
39.2' Rt "SR29" 17+08.45
Dwy
26.1' Rt "SR29" 22+44.61
END WIDENING
41.6' Rt "SR29" 22+80.00
Dwy
LAYOUT
SCALE: 1" = 50'
L-1
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
03-DESIGN
FUNCTIONAL SUPERVISOR
STEVE P. HERYFORD
CALCULATED-DESIGNED BY
ANGEL PHAM
CHECKED BY
REVISED BY
DATE REVISED
BORDER LAST REVISED 1/4/2023
USERNAME => a161220
DGN FILE => 0122000027eo001.dgn
RELATIVE BORDER SCALE IS IN INCHES
UNIT 0307
PROJECT NUMBER & PHASE 0122000027
DATE PLOTTED => 1-JAN-2025
TIME PLOTTED => 12:03


NOTES:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
CURVE DATA
No. # | R | Δ | T | L
1 | 1,975.00 | 21°23'33" | 373.05 | 737.40
2 | 950.00 | 35°40'45" | 305.74 | 591.58
Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS
01 | Lak | 29 | 5.0/5.9 | 2 | 4
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
81.5' Lt "SR29" 29+29.86 BC
CONFORM TO Exist Beg WIDENING
30.0' Lt "SR29" 29+54.42 EC
53.0' Lt "SR29" 29+27.97
REPLACE CULVERT 24" X 68' RCP 24" FES RCP
REMOVE 18" X 57' CSP
81.5' Lt "SR29" 28+74.90
CONFORM TO Exist END WIDENING
57.8' Lt "SR29" 28+82.18 EC
30.0' Lt "SR29" 28+43.35 BC
23.0' Lt "SR29" 27+86.97
23.0' Lt "SR29" 27+20.00
END TAPER
END Shld TAPER (8' TO 5')
29.94' Lt "SR29" 29+75.25
EXTEND CULVERT 18" X 20' CMP 18" FES CMP
26.0' Lt "SR29" 36+28.22
Beg WIDENING
79.9' Lt "SR29" 34+59.81
CONFORM TO Exist
75.7' Lt "SR29" 34+11.72
CONFORM TO Exist
"SR29" 33+96.36 BC
22.0' Lt "SR29" 32+56.42
END WIDENING
LAKE ST
HILL AVE
N54° 30' 05"E
ROUTE 29 "SR29" LINE
338.16'
7.10'
R/W
MATCH LINE (L-1)
MATCH LINE (L-3)
"SR29" 30+58.21 EC
23.1' Rt "SR29" 33+96.59
Beg Shld TAPER (5' TO 8')
Beg WIDENING
26.0' Rt "SR29" 35+17.00
END Shld TAPER (5' TO 8')
Conc CURB
(TYPE D4 Mod A)
LAYOUT
SCALE: 1" = 50'
L-2
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
03-DESIGN
FUNCTIONAL SUPERVISOR
STEVE P. HERYFORD
CALCULATED-DESIGNED BY
ANGEL PHAM
CHECKED BY
REVISED BY
DATE REVISED
BORDER LAST REVISED 1/4/2023
USERNAME => a181220
DGN FILE => 0122000027ea002.dgn
RELATIVE BORDER SCALE IS IN INCHES
UNIT 0307
PROJECT NUMBER & PHASE 0122000027
DATE PLOTTED => 4-JUN-2025
TIME PLOTTED => 12:03
LAST REVISION 01-15-24


NOTES:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS
01 | Lak | 29 | 5.0/5.9 | 3 | 4
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
26.6' Lt "SR29" 37+18.35
REPLACE DI
33.4' Lt "SR29" 38+51.21
Dwy
24.5' Lt "SR29" 40+28.83
END WIDENING
50.6' Lt "SR29" 46+91.36
END HMA (TYPE A) OVERLAY
44.7' Lt "SR29" 43+87.62
END HMA (TYPE A) OVERLAY
CALLAYOMI ST
DOUGLAS ST
CURB RAMP (CASE A)
INSTALL CT STD LIGHT POLE
Dwy 2 (CASE A)
Dwy 3 (CASE A)
Dwy 4 (CASE A)
Dwy 1 (CASE A)
CURB RAMP (CASE A)
CURB RAMP (CASE CM)
INSTALL RRFB
MATCH LINE (L-2)
8' R/W
"SR29" LINE
N18°58'35"E 1281.02'
ROUTE 29
10.5
10.5
R/W
MATCH LINE (L-4)
"SR29" 39+49.57 EC
INSTALL RRFB
33.9' Rt "SR29" 39+74.45
Dwy
33.8' Rt "SR29" 38+50.80
Dwy
47.7' Rt "SR29" 43+64.06
CONFORM TO Exist END WIDENING
INSTALL CT STD LIGHT POL
CURB RAMP (CASE A)
CURB RAMP (CASE A)
INSTALL CT STD LIGHT POLE
47.7' Rt "SR29" 43+84.59
END HMA (TYPE A) OVERLAY
Dwy 7 (CASE A)
Dwy 6 (CASE A)
CURB RAMP (CASE G)
46.4' Rt "SR29" 46+97.48
END HMA (TYPE A) OVERLAY
CURB RAMP (CASE A)
LAYOUT
SCALE: 1" = 50'
L-3
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
03-DESIGN
FUNCTIONAL SUPERVISOR
STEVE P. HERYFORD
CALCULATED-DESIGNED BY
ANGEL PHAM
CHECKED BY
REVISED BY
DATE REVISED
BORDER LAST REVISED 1/4/2023
USERNAME => a161220
DGN FILE => 0122000027ea003.dgn
RELATIVE BORDER SCALE IS IN INCHES
UNIT 0307
PROJECT NUMBER & PHASE 0122000027
DATE PLOTED => 4-JUL-2025
TIME PLOTTED => 12:03


NOTES:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS
01 | Lak | 29 | 5.0/5.9 | 4 | 4
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
ARMSTRONG ST
ROUTE 175
YOUNG ST
INSTALL CT STD LIGHT POLE
45.3' Lt "SR29" 49+93.79
END HMA (TYPE A) OVERLAY
42.5' Lt "SR29" 53+00.86
END HMA (TYPE A) OVERLAY
42.0' Lt "SR29" 56+12.18
END HMA (TYPE A) OVERLAY
Dwy 5 (CASE A)
CURB RAMP (CASE A)
CURB RAMP (CASE G)
MATCH LINE (L-3)
R/W
ROUTE 29
N19°04'37"E
450'
"SR29" LINE
"SR29" 58+68.83 EC
47.0' Rt "SR29" 49+89.05
END HMA (TYPE A) OVERLAY
43.9' Rt "SR29" 53+00.13
END HMA (TYPE A) OVERLAY
"SR29" 52+68.97 PI
54.5' Rt "SR29" 56+15.06
END HMA (TYPE A) OVERLAY
"SR29" 57+98.97
CONFORM TO Exist
END CONSTRUCTION
END RHMA-G
END COLD PLANE AC Pvmt
"SR29" 57+50.00
Beg COLD PLANE AC Pvmt
"SR29" 57+18.97 BC
LAYOUT
SCALE: 1" = 50'
L-4
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
03-DESIGN
FUNCTIONAL SUPERVISOR: STEVE P. HERFORD
CALCULATED-DESIGNED BY: ANGEL PHAM
CHECKED BY
REVISED BY
DATE REVISED
BORDER LAST REVISED 1/4/2023
USERNAME => a161220
DGN FILE => 0122000027e0004.dgn
RELATIVE BORDER SCALE IS IN INCHES
UNIT 0307
PROJECT NUMBER & PHASE 0122000027
DATE PLOTTED => 1-15-24
TIME PLOTTED => 12:03

Appendix B. Title VI–Non-Discrimination Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

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 2023

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.

