LA FRANCHI SAFETY PROJECT

INITIAL STUDY

with Proposed Negative Declaration

MENDOCINO COUNTY, CALIFORNIA

DISTRICT 1 – MEN – 101 — Post Miles R9.5 to 10.8

EA 01-0L110 / EFIS 0121000072

Prepared by the
State of California Department of Transportation

June 2024

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 effects of the La Franchi Safety Project on U.S. Highway 101 in Mendocino 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 should you do?

- Please read this document.
- Additional copies of this document and related technical studies are available upon request at:
    - Mendocino County Library – 105 N. Main Street Ukiah, CA 95482
    - Caltrans District 3 Office – 703 B Street, Marysville, CA, 95901
      2nd Floor Public Desk
- This document may be downloaded at the following website: https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental/d3-environmental-docs/d3-mendocino-county
- **Attend the public meeting:**

  June 12, 2024, from 6 PM - 7 PM
  Shanél Valley Academy-Multipurpose Room
  1 Ralph Bettcher Dr.
  Hopland, CA 95449

- We'd like to hear what you think. If you have any comments about the proposed project, please attend the Public Meeting 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 3
  Attention: Danielle Ruiz, 3rd Floor
  703 B Street
  Marysville, CA 95901

- **Send comments via e-mail to:** LaFranchi.SafetyProject@dot.ca.gov
- **Be sure to send comments by the deadline*:* July 3, 2024.**

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 write to or call Caltrans, Attention: Manny Machado, North Region Environmental-District 1, 1656 Union Street, Eureka, CA 95501; (707) 496-6879 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.

LA FRANCHI SAFETY PROJECT

Improve safety by reducing collisions during cross traffic turns on this section of U.S. Highway 101 in Mendocino County, from Post Mile R9.5 at Hopland Overhead to Post Mile 10.8 at Feliz Creek Bridge

INITIAL STUDY

With Proposed Negative Declaration

Submitted Pursuant to:

State: Division 13, California Public Resources Code

THE STATE OF CALIFORNIA

Department of Transportation

6/3/2024

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:

California Department of Transportation
North Region Environmental–District 3
Attention: Danielle Ruiz, 3rd Floor
703 B Street
Marysville, CA 95901

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

SCH Number: Pending

Project Description

The California Department of Transportation (Caltrans) proposes the La Franchi Safety Project on U.S. Highway 101 in Mendocino County between Post Miles R9.5 and 10.8. Project features include widening to accommodate standard shoulder widths and new left-turn and merge lanes, upgrading guardrail to current standards, replacing one (1) culvert, and constructing a new retaining system to realign the roadway in the northbound direction.

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 Negative Declaration is subject to change based on comments received by interested agencies and the public.

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

The proposed project would have *No Impact* on

- Aesthetics
- Air Quality
- Agricultural and Forest Resources
- Cultural Resources
- Cumulative Impacts
- Energy
- Geology and Soils
- Hazards and Hazardous Waste
- Land Use and Planning
- Mandatory Findings of Significance
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

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

- Biological Resources
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Noise

_____ _____

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

Date

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Acronyms and Abbreviated Terms

Acronym/Abbreviation	Description
AB	Assembly Bill
ADL	Aerially Deposited Lead
APE	Area of Potential Effect
ASR/XPI	Archaeological Survey Report/Extended Phase I Investigation Report
ATP	Active Transportation Plan
BMPs	Best Management Practices
BSA	Biological Study Area
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CAL-CET	Caltrans Construction Emissions Tool
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAPTI	Climate Action Plan for Transportation Infrastructure
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
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
CSP	Corrugated Steel Pipe
CTP	California Transportation Plan
CWA	Clean Water Act
CWPP	Community Wildfire Protection Plan
dB	decibels
DBH	Diameter at Breast Height
Department	Caltrans
DOT	Department of Transportation
DP	Director's Policy

Acronym/Abbreviation	Description
DSA	Disturbed Soil Area
DWR	Department of Water Resources
ECL	Environmental Construction Liaison
EFH	Essential Fish Habitat
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
ESU	Evolutionarily Significant Unit
ºF	degrees Fahrenheit
FED	Final Environmental Document
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FHSZ	Fire Hazard Severity Zone
FR	Federal Register
GDP	Gross Domestic Product
GHG	greenhouse gas
GWP	Global Warming Potential
H&SC	Health & Safety Code
HFCs	hydrofluorocarbons
HPSR	Historic Property Survey Report
HRER	Historical Resources Evaluation Report
IPaC	Information for Planning and Consultation
IS	Initial Study
IS/ND	Initial Study / Negative Declaration
LDP	Late Discovery Plan
LF	Linear Feet
LRA	Local Responsibility Area
LSAA	Lake and Streambed Alteration Agreement
LTO	Licensed Timber Operators
MBGR	Metal Beam Guardrail
MBTA	Migratory Bird Treaty Act
MCOG	Mendocino Council of Governments
MGS	Midwest Guardrail System
MLD	Most Likely Descendent
MMT	million metric tons
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization

Acronym/Abbreviation	Description
MSA	Magnuson-Stevens Fishery Conservation and Management Act
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
NB	Northbound
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
NOA	Naturally Occurring Asbestos
NOAA	National Oceanic and Atmospheric Administration
NOx	Nitrogen Oxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	ozone
OHM	Ordinary High Water
OHWM	Ordinary High-Water Mark
OPC	Ocean Protection Council
OPR	Governor's Office of Planning and Research
OVWM	Office of Vegetation and Wildfire Management
PDT	Project Development Team
PIR	Project Initiation Report
PLACs	Permits, Licenses, Agreements and Certifications
PLOC	Programmatic Letter of Concurrence
PM	Particulate Matter
PM(s)	Post Mile(s)
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
Project	La Franchi Safety
PRC	(California) Public Resources Code
PTS	Paint and Thermoplastic Striping
RCP	Representative Concentration Pathways 8.5 Emissions Scenario
RECP	Rolled Erosion Control Products
RSP	Rock Slope Protection
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RWQCB	Regional Water Quality Control Board

Acronym/Abbreviation	Description
SB	Senate Bill
SCS	Sustainable Communities Strategy
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
SRA	State Responsibility Area
SRZ	Structural Root Zone
SS	Standard Specification
SSC	Species of Special Concern
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TBMPs	Post-construction Treatment BMPs
THPO	Tribal Historic Preservation Officer
THVF	Temporary High Visibility Fencing
TMDLs	Total Maximum Daily Loads
TMP	Transportation Management Plan
TWW	Treated Wood Waste
U.S. or US	United States
U.S. 101	U.S. (United States) Highway 101
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
VOC	Volatile Organic Compounds
WOTUS	Waters of the U.S.
WPCP	Water Pollution Control Program
WQAR	Water Quality Assessment Report
WQOs	Water Quality Objectives

Chapter 1. Proposed Project

1.1 Introduction/Project History

The California Department of Transportation (Caltrans) proposes the La Franchi Safety Project on U.S. Highway 101 (U.S. 101) in Mendocino County between Post Miles R9.5 and 10.8. The total length of the project is 1.3 miles. U.S. 101 throughout the project limits is a conventional two-lane, undivided highway with 12-foot-wide lanes and 4-foot-wide non-standard shoulders. This project was programmed in response to a collision analysis completed by District 1 Traffic Safety for the 48-month period between January 1, 2016, and December 31, 2019. A Project Initiation Report (PIR) was completed for this project on June 28, 2022.

The PIR originally proposed widening on both sides of U.S. 101. For the La Franchi Road intersection, most widening would have occurred on the southbound side of highway. The existing U.S. 101 access to Milano Winery, which is approximately 200 feet south of the La Franchi intersection, was to be closed, and the driveway rerouted to La Franchi Road near U.S. 101. Due to this widening, and the construction of the new Milano driveway, a 90-foot extension to an existing 8-foot-wide x 7-foot-wide reinforced concrete box culvert (PM 9.87) would have been required, as well as construction of an intervening drainage drop inlet.

After further analysis, it was realized that proceeding with this alternative would have required extensive mitigation due to the high sensitivity of biological and cultural resources located on parcels adjacent to the southbound side of the highway. Additionally, the U.S. 101 and La Franchi Road intersection would also require right of way acquisition to rebuild and conform La Franchi Road to U.S. 101. The project was then re-evaluated by the Project Development Team (PDT) with the intention to reduce environmental mitigation and right of way acquisition while addressing the purpose and need of this safety project. Ultimately, the PDT decided to update the project scope and chose to widen U.S. 101 in the La Franchi Road vicinity to the east of U.S. 101 only, from PM 9.76 to PM 10.02, with soldier pile walls being used to reduce the area of fill required. Additionally, the reinforced concrete box culvert under the highway would not need to be extended, and the existing fill prism would not be expanded.