TONY TAVARES
Director

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

Appendix C. USFWS, NMFS, CNDDB, and CNPS Species Lists

Quad Name	Middletown	Detert Reservoir	Mount Saint Helena	Whispering Pines	Clearlake Highlands	Lower Lake	Wilson Valley	Jericho Valley	Aetna Springs
Quad Number	38122-G5	38122-F5	38122-F6	38122-G6	38122-H6	38122-H5	38122-H4	38122-G4	38122-F4
ESA Anadromous Fish									
SONCC Coho ESU (T)									
CCC Coho ESU (E) -		X	X	X					
CC Chinook Salmon ESU (T) -		X	X	X					
CVSR Chinook Salmon ESU (T) -									
SRWR Chinook Salmon ESU (E) -									
NC Steelhead DPS (T)									
CCC Steelhead DPS (T) -		X	X	X					
SCCC Steelhead DPS (T) -									
SC Steelhead DPS (E) -									
CCV Steelhead DPS (T) -									
Eulachon (T) -									
sDPS Green Sturgeon (T) -									
ESA Anadromous Fish Critical Habitat									
SONCC Coho Critical Habitat -									
CCC Coho Critical Habitat -		X	X	X					

CC Chinook Salmon Critical Habitat -									
CVSR Chinook Salmon Critical Habitat -									
SRWR Chinook Salmon Critical Habitat -									
NC Steelhead Critical Habitat -									
CCC Steelhead Critical Habitat -		X	X						
SCCC Steelhead Critical Habitat -									
SC Steelhead Critical Habitat -									
CCV Steelhead Critical Habitat -									
Eulachon Critical Habitat -									
sDPS Green Sturgeon Critical Habitat -									
ESA Marine Invertebrates									
Range Black Abalone (E) -									
Range White Abalone (E) -									
ESA Marine Invertebrates Critical Habitat									

Chinook Salmon EFH -		X	X	X					
Groundfish EFH -									
Coastal Pelagics EFH -									
Highly Migratory Species EFH -									
MMPA Species (See list at left)									
ESA and MMPA Cetaceans/Pinnipeds									
See list at left and consult the NMFS Long Beach office									
562-980-4000									
MMPA Cetaceans -									
MMPA Pinnipeds -									

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: 05/08/2025 22:04:39 UTC
Project Code: 2023-0027706
Project Name: 01-0L590K-MIDDLETOWN SAFETY SOUTH LAKE

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.

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:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2023-0027706
Project Name: 01-0L590K-MIDDLETOWN SAFETY SOUTH LAKE
Project Type: Road/Hwy - Maintenance/Modification
Project Description: PURPOSE AND NEED STATEMENT (Purpose: project goal; Need: identified transportation deficiency)
The purpose of this project is to improve safety for all roadway users and reduce the frequency and severity of collisions along this segment of SR 29. This segment of SR 29 experiences a rate of collisions higher than the statewide average. Countermeasures are needed to reduce collisions, such as left-turn channelization and shoulder widening.
PROJECT DESCRIPTION/REASON FOR REVISION (Project description should explain in detail boxes that are checked below.)
This safety project is located in Lake County along State Route 29 between postmile 5.0 and 5.9. The project scope includes HMA overlay, shoulder widening, pavement delineation, left turn channelization, a two way left turn lane, bulb-outs, new/modified curb ramps, approximately 1,050 feet of new sidewalk, and pedestrian activated rectangular rapid flashing beacons.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.74526415,-122.62084604989475,14z

Counties: Lake 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 Fisheries[1], 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
Northern Spotted Owl *Strix occidentalis caurina* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened

REPTILES

NAME	STATUS
Green Sea Turtle *Chelonia mydas* Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp *Branchinecta conservatio* 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

FLOWERING PLANTS

NAME	STATUS
Burke's Goldfields *Lasthenia burkei* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338	Endangered
Kenwood Marsh Checker-mallow *Sidalcea oregana ssp. valida* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1622	Endangered
Lake County Stonecrop *Parvisedum leiocarpum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2263	Endangered

NAME	STATUS
Many-flowered Navarretia *Navarretia leucocephala ssp. plieantha* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2491	Endangered
Sebastopol Meadowfoam *Limnanthes vinculans* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/404	Endangered
Slender Orcutt Grass *Orcuttia tenuis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1063	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: California Department of Transportation
Name: Jana Marquardt
Address: 703 B St
City: Marysville
State: CA
Zip: 95901
Email jana.marquardt@dot.ca.gov
Phone: 5307414580

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Middletown (3812275) OR Detert Reservoir (3812265) OR Mount St. Helena (3812266))

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Actinemys marmorata	northwestern pond turtle	Reptiles	ARAAD02031	1160	6	Proposed Threatened	None	G2	SNR	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	null
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	960	1	None	Threatened	G1G2	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Marsh & swamp, Swamp, Wetland
Amorpha californica var. napensis	Napa false indigo	Dicots	PDFAB08012	123	2	None	None	G4T2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Chaparral, Cismontane woodland
Amsinckia lunaris	bent-flowered fiddleneck	Dicots	PDBOR01070	93	1	None	None	G3	S3	1B.2	BLM_S-Sensitive, SB_UCBG-UC Botanical Garden at Berkeley, SB_UCSC-UC Santa Cruz	Cismontane woodland, Coastal bluff scrub, Valley & foothill grassland
Antrozous pallidus	pallid bat	Mammals	AMACC10010	425	2	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Arctostaphylos manzanita ssp. elegans	Konocti manzanita	Dicots	PDERI04271	69	4	None	None	G5T3	S3	1B.3	BLM_S-Sensitive, SB_UCSC-UC Santa Cruz	Chaparral, Cismontane woodland, Lower montane coniferous forest
Astragalus rattanii var. jepsonianus	Jepson's milk-vetch	Dicots	PDFAB0F7E1	53	6	None	None	G4T3	S3	1B.2	BLM_S-Sensitive, SB_UCSC-UC Santa Cruz	Cismontane woodland, Ultramafic, Valley & foothill grassland
Bombus caliginosus	obscure bumble bee	Insects	IIHYM24380	181	1	None	None	G2G3	S1S2	null	IUCN_VU-Vulnerable	null
Brodiaea leptandra	narrow-anthered brodiaea	Monocots	PMLIL0C022	39	3	None	None	G3?	S3?	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley & foothill grassland
Calystegia collina ssp. oxyphylla	Mt. Saint Helena morning-glory	Dicots	PDCON04032	9	6	None	None	G4T3	S3	4.2	null	Chaparral, Lower montane coniferous forest, Ultramafic, Valley & foothill grassland
Castilleja rubicundula var. rubicundula	pink creamsacs	Dicots	PDSCR0D482	42	1	None	None	G5T2	S2	1B.2	BLM_S-Sensitive, SB_UCSC-UC Santa Cruz	Chaparral, Cismontane woodland, Meadow & seep, Ultramafic, Valley & foothill grassland
Ceanothus confusus	Rincon Ridge ceanothus	Dicots	PDRHA04220	33	10	None	None	G1	S1	1B.1	BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Ultramafic

Ceanothus divergens	Calistoga ceanothus	Dicots	PDRHA04240	26	2	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_UCSC-UC Santa Cruz	Chaparral, Cismontane woodland, Ultramafic
Ceanothus purpureus	holly-leaved ceanothus	Dicots	PDRHA04160	43	1	None	None	G2	S2	1B.2	SB_SBBG-Santa Barbara Botanic Garden	Chaparral, Cismontane woodland
Ceanothus sonomensis	Sonoma ceanothus	Dicots	PDRHA04420	30	2	None	None	G2	S2	1B.2	SB_SBBG-Santa Barbara Botanic Garden	Chaparral, Ultramafic
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	635	7	None	None	G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland
Cryptantha dissita	serpentine cryptantha	Dicots	PDBOR0A0H2	23	3	None	None	G3	S3	1B.2	BLM_S-Sensitive	Chaparral, Ultramafic
Dicamptodon ensatus	California giant salamander	Amphibians	AAAAH01020	254	6	None	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Aquatic, Meadow & seep, North coast coniferous forest, Riparian forest
Erigeron greenei	Greene's narrow-leaved daisy	Dicots	PDAST3M5G0	20	3	None	None	G2?	S2?	1B.2	BLM_S-Sensitive	Chaparral, Ultramafic
Eriogonum nervulosum	Snow Mountain buckwheat	Dicots	PDPGN08440	9	2	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive	Chaparral, Ultramafic
Falco mexicanus	prairie falcon	Birds	ABNKD06090	451	2	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland
Falco peregrinus anatum	American peregrine falcon	Birds	ABNKD06071	76	1	Delisted	Delisted	G4T4	S3S4	null	CDF_S-Sensitive	null
Gratiola heterosepala	Boggs Lake hedge-hyssop	Dicots	PDSCR0R060	110	1	None	Endangered	G2	S2	1B.2	BLM_S-Sensitive	Freshwater marsh, Marsh & swamp, Vernal pool, Wetland
Haliaeetus leucocephalus	bald eagle	Birds	ABNKC10010	333	2	Delisted	Endangered	G5	S3	null	BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern, USFS_S-Sensitive	Lower montane coniferous forest, Oldgrowth
Harmonia hallii	Hall's harmonia	Dicots	PDAST650A0	23	3	None	None	G2?	S2?	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Ultramafic
Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	Dicots	PDAST4R0W1	52	1	None	None	G5T2	S2	1B.2	SB_UCBG-UC Botanical Garden at Berkeley	Valley & foothill grassland
Hesperolinon bicarpellatum	two-carpellate western flax	Dicots	PDLIN01020	25	13	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_UCSC-UC Santa Cruz	Chaparral, Ultramafic
Hesperolinon didymocarpum	Lake County western flax	Dicots	PDLIN01070	6	6	None	Endangered	G1	S1	1B.2	BLM_S-Sensitive, SB_UCSC-UC Santa Cruz	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Hesperolinon sharsmithiae	Sharsmith's western flax	Dicots	PDLIN010E0	32	2	None	None	G2Q	S2	1B.2	BLM_S-Sensitive, SB_UCSC-UC Santa Cruz	Chaparral, Ultramafic
Hydrochara ricksecker	Ricksecker's water scavenger beetle	Insects	IICOL5V010	13	1	None	None	G2?	S2?	null	null	Aquatic, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters

Hysterocarpus traskii pomo	Russian River tule perch	Fish	AFCQK02011	4	1	None	None	G5T4	S4	null	AFS_VU-Vulnerable, CDFW_SSC-Species of Special Concern	Aquatic, Klamath/North coast flowing waters
Juncus luciensis	Santa Lucia dwarf rush	Monocots	PMJUN013J0	37	1	None	None	G3	S3	1B.2	BLM_S-Sensitive, USFS_S-Sensitive	Chaparral, Great Basin scrub, Lower montane coniferous forest, Meadow & seep, Vernal pool, Wetland
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	139	1	None	None	G3G4	S3S4	null	IUCN_LC-Least Concern	Lower montane coniferous forest, Oldgrowth, Riparian forest
Lasiurus cinereus	hoary bat	Mammals	AMACC05032	238	1	None	None	G3G4	S4	null	IUCN_LC-Least Concern	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest
Lasthenia burkei	Burke's goldfields	Dicots	PDAST5L010	36	1	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Meadow & seep, Vernal pool, Wetland
Layia septentrionalis	Colusa layia	Dicots	PDAST5N0F0	69	6	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_UCBG-UC Botanical Garden at Berkeley	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Legenere limosa	legenere	Dicots	PDCAM0C010	83	1	None	None	G2	S2	1B.1	BLM_S-Sensitive, SB_UCBG-UC Botanical Garden at Berkeley	Vernal pool, Wetland
Leptosiphon jepsonii	Jepson's leptosiphon	Dicots	PDPLM09140	51	8	None	None	G2G3	S2S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_USDA-US Dept of Agriculture	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Limnanthes floccosa ssp. floccosa	woolly meadowfoam	Dicots	PDLIM02043	54	1	None	None	G4T4	S3	4.2	SB_UCBG-UC Botanical Garden at Berkeley	Chaparral, Cismontane woodland, Valley & foothill grassland, Vernal pool, Wetland
Limnanthes vinculans	Sebastopol meadowfoam	Dicots	PDLIM02090	46	1	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Lupinus sericatus	Cobb Mountain lupine	Dicots	PDFAB2B3J0	46	16	None	None	G2?	S2?	1B.2	BLM_S-Sensitive, SB_UCSC-UC Santa Cruz	Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Ultramafic
Navarretia leucocephala ssp. bakeri	Baker's navarretia	Dicots	PDPLM0C0E1	64	1	None	None	G4T2	S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Cismontane woodland, Lower montane coniferous forest, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Navarretia leucocephala ssp. plieantha	many-flowered navarretia	Dicots	PDPLM0C0E5	8	1	Endangered	Endangered	G4T1	S1	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Vernal pool, Wetland
Navarretia myersii ssp. deminuta	small pincushion navarretia	Dicots	PDPLM0C0X2	1	1	None	None	G2T1	S1	1B.1	null	Vernal pool, Wetland
Navarretia paradoxinota	Porter's navarretia	Dicots	PDPLM0C160	9	2	None	None	G2	S2	1B.3	BLM_S-Sensitive	Meadow & seep, Ultramafic
Northern Basalt Flow Vernal Pool	Northern Basalt Flow Vernal Pool	Herbaceous	CTT44131CA	28	1	None	None	G3	S2.2	null	null	Vernal pool, Wetland
Northern Vernal Pool	Northern Vernal Pool	Herbaceous	CTT44100CA	20	1	None	None	G2	S2.1	null	null	Vernal pool, Wetland
Oncorhynchus mykiss irideus pop. 8	steelhead - central	Fish	AFCHA0209G	55	1	Threatened	None	G5T3Q	S3	null	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern	Aquatic, Sacramento/San Joaquin flowing waters