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 reduce the frequency and the severity of collisions along this segment of highway.

Need

Collision rates exceed the statewide average in the vicinity of this project. Most collisions within the project limits were associated with left turn movements, with the remaining collisions likely associated with narrow shoulders.

1.3 Project Description

The proposed project is located on U.S. Highway 101 in Mendocino County between Post Miles (PMs) R9.5 and 10.8 (Figures 1 and 2). The project proposes to widen the northbound (NB) shoulder to current standards (8-foot-wide) throughout the entire project limits and widen the southbound (SB) shoulder to current standards (8-foot-wide) from PMs 9.88 to 10.44 and PMs 10.50 to 10.68. This alternative also provides additional widening and alignment modifications to accommodate the left turn pockets at La Franchi Road intersection while providing access for the commercial driveway at PM 10.63. To accommodate the widening, on the right side of the roadway, two soldier pile wall sections are proposed in the northbound direction from PM R9.76 to PM 9.80 and from PM 9.81 to PM 10.02. Other features proposed include:

- Correct superelevation on curve located at PM 10.30.
- Install ground-in indentations centerline and shoulder rumble strips throughout the project limits.
- Upgrade metal beam guardrail (MBGR) to Midwest Guardrail System (MGS) and transition rail and end-sections at the north end of Hopland Overhead Bridge at PM R9.5.
    - Vegetation control would be installed under the MGS and transition rail sections.

- Upsize 30" corrugated steel pipe (CSP) culvert at PM 10.35 to 36" CSP.
- Place left-turn pocket striping at PM 9.80 and PM 10.68.
- Add cable railing for fall protection between culvert outlet and shoulder edge at PM 10.06.
- Upgrade and/or modify the Roadway Weather Information System at PM R9.5
- Relocate vandalized maintenance road gate at PM 9.8.
- Conform driveways and crossroads.

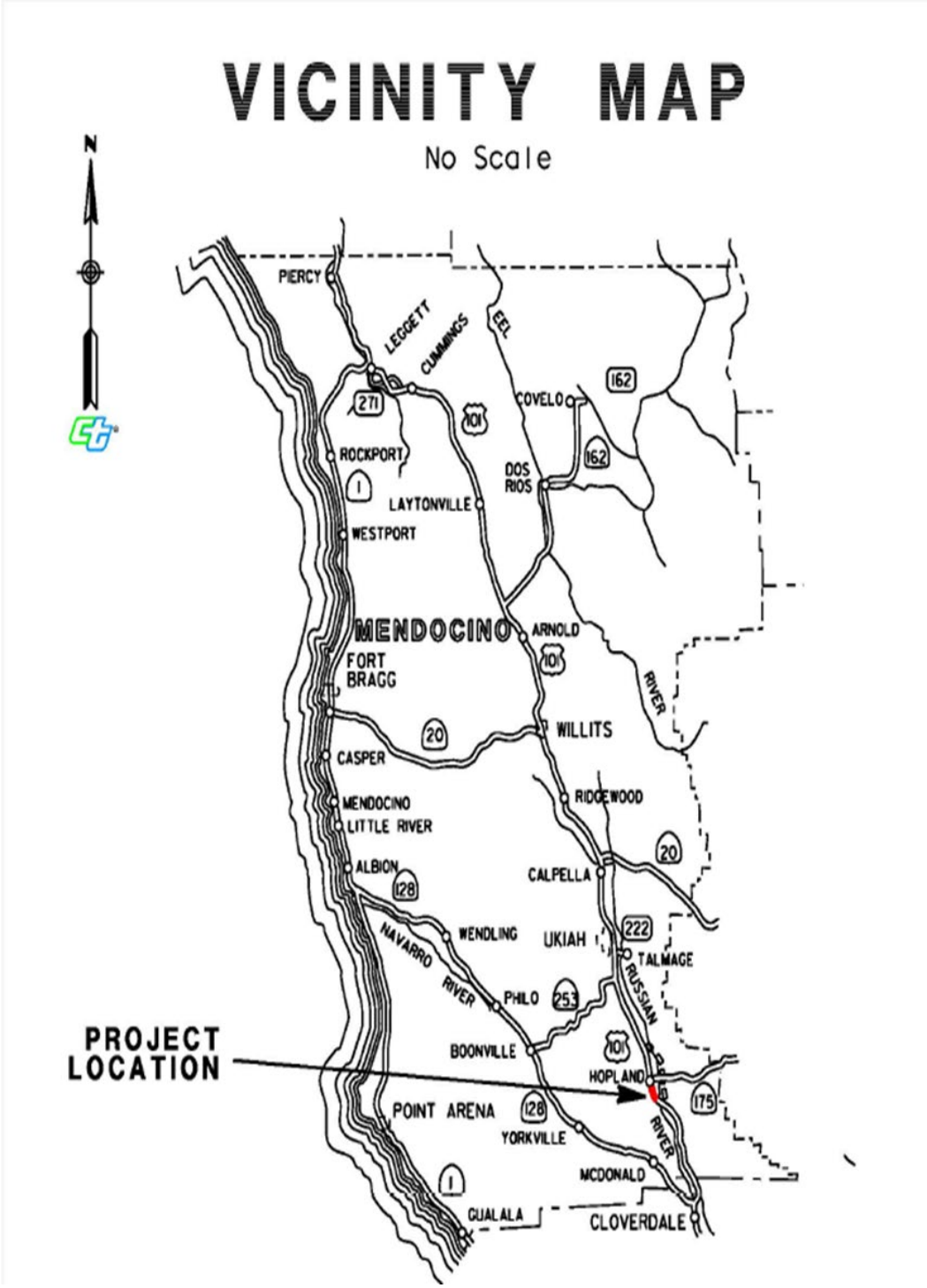

Figure 1. Project Vicinity

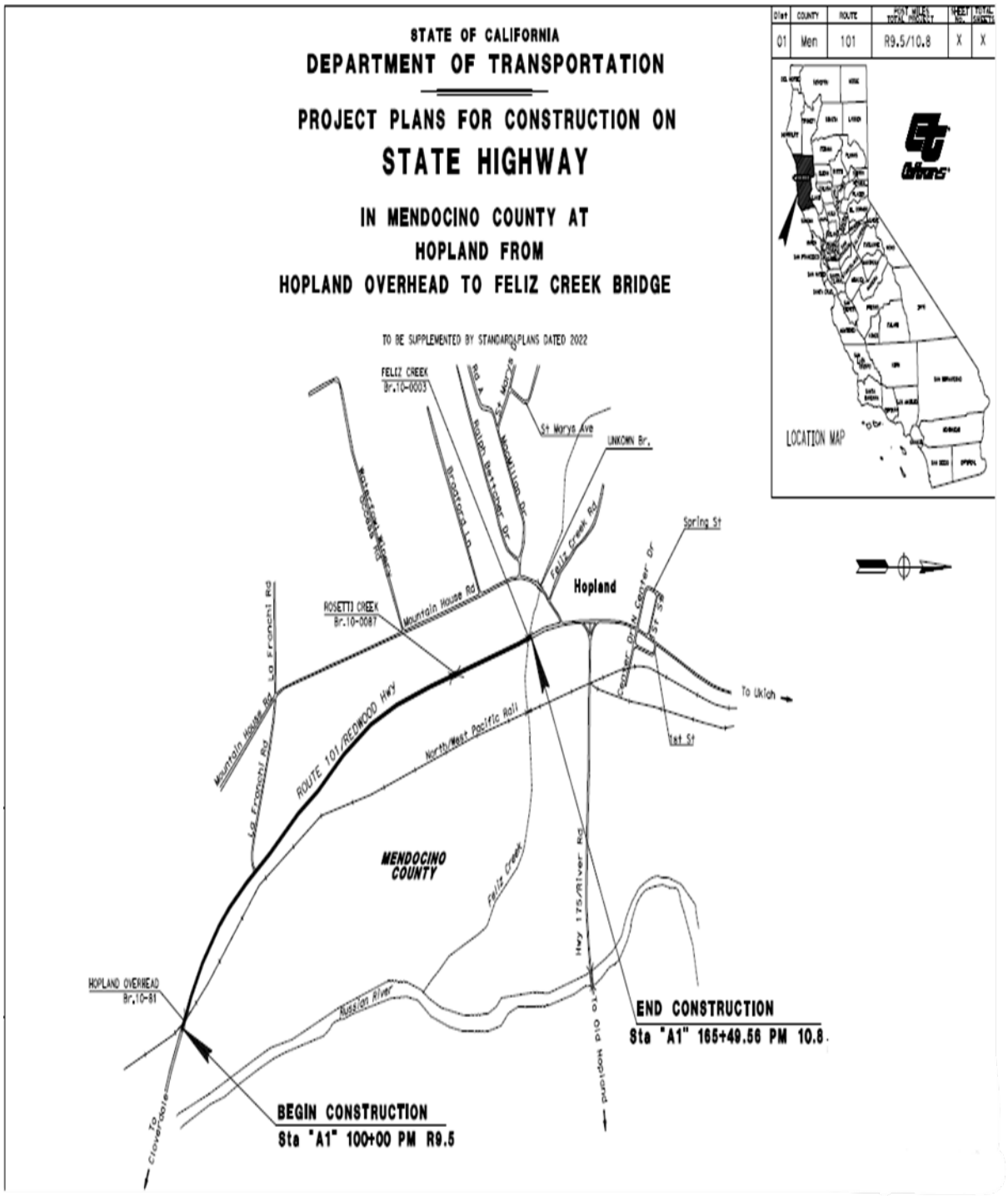

Figure 2. Project Location Map

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 Permits, Licenses and Certifications Required and Status of Permit