	California coast DPS											
Orcuttia tenuis	slender Orcutt grass	Monocots	PMPOA4G050	100	1	Threatened	Endangered	G2	S2	1B.1	SB_UCBG-UC Botanical Garden at Berkeley	Vernal pool, Wetland
Pekania pennanti	Fisher	Mammals	AMAJF01020	555	1	None	None	G5	S2S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	North coast coniferous forest, Oldgrowth, Riparian forest
Penstemon newberryi var. sonomensis	Sonoma beardtongue	Dicots	PDSCR1L483	15	10	None	None	G4T3	S3	1B.3	BLM_S-Sensitive	Chaparral
Progne subis	purple martin	Birds	ABPAU01010	71	2	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Broadleaved upland forest, Lower montane coniferous forest
Rana boylii pop. 1	foothill yellow-legged frog - north coast DPS	Amphibians	AAABH01051	1610	23	None	None	G3T4	S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Aquatic, Klamath/North coast flowing waters, Riparian forest, Riparian scrub, Riparian woodland
Sedella leiocarpa	Lake County stonecrop	Dicots	PDCRA0F020	5	1	Endangered	Endangered	G1	S1	1B.1	null	Cismontane woodland, Valley & foothill grassland, Vernal pool, Wetland
Sidalcea oregana ssp. valida	Kenwood Marsh checkerbloom	Dicots	PDMAL110K5	2	1	Endangered	Endangered	G5T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Freshwater marsh, Marsh & swamp, Wetland
Streptanthus brachiatus ssp. brachiatus	Socrates Mine jewelflower	Dicots	PDBRA2G072	10	1	None	None	G2T1	S1	1B.2	BLM_S-Sensitive	Chaparral, Closed-cone coniferous forest, Ultramafic
Streptanthus brachiatus ssp. hoffmanii	Freed's jewelflower	Dicots	PDBRA2G071	13	6	None	None	G2T2	S2	1B.2	BLM_S-Sensitive	Chaparral, Cismontane woodland, Ultramafic
Streptanthus hesperidis	green jewelflower	Dicots	PDBRA2G510	35	7	None	None	G2G3	S2S3	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland, Ultramafic
Streptanthus morrisonii ssp. elatus	Three Peaks jewelflower	Dicots	PDBRA2G0S1	7	3	None	None	G2T1	S1	1B.2	BLM_S-Sensitive	Chaparral, Ultramafic
Streptanthus vernalis	early jewelflower	Dicots	PDBRA2G120	1	1	None	None	G1	S1	1B.2	BLM_S-Sensitive, SB_UCBG-UC Botanical Garden at Berkeley	Chaparral, Closed-cone coniferous forest, Ultramafic
Stuckenia filiformis ssp. alpina	northern slender pondweed	Monocots	PMPOT03091	21	1	None	None	G5T5	S2S3	2B.2	null	Marsh & swamp, Wetland
Stygobromus cherylae	Barr's amphipod	Crustaceans	ICMAL05D60	1	1	None	None	G1	S1	null	null	Aquatic
Taricha rivularis	red-bellied newt	Amphibians	AAAAF02020	136	3	None	None	G2	S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Broadleaved upland forest, North coast coniferous forest, Redwood, Riparian forest, Riparian woodland
Trachykele hartmani	serpentine cypress wood-boring beetle	Insects	IICOLX6010	3	2	None	None	G1	S1	null	null	null
Trichostema ruygtii	Napa bluecurls	Dicots	PDLAM220H0	19	1	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley & foothill grassland, Vernal pool, Wetland

Trifolium hydrophilum	saline clover	Dicots	PDFAB400R5	56	1	None	None	G2	S2	1B.2	null	Marsh & swamp, Valley & foothill grassland, Vernal pool, Wetland

Appendix D. Plant and Animal Species Tables

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
adobe navarretia	*Navarretia nigelliformis* ssp. *nigelliformis*	--/--/4.2	Valley and foothill grassland (vernally mesic), vernal pools (sometimes) clay, serpentine (sometimes) Blooms: April and May Elevation: 325–3,300 feet	Present	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.
adobe-lily	*Fritillaria pluriflora*	--/--/1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Usually on clay soils; sometimes serpentine Blooms: February-April Elevation: 140–3,100 feet	Present	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.
Baker's navarretia	*Navarretia leucocephala* ssp. *bakeri*	--/--/1B.1	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest. Vernal pools and swales; adobe or alkaline soils. Blooms: April and July Elevation: 9–5,511 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
bare monkeyflower	*Erythranthe nudata*	--/--/4.3	Chaparral, cismontane woodland. Blooms: May-June Elevation: 655-2,295 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
Bay buckwheat	*Eriogonum umbellatum* var. *bahiiforme*	--/--/4.2	Sulphur flower buckwheat is a rare native perennial herb that grows in northern, southern and central California. It tends to grow in rocky areas. Blooms: July-September Elevation: 2,300–7,200 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
bent-flowered fiddleneck	*Amsinckia lunaris*	--/--/1B.2	Cismontane woodland, coastal bluff scrub, valley and foothill grassland. Blooms: March–June Elevation: 10–1,640 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Boggs Lake hedge-hyssop	*Gratiola heterosepala*	--/SE/1B.2	Marshes and swamps, vernal pools. Blooms: April–August Elevation: 35–7,790 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Brewer's milk-vetch	*Astragalus breweri*	--/--4.2	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland. Serpentinite (often), volcanic. Blooms: April–June Elevation: 295–2,395 feet.	Absent	Suitable habitat is not present; surveys did not detect species presence.
bristly leptosiphon	*Leptosiphon aureus*	--/--/4.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Blooms: April–July Elevation: 180–4,920 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
broad-lobed leptosiphon	*Leptosiphon latisectus*	--/--/4.3	Broadleafed upland forest, cismontane woodland. Blooms: April–June Elevation: 560–4,920 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
Burke's goldfields	*Lasthenia burkei*	FE/SCE/1B.1	Vernal pools and swales. No critical habitat has been designated for this species. Blooms: April–June Elevation: 50–1,970 feet	Present	Suitable habitat present; however, surveys did not detect species presence within the ESL where ground disturbance is anticipated.
Calistoga ceanothus	*Ceanothus divergens*	--/--/1B.2	Occurrence is primarily in the Northern California Coast Ranges, such as near Calistoga, at altitudes of less than 1,640 feet. Blooms: February–April Elevation: 300–3,300 feet	Absent	Suitable habitat present; however, surveys did not detect species presence within the ESL where ground disturbance is anticipated.
Cleveland's milk-vetch	*Astragalus clevelandii*	--/--/4.3	Chaparral, cismontane woodland, riparian forest. Seeps, serpentine. Blooms: June–September Elevation: 1,115–5,545 feet	Present	Suitable habitat present; however, surveys did not detect species presence within the ESL where ground disturbance is anticipated.
Cleveland's ragwort	*Senecio clevelandii* var. *clevelandii*	--/--/4.3	Chaparral (seeps, serpentinite) Blooms: June–July Elevation: 1,000–2,300 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Cobb Mountain lupine	*Lupinus sericatus*	--/--/1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest. Blooms: March–June Elevation: 900–5,005 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Colusa layia	*Layia septentrionalis*	--/--/1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Blooms: April–May Elevation: 330–3,595 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
congested-headed hayfield tarplant	*Hemizonia congesta* ssp. *congesta*	--/--1B.2	Valley and foothill grassland. Blooms: April–November Elevation: 65–1,835 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
cotula navarretia	*Navarretia cotulifolia*	--/--/4.2	Chaparral, cismontane woodland, valley and foothill grassland. It is endemic to northern California and the Coast Ranges in and around the San Francisco Bay Area, in heavy soils such as adobe clay. Blooms: May–June Elevation: 0–4,035 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
early jewelflower	*Streptanthus vernalis*	--/--/1B.2	Chaparral, closed-cone coniferous forest. On serpentine. Blooms: March–May Elevation: 1,900–3,000 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
four-petaled pussypaws	*Calyptridium quadripetalum*	--/--/4.3	Chaparral, lower montane coniferous forest. Gravelly (sometimes), sandy (sometimes), serpentinite (usually). Blooms: April–June Elevation: 1,035–6,695 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Freed's jewelflower	*Streptanthus brachiatus* ssp. *hoffmanii*	--/--/1B.2	Chaparral, cismontane woodland. Serpentine rock outcrops, primarily in geothermal development areas. Blooms: June–July Elevation: 1,591–3,412 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
green jewelflower	*Streptanthus hesperidis*	--/--/1B.2	Chaparral, cismontane woodland. Openings in chaparral or woodland; serpentine, rocky sites. Blooms: May–July Elevation: 780–2,510 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Greene's narrow-leaved daisy	*Erigeron greenei*	--/--/1B.2	Chaparral. Serpentine and volcanic substrates, generally in shrubby vegetation. Blooms: May–July Elevation: 295–2740 feet	Present	Suitable habitat is present; surveys did not detect species presence.
Hall's harmonia	*Harmonia hallii*	--/--/1B.2	Chaparral. Serpentine hills and ridges. Open, rocky areas within chaparral. Blooms: April–June Elevation: 1,099–3,100 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
holly-leaved ceanothus	*Ceanothus purpureus*	--/--/1B.2	Chaparral, cismontane woodland. Rocky, volcanic slopes. Blooms: February–April Elevation: 1,450–2,362 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Hoover's lomatium	*Lomatium hooveri*	--/--/4.3	Chaparral, cismontane woodland. Serpentine, volcanic (rarely). Blooms: April–June Elevation: 1,300–4,000 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Howell's broomrape	*Aphyllon validum* ssp. *howellii*	--/--/4.3	Chaparral (serpentinite, volcanic). Blooms: June–September Elevation: 2,300–2,330 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
Jepson's leptosiphon	*Leptosiphon jepsonii*	--/--/1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Open to partially shaded grassy slopes. On volcanics or the periphery of serpentine substrates. Blooms: April–May Elevation: 180–2,805 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Jepson's milk-vetch	*Astragalus rattanii var. jepsonianus*	--/--/1B.2	Cismontane woodland, valley and foothill grassland, chaparral. Commonly on serpentine in grassland or openings in chaparral. Blooms: March–June Elevation: 574–3,297 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Jepson's navarretia	*Navarretia jepsonii*	/--/4.3	Chaparral, cismontane woodland, valley and foothill grassland Serpentine. Blooms: April–June Elevation: 1,475–2,360 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Kenwood Marsh checkerbloom	*Sidalcea oregana* ssp. *valida*	FE/SE/1B.1	Marshes and swamps. Edges of freshwater marshes. Blooms: February–May Elevation: 370–415 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Konocti manzanita	*Arctostaphylos manzanita* ssp. *elegans*	--/--/1B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Volcanic soils. Blooms: February–May Elevation: 730–6,000 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
Lake County stonecrop	*Sedella leiocarpa*	FE/SE/1B.1	Valley and foothill grassland, vernal pools, cismontane woodland. Level areas that are seasonally wet and dry out in late spring; substrate usually of volcanic origin. Blooms: April–May Elevation: 1,700–2,100 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Lake County western flax	*Hesperolinon didymocarpum*	--/SE/1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Serpentine soil in open grassland and near chaparral. Blooms: May–June Elevation: 1,050–1,325 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
legenere	*Legenere limosa*	--/--/1B.1	Vernal pools. In beds of vernal pools. Blooms: May–June Elevation: 70–3,300 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
many-flowered navarretia	*Navarretia leucocephala* ssp. *plieantha*	FE/SE/1B.2	Vernal pools. Volcanic ash flow vernal pools. Blooms: April–June Elevation: 95-3,000 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
modest rockcress	*Arabis modesta*	--/--/4.3	Chaparral, lower montane coniferous forest. Bloom: March–May Elevation: 500–1,650 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
Mt. Saint Helena morning-glory	*Calystegia collina* ssp. *oxyphylla*	--/--/4.2	Chaparral, lower montane coniferous forest, valley and foothill grassland. Serpentinite. Blooms: April–June Elevation: 915–3,315 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Napa bluecurls	*Trichostema ruygtii*	--/--/1B.2	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal pools. Blooms: June-October Elevation: 100–2,230 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Napa false indigo	*Amorpha californica* var. *napensis*	--/--/1B.2	Broadleafed upland forest, chaparral, cismontane woodland. Openings in forest or woodland or in chaparral. Blooms: April–July Elevation: 90–2,400 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Napa lomatium	*Lomatium repostum*	--/--/4.2	Broadleafed upland forest, chaparral, cismontane woodland. Gravelly (sometimes), openings (often), rocky (sometimes), sandstone (rarely), serpentine, volcanic (often). Blooms: March–June Elevation: 300–2,600 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
narrow-anthered brodiaea	*Brodiaea leptandra*	--/--/1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Volcanic substrates. Blooms: May-July Elevation: 90–2,000 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
nodding harmonia	*Harmonia nutans*	--/--/4.3	Chaparral, cismontane woodland. Gravelly (sometimes), rocky (sometimes), volcanic. Blooms: April–June Elevation: 1,445–2,725 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