Agency	PLACs	Status
U.S. Army Corps of Engineers (USACE)	Clean Water Act–Section 404	Permit applications would be submitted after final environmental document (FED) approval.
California Department of Fish and Wildlife (CDFW)	CFGC Section 1600 Lake and Streambed Alteration Agreement	To be submitted after FED approval.
Regional Water Quality Control Board (RWQCB)	Clean Water Act–Section 401	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 several standardized project features, standard practices (measures), and Best Management Practices (BMPs) which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project and, as such, are included as part of the project description. Any project-specific avoidance, minimization, or mitigation measures that would be applied to reduce the effects of project impacts are listed further below as Additional Measures or in Section 2.4.–Biological Resources.

Aesthetics Resources

AR-1: Aesthetic treatment to retaining walls may be included to address context sensitivity.

AR-2: 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-3: Where feasible, guardrail terminals would be buried; otherwise, an appropriate terminal system would be used, if appropriate.

AR-4: Where feasible, construction lighting would be temporary, and directed specifically on the portion of the work area actively under construction.

AR-5: 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 Caltrans biologist, or Environmental Construction Liaison (ECL) would meet with the contractor to brief them on environmental permit conditions and requirements relative to each stage of the proposed project, including, but not limited to, work windows, drilling site management, and how to identify and report regulated species within the project areas.

BR-2: Animal Species

A. To protect migratory and nongame birds (occupied nests and eggs), if possible, vegetation removal would be limited to the period outside of the bird breeding season (removal would occur between September 16 and January 31). If vegetation removal is required during the breeding season, a nesting bird survey would be conducted by a qualified biologist within five days prior to vegetation removal. If an active nest is located, the biologist would coordinate with CDFW to establish appropriate species-specific buffer(s) and any monitoring requirements. The buffer would be delineated around each active nest and construction activities would be excluded from these areas until birds have fledged, or the nest is determined to be unoccupied.

B. 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, reptiles). The biologist will be responsible for on-site Northwestern Pond turtle (NWPT) and Foothill yellow-legged frog (FYLF) "clearance" surveys and monitoring (detailed below) of occupied NWPT and FYLF areas during ground disturbing activities, in-water work, and any other time when project activities could reasonably result in adverse effects to NWPT and FYLF. The biologist will notify the Resident Engineer if NWPT and/or FYLF is encountered within the action area during project activities. The biologist will have the authority to temporarily stop work activities that may result in adverse effects to relocate NWPT and/or FYLF in dewatered areas or upland habitat.

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.

F. Conduct Mandatory Environmental Awareness Training for Construction Personnel.

G. Artificial night lighting may be required. To reduce potential disturbance to sensitive resources, lighting would be temporary and directed specifically on the portion of the work area actively under construction. Use of artificial lighting would be limited to Cal/OSHA work area lighting requirements.

BR-3: Invasive Species

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

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

- 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 Cleaning/Decontamination Protocol (Northern Region)* (CDFW 2016) 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 wetland and 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. See **BR-4** for Temporary High Visibility Fencing (THVF) information.

B. If allowed by regulatory agencies, temporary wetland protection mats may be used to prevent permanent damage and minimize temporary damage to wetlands from construction activities. Mats should be designed to accommodate motorized equipment or vehicles. Mats would be removed when wetland access is no longer needed or by November 1 of each year.

Cultural Resources

CR-1: Caltrans would coordinate with the Tribal Historic Preservation Officer, (THPO) Ramon Billy of the Hopland Band of Pomo Indians, and incorporate measures outlined in the Memorandum of Understanding (MOU) executed on February 7, 2023, to protect tribal resources, including potential work windows associated with tribal ceremonies.

CR-2: An archaeological monitor and Hopland Band 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 United States Code [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 (CCR), 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: Bicycle access would be maintained on U.S. Highway 101 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 Yellow Traffic Stripes and Pavement Markings with Hazardous Waste Residue" (SSP 14-11.12).

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

HW-4: If asbestos-containing material is removed during this project, it would be removed and disposed of in accordance with Standard Special Provisions (SSP) 14-11.10 Naturally Occurring Asbestos.

Traffic and Transportation

TT-1: Bicycle access would be maintained during construction.

TT-2: A Transportation Management Plan (TMP) will 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.

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 U.S. Highway 101 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 if 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 if 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: (only include those relevant to the project)

- Any spills or leaks from construction equipment (e.g., fuel, oil, hydraulic fluid, and grease) would be cleaned up in accordance with applicable local, state, and/or federal regulations.
- Accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities would be removed by dewatering.
- Water generated from the dewatering operations would be discharged on-site for dust control and/or to an infiltration basin or disposed of offsite.
- Temporary sediment control and soil stabilization devices would be installed.
- Existing vegetated areas would be maintained to the maximum extent practicable.
- Clearing, grubbing, and excavation would be limited to specific locations, as delineated on the plans, to maximize the preservation of existing vegetation.
- Vegetation reestablishment or other stabilization measures would be implemented on disturbed soil areas, per the Erosion Control Plan.
- For SWPPP projects (which are governed according to both the Caltrans NPDES permit and the Construction General Permit), soil disturbance is permitted to occur year-round if 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 if 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 (for proposed ND) prepared in accordance with the National Environmental Policy Act. When needed for clarity, or as required by CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special status species by the 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	**Yes**
Cultural Resources	No
Energy	No
Geology and Soils	No
Greenhouse Gas Emissions	**Yes**
Hazards and Hazardous Materials	No
Hydrology and Water Quality	**Yes**
Land Use and Planning	No
Mineral Resources	No
Noise	**Yes**
Population and Housing	No
Public Services	No
Recreation	No
Transportation/Traffic	No
Tribal Cultural Resources	No
Utilities and Service Systems	No
Wildfire	No
Mandatory Findings of Significance	No
Cumulative Impacts	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 1.4]), are considered to be an integral part of the project and have been considered prior to any significance determinations documented in the checklist or document.

Project Impact Analysis Under CEQA

CEQA broadly defines "project" to include "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" (14 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. For example, if a project has the potential to impact 0.10 acre of wetland in a watershed that has minimal development and contains thousands of acres of wetland, then a "less than significant" determination would be considered appropriate. In comparison, if 0.10 acre of wetland would be impacted that is located within a park in a city that only has 1.00 acre of total wetland, then the 0.10 acre of wetland impact could be considered "significant."

If the action may have a potentially significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the Lead Agency may adopt a Negative Declaration (ND) if there is no substantial evidence that the project may have a potentially significant effect on the environment (14 CCR § 15070(a)). A proposed Negative Declaration must be circulated for public review, along with a document known as an Initial Study. CEQA also allows for a "Mitigated Negative Declaration"

in which mitigation measures are proposed to reduce potentially significant effects to less than significant (14 CCR § 15369.5).

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

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

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

No-Build (No-Action) Alternative

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

Definitions of Project Parameters

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

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

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

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

Environmental Study Limits (ESL): The project engineer provides the Environmental team the ESL (Figure 3) 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 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 (Figure 3) 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.

The BSA is defined as the ESL plus any areas outside of the ESL that might be potentially affected by a project (i.e., noise and visual, etc.). The BSA is defined as a 50-foot buffer area surrounding the ESL (Caltrans 2024c). The buffer was chosen based on site conditions (in part due to the railway to the east of the project), project scope, and the regulatory context of the proposed project to capture all resources

near the project that have the potential to be indirectly impacted by project activities. In the scope of this project, the BSA is not analyzed for direct impacts on protected resources because no project-related activities would occur outside of the ESL. Therefore, the BSA has been analyzed for indirect impacts on any protected resources found within those limits.