northern slender pondweed	*Stuckenia filiformis* ssp. *alpina*	--/--/2B.2	Marshes and swamps. Shallow, clear water of lakes and drainage channels. Blooms: May–July Elevation: 15–7,700 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
pink creamsacs	*Castilleja rubicundula* var. *rubicundula*	--/--/1B.2	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland. Openings in chaparral or grasslands. On serpentine. Blooms: April–July Elevation: 65–3,000 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
pink star-tulip	*Calochortus uniflorus*	--/--/4.2	Coastal prairie, coastal scrub, meadows and seeps, North Coast coniferous forest. Blooms: April–June Elevation: 0–700 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
Porter's navarretia	*Navarretia paradoxinota*	--/--/1B.3	Meadows and seeps. Serpentinite, openings, vernally mesic, often drainages. Blooms: May–July Elevation: 575–2,900 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Purdy's fritillary	*Fritillaria purdyi*	--/--/4.3	Chaparral, cismontane woodland, lower montane coniferous forest. Blooms: March–June Elevation: 575–7,400 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Rincon Ridge ceanothus	*Ceanothus confusus*	--/--/1B.1	Chaparral, cismontane woodland, closed-cone coniferous forest. Serpentinite (sometimes), volcanic (sometimes). Blooms: February–June Elevation: 245–3,495 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
saline clover	*Trifolium hydrophilum*	--/--/1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. Blooms: April–June Elevation: 0–1,000 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Santa Lucia dwarf rush	*Juncus luciensis*	--/--/1B.2	Vernal pools, meadows and seeps, lower montane coniferous forest, chaparral, Great Basin scrub. Vernal pools, ephemeral drainages, wet meadow habitats and streamsides. Blooms: June–July Elevation: 985–6,234 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
Sebastopol meadowfoam	*Limnanthes vinculans*	FE/CE/1B.1	Meadows and seeps, vernal pools, valley and foothill grassland. Swales, wet meadows and marshy areas in valley oak savanna; on poorly drained soils of clays and sandy loam. Blooms: April–May Elevation: 0–1,000 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
serpentine bird's-beak	*Cordylanthus tenuis* ssp. *brunneus*	--/--/4.3	Chaparral, cismontane woodland, closed-cone coniferous forest. Serpentine (usually). Blooms: June–July Elevation: 700–4,600 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
serpentine collomia	*Collomia diversifolia*	--/--/4.3	Chaparral, cismontane woodland. Gravelly (sometimes), rocky (sometimes), serpentinite (sometimes). Blooms: May–June Elevation: 665–1,970 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
serpentine cryptantha	*Cryptantha dissita*	--/--/1B.2	Chaparral. Blooms: April–June Elevation: 1,295–1,905 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
serpentine milkweed	*Asclepias solanoana*	--/--/4.2	Chaparral, cismontane woodland, lower montane coniferous forest. Serpentine. Blooms: June–July Elevation: 700–6,600 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
serpentine reed grass	*Calamagrostis ophitidis*	--/--/4.3	Chaparral, lower montane coniferous forest, meadows and seeps, valley and foothill grassland. Rocky, serpentinite. Blooms: April–June Elevation: 295–3,495 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Sharsmith's western flax	*Hesperolinon sharsmithiae*	--/--/1B.2	Chaparral. Serpentine substrates. Blooms: May–July Elevation: 660–980 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
slender Orcutt grass	*Orcuttia tenuis*	FT/SE/1B.1	Vernal pools. Often in gravelly substrate Blooms: May–June Elevation: 120–5,800 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
small pincushion navarretia	*Navarretia myersii* ssp. *deminuta*	--/--/1B.1	Vernal pools. Known from only one site in Lake County in vernal pool habitat on clay-loam soil; also in roadside depressions. Blooms: April–June Elevation: 492–3,337 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Snow Mountain buckwheat	*Eriogonum nervulosum*	--/--/1B.2	Chaparral. Dry serpentine outcrops, balds, and barrens. Blooms: May to October Elevation: 950–7,000 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Socrates Mine jewelflower	*Streptanthus brachiatus* ssp. *brachiatus*	--/--/1B.2	Chaparral, closed-cone coniferous forest. Serpentine areas and serpentine chaparral. Blooms: June–July Elevation: 2,000–3,100 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
Sonoma beardtongue	*Penstemon newberryi* var. *sonomensis*	--/--/1B.3	Chaparral. Crevices in rock outcrops and talus slopes. Blooms: June–August Elevation: 2,000–4,000 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
Sonoma ceanothus	*Ceanothus sonomensis*	--/--/1B.2	Chaparral. Sandy, serpentine or volcanic soils. Blooms: March–April Elevation: 300–2,300 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
streamside daisy	*Erigeron biolettii*	--/--/3	Broadleafed upland forest, cismontane woodland, North Coast coniferous forest. Mesic, rocky soils. Blooms: June–September Elevation: 160–3,600 feet	Absent	Suitable habitat is not present; surveys did not detect species presence.
swamp larkspur	*Delphinium uliginosum*	--/--/4.2	Chaparral, valley and foothill grassland. Seeps, serpentine. Blooms: May–June Elevation: 1,300–1,970 feet	**Present**	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.
St. Helena fawn lily	*Erythronium helenae*	--/--/4.2	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Blooms: March–May Elevation: 1,150–4,005 feet	Present	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.
Three Peaks jewelflower	*Streptanthus morrisonii* ssp. *elatus*	--/--/1B.2	Chaparral. Serpentine barrens, outcrops, and talus. Blooms: March–May Elevation: 500–3,600 feet	Present	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
Toren's grimmia	*Grimmia torenii*	--/--/1B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Blooms: March–June Elevation: 1,065–3,805 feet	Present	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.
Tracy's clarkia	*Clarkia gracilis* ssp. *tracyi*	--/--/4.2	Chaparral. Blooms: April–July Elevation: 215–2,135 feet	Present	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.
tripod buckwheat	*Eriogonum tripodum*	--/--/4.2	Chaparral, cismontane woodland. Serpentine (often). Blooms: May–July Elevation: 300–5,200 feet	Present	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.
twig-like snapdragon	*Antirrhinum virga*	--/--/4.3	Chaparral, lower montane coniferous forest. Openings, rocky, serpentinite (often). Blooms: June–July Elevation: 330–6,610 feet	Present	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.
two-carpellate western flax	*Hesperolinon bicarpellatum*	/--/1B.2	Chaparral. Serpentine barrens at edge of chaparral. Blooms: May–July Elevation: 200–3,300 feet	Present	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.
Victor's gooseberry	*Ribes victoris*	--/--/4.2	Broadleafed upland forest, chaparral, mesic. Blooms: February–April Elevation: 4,900–5,900 feet	Present	Suitable habitat is not present; surveys did not detect species presence.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
watershield	*Brasenia schreberi*	--/--/2B.3	Marshes and swamps. Blooms: June–September Elevation: 0–7,220 feet	Present	Suitable habitat is not present; surveys did not detect species presence.
woolly meadowfoam	*Limnanthes floccosa* ssp. *floccosa*	/--/4.2	Chaparral, cismontane woodland, valley and foothill grassland, vernal pools. Vernally wet areas, ditches, and ponds. Blooms: March–April Elevation: 115–3,830 feet	Present	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.
Coastal and Valley Freshwater Marsh		--/--/--	Wetland	Absent	Suitable habitat is not present within the ESL.
Central Valley Drainage Rainbow Trout/Cyprinid Stream		--/--/--	Inland Waters	Absent	Suitable habitat is not present within the ESL.
Clear Lake Drainage Resident Trout Stream		--/--/--	Inland Waters	Absent	Suitable habitat is not present within the ESL.
Northern Basalt Flow Vernal Pool		--/--/--	Inland Waters	Absent	Suitable habitat is not present within the ESL.
Northern Vernal Pool		--/--/--	Inland Waters	Absent	Suitable habitat is not present within the ESL.
Northern Volcanic Ash Vernal Pool		--/--/--	Inland Waters	Absent	Suitable habitat is not present within the ESL.
Northern Interior Cypress Forest		--/--/--	Closed-cone coniferous forest.	Absent	Suitable habitat is not present within the ESL.
Serpentine Bunchgrass		--/--/--	Valley and foothill grassland.	Absent	Suitable habitat is not present within the ESL.
Wildflower Field		--/--/--	Grasslands	Absent	Suitable habitat is not present within the ESL.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale
watershield	*Brasenia schreberi*	--/--/2B.3	Marshes and swamps. Blooms: June–September Elevation: 0–7,220 feet	Present	Suitable habitat is not present; surveys did not detect species presence.
woolly meadowfoam	*Limnanthes floccosa* ssp. *floccosa*	/--/4.2	Chaparral, cismontane woodland, valley and foothill grassland, vernal pools. Vernally wet areas, ditches, and ponds. Blooms: March–April Elevation: 115–3,830 feet	Present	Suitable habitat present; however, surveys did not detect species presence in the ESL where ground disturbance is anticipated.
Coastal and Valley Freshwater Marsh		--/--/--	Wetland	Absent	Suitable habitat is not present within the ESL.
Central Valley Drainage Rainbow Trout/Cyprinid Stream		--/--/--	Inland Waters	Absent	Suitable habitat is not present within the ESL.
Clear Lake Drainage Resident Trout Stream		--/--/--	Inland Waters	Absent	Suitable habitat is not present within the ESL.
Northern Basalt Flow Vernal Pool		--/--/--	Inland Waters	Absent	Suitable habitat is not present within the ESL.
Northern Vernal Pool		--/--/--	Inland Waters	Absent	Suitable habitat is not present within the ESL.
Northern Volcanic Ash Vernal Pool		--/--/--	Inland Waters	Absent	Suitable habitat is not present within the ESL.
Northern Interior Cypress Forest		--/--/--	Closed-cone coniferous forest.	Absent	Suitable habitat is not present within the ESL.
Serpentine Bunchgrass		--/--/--	Valley and foothill grassland.	Absent	Suitable habitat is not present within the ESL.
Wildflower Field		--/--/--	Grasslands	Absent	Suitable habitat is not present within the ESL.

Common Name	*Scientific Name*	Status* Federal/State/ CRPR	Habitat/ Blooming Period/ Elevational Range(feet)	Habitat/ Critical Habitat Present/Absent	Rationale

Status:

Federal: FE = Federal Endangered
State: SE = State Endangered; SCE = State Candidate Endangered

California Rare Plant Rank (CRPR):

1B = rare, threatened, or endangered in California and elsewhere
2B = rare, threatened, or endangered in California but common elsewhere
3 = more information is needed (Review List)
4 = limited distribution (Watch List)

CRPR Threat Ranking: 0.1 = seriously endangered in California;
0.2 = fairly endangered in California;
0.3 = not very endangered in California

Common Name	*Scientific Name*	Status[1] Federal/ State	General Habitat Description	Suitable Habitat[2]/ Critical Habitat/ Essential Fish Habitat Present/Absent	Rationale
AMPHIBIANS AND REPTILES					
California giant salamander	*Dicamptodon ensatus*	--/SSC	Aquatic from wet coastal forests near streams and seeps from Mendocino County south to Monterey County, and east to Napa County. Aquatic larvae found in cold, clear streams. Adults known from wet forests under rocks and logs near streams and lakes.	Absent	Suitable habitat does not exist within the ESL.
California red-legged frog	*Rana draytonii*	--/ST	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation (summer sleep period) habitat.	Absent	Suitable habitat does not exist within the ESL.
Foothill yellow-legged frog– North Coast DP	*Rana boylii (Pop. 1)*	--/SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats.	**Present**	Suitable habitat does exist within the ESL. There are occurrences of this species in the area; however, no work would take place in channel. No substantial impact anticipated.

Common Name	*Scientific Name*	Status[1] Federal/ State	General Habitat Description	Suitable Habitat[2]/ Critical Habitat/ Essential Fish Habitat Present/Absent	Rationale
Green sea turtle–East Pacific DPS	*Chelonia mydas*	FT/--	Along the coast of Southern California, juvenile and adult green turtles are present in many of the bays, lagoons, and coastal inlets. Originating from nesting beaches in Mexico, these turtles come to California to take advantage of the productive coastal ecosystems, which are rich in seagrass, algae, and invertebrates.	Absent	Suitable habitat does not exist within the BSA.
Red-bellied newt	*Taricha rivularis*	--/SSC	Old-growth forests and coastal redwood, Douglas-fir, mixed conifer, montane riparian and montane hardwood-conifer habitats. Requires cold, well-shaded, permanent streams and seepages, or within splash zone or on moss-covered rocks within trickling water.	**Present**	Suitable habitat does exist within the ESL. There are occurrences of this species in the area; however, no work would take place in channel.
Western (Northwestern) pond turtle	*Actinemys [Emys] marmorata*	FPT/SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6,000 foot elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.3 mile (0.5 km) from water for egg-laying.	**Present**	Suitable habitat does exist within the ESL. There are occurrences of this species in the area; however, no work is to take place in channel.