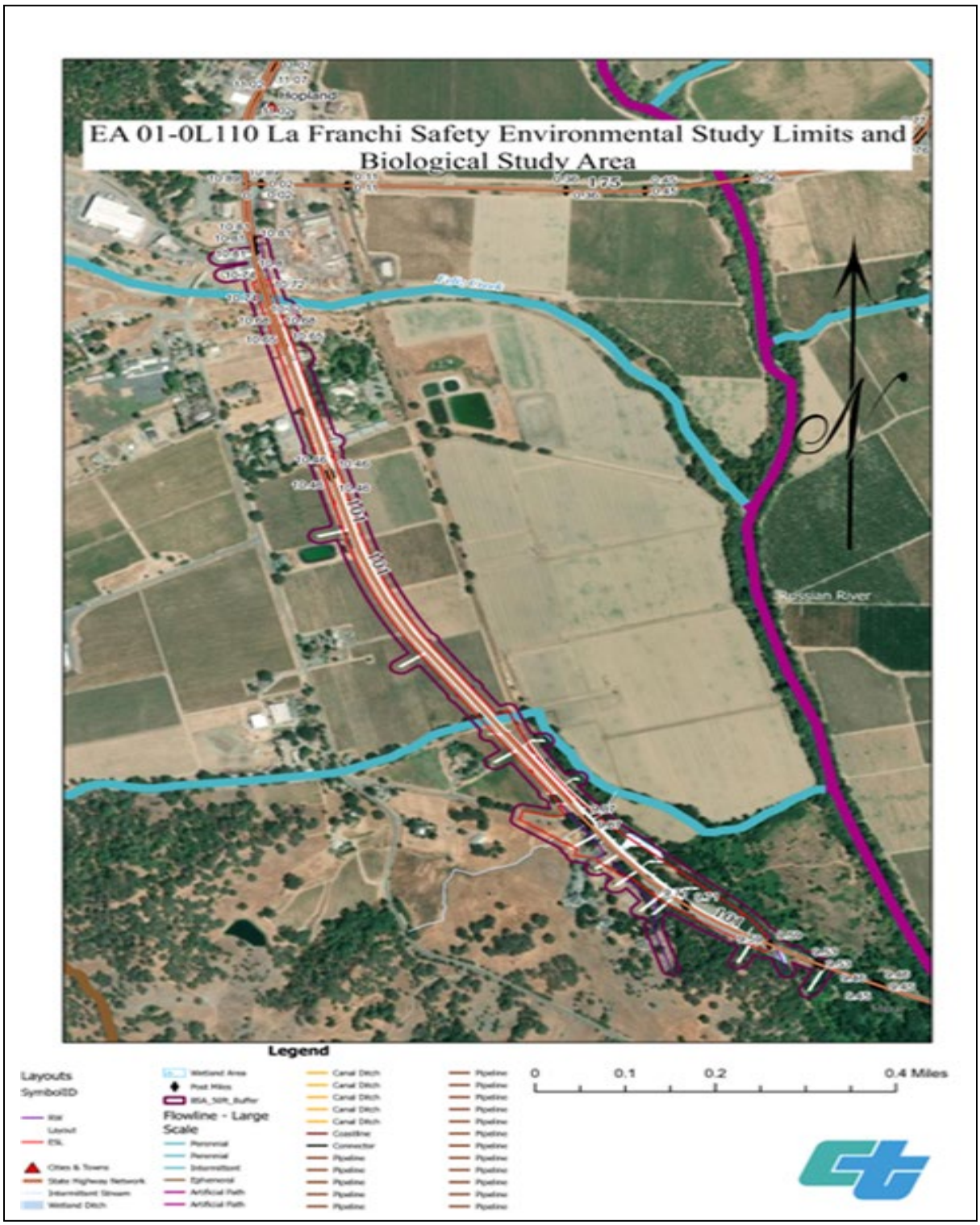

Figure 3. Environmental Study Limits and Biological Study Area

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?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Visual Impact Assessment (VIA) dated July 12, 2023 (Caltrans 2023g). This section of U.S. 101 is neither a designated scenic highway nor an eligible scenic highway (Caltrans 2024f). The project corridor viewshed comprises agriculture and open spaces, as well as distant views of oak woodlands and forest lands, and is considered a valuable scenic resource by the County of Mendocino (Caltrans 2023g).

The proposed removal of trees and shrubs within the project limits would alter the overall view for highway users. However, much of the vegetation would remain within the project area. Landscaping and permit-driven replanting would be completed following construction, and Standard Measures and Best Management Practices (BMPs), as outlined in Chapter 1, Section 1.6, would be implemented as part of the proposed project to further avoid and/or minimize any potential impacts.

Potential impacts to visual resources are not anticipated because the project is consistent with the Mendocino County General Plan resource management policies that pertain to scenic resources, does not degrade the existing visual character or quality of Hopland 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 post construction. Thus, there would be no impact.

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 map produced on March 25, 2024 (California Department of Conservation 2024a). Potential impacts to agricultural or forest resources are not anticipated as the project footprint is within the existing state right of way. Although the *Mendocino County General Plan* (County of Mendocino 2021a) identifies Hopland as a rural agricultural community with Prime Farmland and several parcels enrolled under the California Land Conservation Act of 1965 (commonly referred to as the Williamson Act), none of these parcels would be acquired temporarily or permanently for construction use.

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, Noise, GHG, and Energy Memorandum prepared by the Caltrans Department of Environmental Engineering–South, dated March 20, 2023 (Caltrans 2023e). The analysis concluded that the project is exempt from conformity requirements as Mendocino County is designated as attainment for all current National Air Quality Standards. 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.

The project may result in the generation of short-term construction-related emissions, including fugitive dust and exhaust emissions from construction equipment. Fugitive dust, or PM10, may be generated during excavation, grading, and hauling activities. However, both fugitive dust and construction equipment would be temporary in nature. Dust and emissions would be reduced and controlled in conformance with Standard Measures and Best Management Practices (BMPs), as outlined in Chapter 1, Section 1.6.

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?				✓

Regulatory Setting

Within this section of the document (2.4. Biological Resources), the topics are separated into Natural Communities, Wetlands and Other Waters, Plant and Animal Species, including Threatened and Endangered Species, and Invasive Species. Threatened and endangered special status plant and animal species, including USFWS and NMFS candidate species and CDFW Fully Protected (FP) species are covered under the Threatened and Endangered Animal section. Species of Special Concern (SSC) and California Native Plant Society (CNPS) rare plants are covered in the respective Plant and Animal sections.

The following sections rely on Chapter 4 of the project Natural Environment Study/Minimal Impacts (NES/MI) (Caltrans 2024c).

Natural Communities

In this section, the focus is on biological communities, not individual plant or animal species. CDFW maintains a list of sensitive natural communities (SNCs). SNCs are those natural communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status taxa or their habitat. This section also includes information on wildlife corridors and habitat fragmentation.

Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in the Threatened and Endangered Species section. Wetlands and Other Waters are also discussed below.

Wetlands and Other Waters

Wetlands and Waters of the United States and State are protected under several laws and regulations. The primary laws and regulations governing wetlands and other waters include:

- Federal: Clean Water Act (CWA)–33 United States Code (USC) 1344 (USACE–Section 404)
- Federal: Executive Order for the Protection of Wetlands (Executive Order [EO] 11990)
- State: California Fish and Game Code (CFGC)–Sections 1600–1607
- State: Porter-Cologne Water Quality Control Act–Sections 3000 et seq.

Plant Species

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special status plant species. "Special status" species are selected for protection because they are rare and/or subject to population and habitat declines the primary laws governing plant species include:

- Federal Endangered Species Act (FESA)–USC 16 Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402
- California Endangered Species Act (CESA)–California Fish and Game Code (CFGC) Section 2050, et seq.
- Native Plant Protection Act–California Fish and Game Code Sections 1900–1913
- National Environmental Policy Act (NEPA)–40 CFR Sections 1500 through 1508

- California Environmental Quality Act (CEQA)–California Public Resources Code (PRC) Sections 21000–21177

Animal Species

The USFWS, NMFS, and CDFW have regulatory responsibility for the protection of special status animal species, which include CDFW Species of Special Concern and rare species. The primary laws governing animal species include:

- NEPA–40 CFR Sections 1500 through 1508
- CEQA–California Public Resources Code Sections 21000–21177
- Migratory Bird Treaty Act–16 USC Sections 703–712
- Fish and Wildlife Coordination Act–16 USC Section 661
- California Fish and Game Code Sections 1600–1603
- California Fish and Game Code Sections 4150 and 4152

Threatened and Endangered Species

The USFWS, NMFS, and CDFW also have regulatory responsibility for the protection of special status animal species, which include federal and state threatened and endangered, candidate for listing, and fully protected species. The primary laws governing threatened and endangered species include:

- FESA–16 USC Section 1531, et seq. See also 50 CFR Part 402
- CESA–California Fish and Game Code Section 2050, et seq.
- CESA–California Fish and Game Code Section 2080
- CEQA–California Public Resources Code, Sections 21000–21177
- Magnuson-Stevens Fishery Conservation and Management Act, as amended–16 USC Section 1801

Invasive Species

The primary laws governing invasive species are Executive Order (EO) 13112 and NEPA.