Common Name	*Scientific Name*	Status[1] Federal/ State	General Habitat Description	Suitable Habitat[2]/ Critical Habitat/ Essential Fish Habitat Present/Absent	Rationale
BIRDS					
American peregrine falcon	*Falco peregrinus anatum*	DL/DL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Absent	Suitable habitat does not exist within the BSA.
Bald eagle	*Haliaeetus leucocephalus*	DL/SE, FP-	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	**Present**	Nesting habitat is present within the BSA. However, no signs of nesting habitat or potential nest structures have been detected within the ESL.
Golden eagle	*Aquila chrysaetos*	FP/FP	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	**Present**	Nesting habitat is present within the BSA. However, no signs of nesting habitat or potential nest structures have been detected within the ESL.
Northern spotted owl (NSO)	*Strix occidentalis caurina*	FT/SSC	Old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests with patches of big trees. High, multistory canopy dominated by big trees, many trees with cavities or broken tops, woody debris, and space under canopy.	Absent	Suitable habitat does not exist within the BSA. CNDDB indicates occurrences of NSO over 2.5 miles away.

Common Name	*Scientific Name*	Status[1] Federal/ State	General Habitat Description	Suitable Habitat[2]/ Critical Habitat/ Essential Fish Habitat Present/Absent	Rationale
Purple martin	*Progne subis*	--/SSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag.	Absent	Suitable habitat does not exist within the BSA.
Tricolored blackbird	*Agelaius tricolor*	--/ST, SSC	Freshwater marsh, marsh and swamp, wetland. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few miles of the colony.	Absent	Suitable habitat does not exist within the ESL.
Yellow-billed cuckoo–Western U.S. DPS	*Coccyzus americanus*	FT/SE	(Nesting) riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Absent	Suitable breeding habitat does not exist within the ESL.

Common Name	*Scientific Name*	Status[1] Federal/ State	General Habitat Description	Suitable Habitat[2]/ Critical Habitat/ Essential Fish Habitat Present/Absent	Rationale
FISH					
Chinook salmon– California Coastal ESU	*Oncorhynchus tshawytscha*	FT/--	Coastal, spring and fall river runs between Redwood Creek in Humboldt County and Russian River in Sonoma County.	Absent EFH Absent	Dams on Cache Creek and Putah Creek serve as barriers to migration and are not accessible to anadromous fish. No in-water work is proposed.
Coho salmon– Central California Coast ESU	*Oncorhynchus kisutch*	FE/SE	The Central California Coastal ESU of coho salmon typically inhabits small coastal streams, as well as larger rivers (such as the Klamath River system) where they are currently found as far upstream as Iron Gate Dam and the Shasta River. Coho salmon in northern California coastal streams are typically associated with low gradient reaches of tributary streams, which provide suitable spawning areas and good juvenile rearing habitat	Absent	Dams on Cache Creek and Putah Creek serve as barriers to migration and are not accessible to anadromous fish. No in-water work is proposed.

Common Name	*Scientific Name*	Status[1] Federal/ State	General Habitat Description	Suitable Habitat[2]/ Critical Habitat/ Essential Fish Habitat Present/Absent	Rationale
Russian River tule perch	*Hysterocarpus traskii pomo*	--/SSC	Aquatic. Klamath/North Coast flowing waters, low elevation streams of the Russian River system. Requires clear, flowing water with abundant cover. They also require deep (3 feet) pool habitat.	Absent	Suitable habitat does not exist within the BSA.
Steelhead– Central California Coast (CCC) DPS	*Oncorhynchus mykiss irideus (Pop. 8)*	FT/SSC	This distinct population segment (DPS) includes naturally spawned anadromous *O. mykiss* (steelhead) originating below natural and manmade impassable barriers from the Russian River to and including Aptos Creek, Santa Cruz County, California (inclusive), and all drainages of San Francisco and San Pablo Bays, eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers. This also includes steelhead from the following artificial propagation programs: Don Clausen Fish Hatchery Program; Kingfisher Flat Hatchery Program (Monterey Bay Salmon and Trout Project).	Absent **CH Present**	Suitable habitat does not exist within the BSA. CH is present, but the reach is blocked by two dams and is not accessible to anadromous fish.

Common Name	*Scientific Name*	Status[1] Federal/ State	General Habitat Description	Suitable Habitat[2]/ Critical Habitat/ Essential Fish Habitat Present/Absent	Rationale
MAMMALS					
American badger	*Taxidea taxus*	--/SSC	Valley and foothill grassland. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Absent	Suitable habitat does not exist within the ESL.
Fisher–West Coast DPS	*Pekania pennanti*	--/SSC	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	Absent	Suitable habitat does not exist within the ESL.
North American porcupine	*Erethizon dorsatum*	--/--	Forested habitats in the Sierra Nevada, Cascade, and Coast ranges, with scattered observations from forested areas in the Transverse Ranges. Wide variety of coniferous and mixed woodland habitat.	Absent	Suitable habitat does not exist within the ESL.

Common Name	*Scientific Name*	Status[1] Federal/ State	General Habitat Description	Suitable Habitat[2]/ Critical Habitat/ Essential Fish Habitat Present/Absent	Rationale
Pallid bat	*Antrozous pallidus*	--/SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limited. Extremely sensitive to human disturbance.	Absent	Suitable habitat is not present within the ESL.
Townsend's big-eared bat	*Corynorhinus townsendii*	--/SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limited. Extremely sensitive to human disturbance.	**Present**	Foraging habitat may be present but nesting/ roosting habitat is absent.
INVERTEBRATES					
Conservancy fairy shrimp	*Branchinecta conservatio*	FE/--	Aquatic. They live in vernal pools and hypersaline lakes across the world, and have even been found in deserts, ice-covered mountain lakes, and Antarctic ice. They are usually .20 to 1 inch long.	Absent	Suitable habitat is not present within the ESL.

Common Name	*Scientific Name*	Status[1] Federal/ State	General Habitat Description	Suitable Habitat[2]/ Critical Habitat/ Essential Fish Habitat Present/Absent	Rationale
Monarch butterfly	*Danaus plexippus*	FPT/--	Found in a variety of habitats including fields, roadsides, open areas, wet areas, and urban gardens. The life cycle of the species is dependent on their host plant, showy milkweed (*Asclepias speciosa*).	Present	Low quality habitat does exist outside of the ESL. No host plants were found in plant surveys.
Western bumble bee	*Bombus occidentalis*	--/SC	Once common and widespread, species has declined precipitously from central California to southern British Columbia, perhaps from disease.	Present CH Absent	Low quality habitat does exist within ESL. No bees were seen during surveys. No host plants were found in plant surveys.

[1] **Federal Status**: FE = Endangered; FT = Threatened; FPT = Proposed Threatened; FC = Candidate for listing; DL = Delisted
State Status: SE = Endangered; ST = Threatened; W = Watch List; FP = CDFW Fully Protected; SSC = CDFW Species of Special Concern

(*Source: CDFW-CNDDB 2025; USFWS 2025)*

[2] **Habitat:**

Absent = No habitat present and no further work needed.
Present = Habitat present; species may be present.
CH = Critical Habitat (CH) – the project is located within a designated critical habitat unit, but does not necessarily mean appropriate habitat is present.
EFH = Essential Fish Habitat