BIOLOGICAL ENVIRONMENT/SETTING

This section describes the physical and biological conditions within the ESL and BSA. This information provides context and aides in understanding the potential project-related impacts. A Natural Environment Study/Minimal Impacts (NES/MI) (Caltrans 2024c) was prepared for the project. The following information relies on the NES/MI.

Environmental Study Limits and Biological Study Area

Field reviews were conducted within the ESL to identify existing habitat types and natural communities, potential jurisdictional waters (including wetlands), rare species and/or factors indicating the potential for rare species (i.e., presence of suitable habitat), sensitive water quality receptors (e.g., fish, amphibians) and ambient noise levels. In addition, airborne noise and water quality assessments were prepared to evaluate potential impacts to both terrestrial and aquatic species from proposed construction, which may include the BSA as well.

The project is within California's outer Northern California Interior Coast Ranges, which is characterized by very high rainfall, as well as redwood, mixed-evergreen, and mixed-hardwood forests. Most of the project location is in an area consisting of orchards and vineyards and open grassland with patches of riparian habitat and oak woodland; however, most of the ESL and BSA consists of agriculture and ruderal areas.

Hydrology

The project is within the Russian River watershed, which includes nearly 1,500 square miles of forests, agricultural lands, and urban lands in Mendocino and Sonoma counties, as well as tributaries including Big Sulphur Creek, Mark West Creek, Maacama Creek, Dry Creek, and the East Fork of the Russian River.

The BSA is adjacent to the west bank of the Russian River. Hydrology within the BSA consists of roadside ditches and drains that convey stormwater run-off during rain events. Some of these ditches may also convey groundwater that emerges from roadside seeps, primarily on the cut slope side of the road.

Habitat Connectivity

Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Stream courses and their associated riparian areas are often used as migration corridors by aquatic and terrestrial species. If corridors are degraded, habitat fragmentation can result. Habitat fragmentation caused by human development, such as construction of fences or roads, results in physical barriers that limit wildlife migration corridors. Habitat fragmentation is the process by which habitat loss results in the division of large, continuous habitats into smaller, more isolated remnants, thereby lessening its biological value (Caltrans 2024c).

This section of U.S. 101 is bordered to the east by a small portion of oak and riparian habitat fragments and several vineyards before reaching the west bank of the Russian River. To the west of U.S. 101, the oak woodland habitat transitions to more vineyards on the valley floor. Though U.S. 101 is being widened to include a turn lane and wider shoulders, no decrease in habitat connectivity/wildlife migration is expected due to the limited amount of widening described in the project scope, therefore, no impacts to wildlife connectivity are anticipated due to the construction of this proposed project. No work would be taking place in any aquatic habitat; thus, this project would have no impact on fish passage.

Surveys

Field surveys were conducted to identify aquatic resources, existing plant communities, wildlife habitats, and wildlife observations. The entire ESL, as safety allowed, was surveyed, and all plant and animal species encountered were recorded. A list of animals and plants observed within the project ESL are listed in their respective sections below.

Based on database queries, the following surveys were conducted to document and evaluate potential impacts on biological resources within the ESL or BSA

- Field surveys were conducted to identify potential biological resources within or adjacent to the proposed ESL, including terrestrial and aquatic wildlife and/or their habitat.
- Field surveys were conducted to assess potential wetlands or Other Waters of the U.S. and/or State.

- Field surveys were conducted to identify the presence of invasive and noxious species.
- Plant surveys were conducted following the 2018 CDFW survey protocols.
- Field surveys for special status plant and wildlife species and migratory birds known to occur near the proposed project location.

SENSITIVE COMMUNITIES PRESENT

Affected Environment

Oak woodlands, riparian habitat, wetlands, and other water of the US (WOTUS) are intermingled throughout the project BSA. Discussion of these resources has been separated to the extent possible.

Habitats are of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special status plants or animals occurring on site.

Within the project area, the most notable scenic resources are the natural roadside vegetation, the Russian River, and views of surrounding hills, vineyards, and riparian vegetation near the river. Valley oak dominates the community within the BSA and exists largely between the east side of U.S. 101 and the Russian River and is most closely identified with a sub-description of valley oak woodlands within the outer Northern California Coast Ranges, which can occupy riparian benches and terraces.

. Sensitive natural communities are present in limited amounts within the BSA and/or ESL; with the majority of the project area consisting of agriculture and ruderal areas. Potential temporary and permanent impacts to sensitive natural communities exclusively within the ESL were evaluated, and the results are discussed in the appropriate checklist questions below.

The following sensitive natural communities are present within the project Environmental Study Limits (Table 2).

Table 2. Sensitive Natural Communities within the ESL

Sensitive Natural Communities/Land Cover Type	Acres within the ESL
Valley Oak *(Quercus lobata*) Riparian Forest and Woodland Alliance, ranked S3	0.255
Valley Oak *(Quercus lobata*) Woodland Alliance, ranked S3	0.255
Total	**0.510**

Valley Oak (Quercus lobata) Woodland Alliance

Valley Oak is a large, deciduous oak that attains a height of 90 feet and an age of 500 years. Roots penetrate moist soil rapidly with high survival under partial shade, thus an intermediate in shade tolerance, but has a high degree of tolerance to flood and drought (CNPS 2024b). Valley Oak is endemic to California and stands vary from open savannas to closed-canopy forests. Both riparian and upland forests of Valley Oak occur in the deep, rich soil typical of floodplains and valley floors. However, this alliance includes only upland forests outside of riparian influence, with these forests being only remnants of what once existed in the Central Valley and various other valleys, as well as foothill locations in California).

Upland and riparian expressions of Valley Oak stands were previously combined in a single alliance, but now riparian and upland stands of Valley Oak have been split into the Valley Oak riparian alliance and the upland Valley Oak alliance. This alliance split follows the revised National Vegetation Classification's recognition of riparian groups separately from upland groups.

Valley Oak (Quercus lobata) Riparian Forest and Woodland Alliance

This community can be found in valley bottoms, floodplains, creeks, and stream terraces that have seasonally saturated soils and may be intermittently flooded. Soils are alluvial or residual. The USACE Wetlands Inventory recognizes Valley Oak as a Facultative-Upland (FACU) plant, which indicates the possibility of a wetland within the vicinity of this plant (CNPS 2024c).

Environmental Consequences

Construction of the project would require the removal of fragmented low-quality oak woodland/ riparian vegetation along the east side of the existing highway due to retaining wall construction and/or access, as well as culvert improvements. It is anticipated Valley Oak (*Quercus lobata*) removal would be approximately 0.516 acre

of oak woodland/riparian habitat due to retaining wall construction; of this, temporary impacts consist of 0.463 acre and permanent impacts consist of 0.053 acre.

Caltrans would comply with permitting requirements set forth by the California Department of Fish and Wildlife (CDFW) regarding oak replanting. Final permit-driven tree replacement ratios would be decided during the permitting process and is anticipated to be at a 1:1 ratio. Caltrans Standard Measures and Best Management Practices (BMPs) outlined earlier in Chapter 1, Section 1.6 would be implemented as part of the proposed project and would minimize potential impacts.

Avoidance, Minimization and Mitigation Measures

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

WETLANDS AND OTHER WATERS

Affected Environment

Oak woodlands, riparian habitat, wetlands, and other waters of the US (WOTUS) and State are intermingled throughout the project BSA. Discussion of these resources has been separated to the extent possible.

Under Section 404 of the Clean Water Act, Waters of the U.S. (WOTUS) include the following: territorial seas, coastal and inland waters, lakes, rivers, and streams that are navigable and their adjacent wetlands, tributaries to navigable waters and their adjacent wetlands, interstate waters and their tributaries including adjacent wetlands, and all other Waters of the U.S. (including intermittent and ephemeral streams). According to the State Water Resources Control Board (SWRCB), waters of the state (California) include any surface water or groundwater, including saline waters, within the boundaries of the state. Aquatic resources regulated by the California Fish and Game Code 1600 et seq. include areas of bed, bank, and channel of watercourses, in addition to the lateral extent of riparian vegetation associated with habitat and hydrology.

Surveys

Assessments specifically for wetlands and Waters of the U.S. and State were conducted in accordance with methods outlined in the U.S. Army Corps of Engineers *Wetland Delineation Manual and Western Mountains, Valleys, and Coast Regional Supplement* (Caltrans 2024c).

Results–Wetlands

Potential wetlands were identified and wetland delineations conducted by Qualified Caltrans biologists March 27 through March 28, 2023 (Figure 4). Positive determinations for wetlands were made based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. During these delineations, Fresh Emergent Wetlands (FEWs) were found within the ESL. FEWs are characterized by erect, rooted herbaceous hydrophytes, and habitats may occur in association with terrestrial or aquatic habitats, which include Riverine, Lacustrine, and Wet Meadows.

Wetlands Identified:

- West of the box culvert at PM 9.86 (within a wet meadow)
- East side of the outlet of the culvert at PM 9.81

A total of 0.387 acre of potentially jurisdictional wetlands were identified and delineated within the project BSA; this includes 0.350 acre of Eastern Riparian and 0.037 acre of Western Wet Meadow.

Due to retaining wall construction approximately 0.026 acre of FEW wetlands would potentially be impacted within the project ESL. This includes 0.0013 acre of permanent impacts due to installation of the required retaining wall and 0.025 acre of temporary impacts (Table 3).

Table 3. Temporary and Permanent Impact to Aquatic Resources

Activities Proposed	Location Post Miles	Water/ Impacted Resource	Type of Impact	Impact (LF = linear feet)
Retaining Wall	9.71–9.80	Oak woodland/ Riparian	Permanent	600 sq ft / 0.007 acres / 300 LF
			Temporary	6,000 sq ft / 0.13 acres / 300 LF
Retaining Wall	9.82–10	Wetland(FEW)/Riparian	Permanent	60 sq ft / .0013 acres / 40 LF
			Temporary	1,060 sq ft / .025 acres / 40 LF
Retaining Wall	9.82–10	Oak woodland/ Riparian	Permanent	1,965 sq ft / .04454 acres / 1,000 LF
			Temporary	13,440 sq ft / 0.308 acres / 1,000 LF
Permanent Impact Totals				2,625 sq ft / .05 acres / ,1340 LF
Temporary Impact Totals				20,500 sq ft / .46 acres / 1,340 LF
TOTAL				23,125 sq ft / .51 acres/ ,1340 LF

Results–Other Waters of the U.S./State

Caltrans biologists performed ordinary high-water mark (OHWM) delineations between March 27 and 28, 2023, and between May 31 through June 1, 2023, to determine the existence of Other Waters of the U.S. and/or State (Caltrans 2024c) (Figure 4). Four (4) drainages were observed to have OHWM characteristics and were classified as jurisdictional. These included two (2) ephemeral streams—at PMs 9.81 and 9.86—and two (2) perennial streams—one at Feliz Creek PM 10.72 at the north end of the project and the other an unnamed creek at PM 10.04. However, there would be no culvert or in-channel work at any of these locations.

There would be removal of riparian vegetation along the east side of the existing highway due to retaining wall construction and/or access, as well as culvert improvements; both would result in temporary and permanent impacts on riparian habitat (Table 3 above). Caltrans Standard Measures and Best Management Practices (BMPs), outlined earlier in Chapter 1, Section 1.6, would be implemented as part of the proposed project, and would minimize impacts on riparian habitat.

Caltrans would comply with permitting requirements put forth by the United States Army Corps of Engineers (USACE) and State Water Resources Control Board regarding wetland, WOTUS, and State waters impacts. Final permit-driven requirements would be decided during the permitting process (anticipated to be at a 1:1 ratio with creation on-site); however, it would be ensured that no net loss of

aquatic habitat would occur. All impacts would be restored onsite or on the adjoining mitigation parcel, post-construction. Caltrans Standard Measures and Best Management Practices (BMPs) outlined earlier in Chapter 1, Section 1.6 would be implemented as part of the proposed project as well and would further minimize potential impacts.

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

- 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.

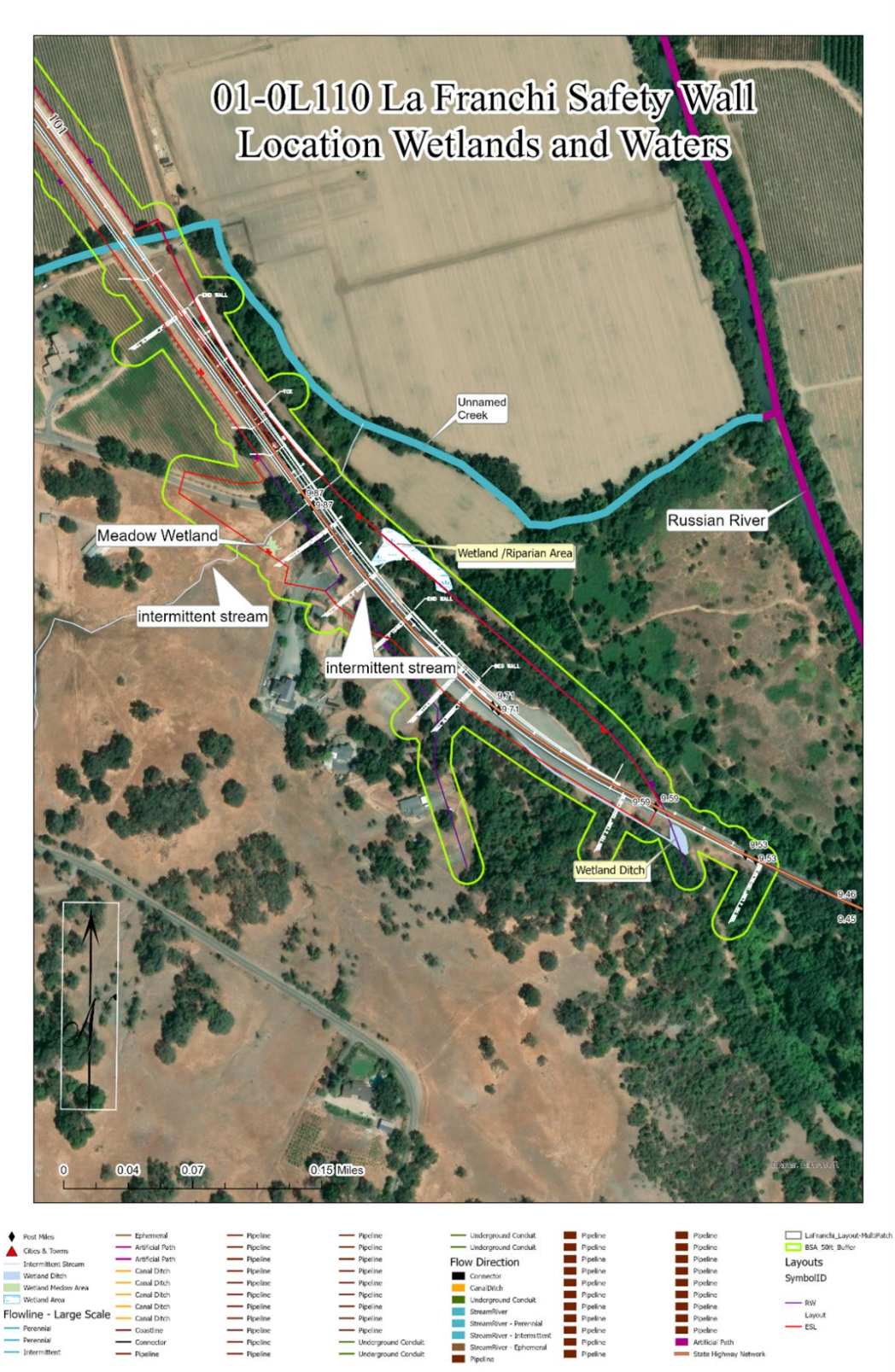

Figure 4. Water and Wetlands within the Biological Study Area.

Environmental Consequences

There would be temporary and permanent impacts on sensitive natural communities, wetlands (FEWs), and riverine habitat, and these are addressed and quantified in the applicable checklist question(s) below.

Avoidance, Minimization and Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, no mitigation measures to wetlands and other waters are proposed.

PLANT SPECIES

Surveys

Botanical surveys, conducted according to CDFW protocols, occurred during the appropriate time of year when potentially occurring rare plants are present and identifiable to assess the presence of sensitive plants and sensitive natural communities within the ESL (Caltrans 2024c). All plants encountered were identified to the taxonomic level necessary to determine rarity status. The natural communities, or vegetation alliances and associations, were also identified based on the vegetation classification and keys in *A Manual of California Vegetation* (Sawyer et al., 2009*)*. Rarity of each vegetation type was determined from CDFW's current online California Natural Communities List (CDFW 2023).

Caltrans biologists performed botanical surveys in March 2023 throughout the ESL and yielded no observations of special status (FESA/CESA) plant species. Thus, as no botanical species would be affected by the proposed work, no species-specific avoidance or minimization efforts are proposed (Caltrans 2024c).

Based on the project location relative to species range, nature of the project, and/or absence of suitable habitat within or adjacent to the project site, Caltrans has determined the project would have no effect on the following federally listed species or species proposed for listing:

- Burke's goldfields *(Lasthenia burkei)*
- Contra Costa goldfields (*Lasthenia conjugens)*
- Showy Indian clover *(Trifolium amoenum)*

Caltrans has determined the project would have no state "take" of the following state listed species, species proposed for listing, or fully protected species that may occur within the project area:

- Boggs Lake hedge hyssop (*Gratiola heterosepala*)
- Burke's goldfields (*Lasthenia burkei*)
- Contra Costa goldfields (*Lasthenia conjugens*)
- North Coast semaphore grass *(Pleuropogon hooverianus)*
- Showy Indian clover (*Trifolium amoenum)*

ANIMAL SPECIES

Based on the project location relative to species range, nature of the project, and/or absence of suitable habitat within or adjacent to the project site, Caltrans has determined that the project may affect, but is not likely to adversely affect the following species proposed for federal listing:

- Northwestern pond turtle (*Actinemys marmorata*)

Based on the project location relative to species range, nature of the project, and/or absence of suitable habitat within or adjacent to the project site, Caltrans has determined the project would have no effect on the following federally listed species or species proposed for listing:

- Golden eagle (*Aquila chrysaetos*)
- Northern spotted owl (*Strix occidentalis caurina*)
- Western snowy plover *(Charadrius nivosus nivosus)*–Pacific Coast Distinct Population Segment (DPS)
- Yellow-billed cuckoo (*Coccyzus americanus)*–Western U.S. DPS
- Chinook salmon (*Oncorhynchus tshawytscha*)–California Coastal ESU
- Coho salmon (*Oncorhynchus tshawytscha*)– Central California Coast ESU
- Steelhead (*Oncorhynchus mykiss irideus*)–Central California Coast DPS (pop. 8)

- Steelhead (*Oncorhynchus mykiss irideus*)–Northern California DPS (winter run) (pop. 49)
- Monarch butterfly (*Danaus plexippus*)

* Essential Fish Habitat (EFH) and Critical Habitat (CH) are located outside of the project BSA, within the Russian River Watershed (Caltrans 2024c).

Caltrans has determined the project would have no state "take" of the following state listed species, species proposed for listing, or fully protected species that may occur within the project area:

- Bald eagle (*Haliaeetus leucocephalus*)
- Golden eagle (*Aquila chrysaetos*)
- Yellow-billed cuckoo (*Coccyzus americanus*)–Western U.S. DPS
- Tricolored blackbird (*Agelaius tricolor*)
- Coho salmon (*Oncorhynchus tshawytscha*)– Central California Coast ESU
- Clear Lake hitch (*Lavinia exilicauda chi*)

The California Department of Fish and Wildlife (CDFW) also maintains a list of animal Species of Special Concern (SSC), most of which are species whose breeding populations in California may face extirpation. Although these species have no legal status, the CDFW recommends their consideration during analysis of the impacts of proposed projects to protect declining populations and avoid the need to list them as endangered in the future.

The project would have "no substantial impact" to the following SSCs identified on the CDFW-CNDDB species list:

- Foothill yellow-legged frog *(Rana boylii*)–North Coast DPS (pop. 1)
- Northwestern pond turtle (*Emys marmorata)*

This project would have "no impact" to the following SSCs identified on the CDFW-CNDDB species list:

- California giant salamander *(Dicamptodon ensatus)*

- Red-bellied newt (*Taricha rivularis)*
- Grasshopper sparrow (*Ammodramus savannarum*)
- Northern spotted owl (*Strix occidentalis caurina*)
- Clear Lake tule perch (*Hysterocarpus traskii lagunae*)
- Sacramento perch (*Archoplites interruptus*)
- Steelhead (*Oncorhynchus mykiss irideus)*–Central California Coast DPS (pop. 8)
- Steelhead (*Oncorhynchus mykiss irideus)*–Northern California DPS (winter run) (pop. 49)
- American badger *(Taxidea taxus)*
- Fisher *(Pekania pennanti)*–West Coast DPS
- Pallid bat (*Antrozous pallidus*)
- Sonoma tree vole *(Arborimus pomo)*
- Townsend's big-eared bat *(Corynorhinus townsendii)*
- Western red bat (*Lasiurus blossevillii*)
- Osprey (*Pandion haliaetus*)
- Monarch butterfly (*Danaus plexippus*)

Caltrans' Standard Measures and Best Management Practices (Section 1.6) would be implemented to avoid impacts to these species. Standard measures would protect sensitive animal species, rare plant species, migratory birds, natural communities, and jurisdictional waters. With implementation of these Standards Measures and Best Management Practices, and as no work would be carried out within the adjacent Russian River riparian zone, no impacts to critical habitat and/or listed fish are expected.

As part of the proposed project, Caltrans or its contractor would implement the standard measures listed below. These measures have been developed to minimize potential effects on biological resources identified as present or having the potential to occur within or near the ESL of the proposed project.

- 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.

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

    - 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.

- Conduct Mandatory Environmental Awareness Training for Construction Personnel.

- Protect Water Quality and Minimize Sedimentation Runoff in Wetlands and Other Waters.

- Biological Monitor - A biologist will be responsible for on-site Northwestern pond turtle (NWPT) and Foothill yellow-legged frog (FYLF) “clearance” surveys and monitoring (detailed below) of occupied NWPT and FYLF areas during ground-disturbing activities, in-water work, and any other time when project activities could reasonably result in adverse effects to NWPT and FYLF. The biologist will notify the Resident Engineer if NWPT and/or FYLF is

encountered within the action area during project activities. The biologist will have the authority to temporarily stop work activities that may result in adverse effects to relocate NWPT and/or FYLF in dewatered areas or upland habitat.

- An Aquatic Species Relocation Plan 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.

The following table indicates those special status species which could potentially occur within the ESL and therefore could potentially be impacted by project construction (Table 4).

Table 4. Findings of Special Status Animal Species that May Potentially Occur within the Environmental Study Limits

Common Name	*Scientific Name*	Status Federal/State	Effect/Impact Finding	Critical Habitat or EFH (If applicable)
AMPHIBIANS/REPTILES				
Foothill yellow-legged frog–North Coast Distinct Population Segment (DPS)	*Rana boylii (pop. 1)*	--/SSC	Suitable habitat does exist within the ESL and there are occurrences of this species in the area. Work in upland areas may effect.	Present
Red-bellied newt	*Taricha rivularis*	--/SSC	Suitable habitat does exist within the ESL and there are occurrences of this species in the area; however, no work is to take place in channel. No impact anticipated.	Present
Western (Northwestern) pond turtle	*Actinemys (Emys) marmorata*	FPT/SSC	Suitable habitat does exist within the ESL and there are occurrences of this species in the area. Work in upland areas may effect.	Present

Foothill Yellow-Legged Frog–North Coast DPS

Affected Environment

The North Coast clade of the foothill yellow-legged frog (FYLF) (*Rana boylii* pop. 1) is a state Species of Special Concern (SSC) (Caltrans 2024c). FYLF is a highly aquatic, medium-sized frog with indistinct dorsolateral folds, smooth skin, a slim waist, long legs, and webbing on its hind feet only. They are characteristically found very close to water in association with partly shaded, shallow perennial streams, ephemeral creeks, and riffles with rocky substrates that retain perennial pools through the end of summer, such that exist in riparian woodland/scrub environments. During cold weather, individuals seek cover under rocks in the streams or on shore within 6 feet of water. FYLF typically use the “sit and wait” method of hunting, capturing prey when it comes into range using their large, sticky tongue and bring the prey to their mouths, and they prey on a variety of terrestrial and aquatic invertebrates and tadpoles, including dead frogs and sometimes their own eggs. Mating and egg-laying occurs exclusively in streams and rivers (not in ponds or lakes) and their eggs are attached to gravel or rocks in moving water near stream margins.

Environmental Consequences

While no surveys for special status amphibians and reptiles were conducted, multiple CNDDB occurrences for these species have been recorded in the project vicinity. Suitable habitat does exist within the ESL, but there are no recorded occurrences of this species within the ESL. While no work would take place within streams and/or channels, work in upland/riparian areas could impact FYLF (foraging and dispersal habitat).

In addition, project construction could degrade water quality by increasing sediment loads associated with ground disturbance, as could any accidental spills of fuels, oils, or other construction-related fluids into or near adjacent creeks or streams. Degraded water quality could harm all life stages of the special status amphibian and reptile species if they are in or downstream of work areas. Standard Measures and BMPs (Section 1.6) would be implemented as part of the proposed project; thus, protecting water quality and minimizing potential impacts on special status amphibians and reptiles and their habitat. For CEQA purposes, Caltrans has determined there would be no impact to Foothill yellow-legged frog.

Avoidance, Minimization and Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, no mitigation measures are proposed for Foothill yellow-legged frog.

Red-Bellied Newt

Affected Environment

Red-bellied newt (*Taricha rivularis*) is a California Species of Special Concern within Sonoma, Mendocino, Humboldt, and Lake counties (Caltrans 2024c). It migrates to streams during fall and winter rains and inhabits primarily redwood forest, but is also found within mixed conifer, valley-foothill woodland, montane hardwood, and hardwood-conifer habitats. Primarily active at night, red-bellied newt feed on arthropods, worms, and snails within water and on the forest floor within ground litter. It spends the dry season underground within root channels, migrates to streams during autumn rains, and returns to terrestrial habitat in the spring. They require rapid streams with rocky substrate for breeding and egg-laying/larval development.

Environmental Consequences

While no surveys for special status amphibians and reptiles were conducted, multiple CNDDB occurrences for these species have been recorded in the project vicinity. Suitable habitat does exist within the ESL and there are recorded occurrences of this species within the ESL. However, as no work would take place within streams and/or channels, no impacts to red-bellied newt are anticipated.

In addition, project construction could degrade water quality by increasing sediment loads associated with ground disturbance, as could any accidental spills of fuels, oils, or other construction-related fluids into or near adjacent creeks or streams. Degraded water quality could harm all life stages of the special status amphibian and reptile species if they are in or downstream of work areas. Standard Measures and BMPs (Section 1.6) would be implemented as part of the proposed project; thus, protecting water quality and minimizing potential impacts on special status amphibians and reptiles. For CEQA purposes, Caltrans has determined there would be no impact to red-bellied newt.

Avoidance, Minimization and Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, no mitigation measures are proposed for red-bellied newt.

Northwestern Pond Turtle

Affected Environment

Northwestern pond turtle (NWPT) (*Actinemys marmorata*), a federal proposed candidate species and California Species of Special Concern (SSC), has the potential to occur within the project ESL (basking and dispersal habitat only) (Caltrans 2024c). NWPT occurs throughout California west of the Sierra–Cascade crest and is found from sea level to 6,000 feet. Although this species is most likely to be encountered in aquatic habitats (e.g., ponds, marshes, rivers, streams), it may be found as much as 650 feet away from perennial waters for nesting and/or aestivation (dormancy-especially during the hot summer season).

Environmental Consequences

While no surveys for special status amphibians and reptiles were conducted, multiple CNDDB occurrences for these species have been recorded. All occurrences are associated with the nearby Russian River and perennial creeks or associated tributaries, with the nearest occurrence recorded in the adjacent Russian River approximately 0.25 mile to the north of the ESL. No work would take place within the Russian River or streams/channels within the project ESL. However, as suitable basking and dispersal habitat does exist within the ESL, presence of NWPT is presumed. Due to retaining wall construction, NWPT foraging, basking, and/or dispersal habitat may be impacted. Caltrans has determined that the project ***may affect, but is not likely to adversely affect*** Northwestern pond turtle.

Project construction could degrade water quality by increasing sediment loads associated with ground disturbance, as could any accidental spills of fuels, oils, or other construction-related fluids into or near adjacent creeks or streams. Degraded water quality could harm all life stages of the special status amphibian and reptile species if they are in or downstream of work areas. Standard Measures and BMPs (Section 1.6) would be implemented as part of the proposed project; thus, protecting water quality and minimizing potential impacts on special status amphibians and reptiles.

Considering implementation of Standard Measures and BMPs (Section 1.6), and as work would take place outside of the Russian River or streams/channels, Caltrans has determined the proposed project would not impact NWPT. Section 7 consultation with the USFWS may result in additional measures to further protect NWPT.

Avoidance, Minimization and Mitigation Measures

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

Migratory Birds

Affected Environment

Federal and state laws protect migratory birds, their occupied nests, and their eggs from destruction. The applicable federal law is the Migratory Bird Treaty Act (MBTA) (15 USC 703-711), 50 CFR Part 21 and 50 CFR Part 10. Protection under California law is found in Fish and Game Code Sections 3503, 3513, and 3800. Migratory bird species are likely to nest in vegetation within and adjacent to the southern end of the project. The MBTA provides protection in part by restricting the disturbance of nests during the bird nesting season.

Environmental Consequences

Habitat for migratory birds, including nesting and foraging habitat, occurred and migratory birds were identified within the ESL during field surveys. However, point count surveys were not conducted to identify specific migratory birds.

Project-related impacts on migratory birds would be avoided by restricting vegetation removal to the period outside of the bird breeding season (September 16 through January 31). If vegetation removal is required between February 1 and September 15, a nesting bird survey would be conducted by a qualified biologist within five days of removal. If an active nest is located, the biologist would coordinate with the CDFW to establish appropriate species-specific buffer(s) and any monitoring requirements. The appropriate buffer would be delineated around each active nest, and construction activities would be excluded from these areas.

Standard Measures and BMPs would be applied to ensure that neither birds nor occupied nests would be affected by the project as described earlier under Bird Protection Measures in Chapter 1, Section 1.6. Thus, no impact is anticipated.

Avoidance, Minimization and Mitigation Measures

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

Fish

Surveys

Suitable habitat exists within the ESL (Feliz Creek) for the following species:

- Chinook salmon (*Oncorhynchus tshawytscha*)–California Coastal ESU
- Coho salmon (*Oncorhynchus tshawytscha*)–Central California Coast ESU

There are reports of young-of-the-year steelhead/rainbow trout (SH/RT) in Feliz Creek; however, work near Feliz Creek is limited to metal beam guardrail replacement and end treatment work well outside of Feliz Creek. No in-water work or above-water work will occur. (Caltrans 2024c).

Chinook Salmon–California Coastal ESU

The Chinook salmon (*Oncorhynchus tshawytscha*)–California Coastal (CC) Evolutionarily Significant Unit (ESU) (pop. 17) is federally listed as threatened. Chinook salmon have a life history like Southern Oregon/Northern California Coast (SONCC) coho salmon but are easily distinguished from other *Oncorhynchus* species by their large size, with some individuals growing to more than 100 pounds.

Chinook salmon spawn in November and December, depending on rainfall patterns. After three to four months, in late winter or spring, the fry emerges from the gravel. In June, juvenile Chinook salmon start their downstream migration to the estuary and then to the ocean. Juveniles can be found in freshwater streams between June and September. Once juveniles descend from their freshwater natal streams, it is likely they use the estuary in the winter and spring as a transition before ocean entry.

While the BSA of the proposed project is within designated critical habitat for CC Chinook salmon, suitable habitat does not exist within the ESL. However, habitat does exist within the Russian River, which the drainages running through the ESL ultimately drain to.

Per FESA, while there are occurrences of these species in the area, there would be no work in connecting waters, no ground disturbance on the banks of the connecting waters, and no work is to take place in the channel. Therefore, no effect is anticipated to Chinook salmon–California Coastal ESU.

Coho Salmon–Central California Coast ESU

The coho salmon (*Oncorhynchus kisutch*)–Central California Coast ESU is part of the southernmost continually-returning natural population of federally endangered coho, which is recognized as a reproductively isolated and distinct population. This Central California Coast population extends from Punta Gorda in Humboldt County south to Santa Cruz County. An adult coho may measure more than 2 feet in length and can weigh up to 36 pounds; however, the average weight of adult coho is 7 to 11 pounds. Coho salmon change in appearance as they move through different life stages. Juvenile coho are distinguished from juvenile steelhead trout in local streams by their dark, vertical bars, known as “parr” marks. During their ocean phase, coho have silver sides and dark blue or greenish backs. As coho return to creeks to spawn, they develop a reddish coloring along the belly.

Suitable habitat does not exist within the ESL. However, habitat does exist in the BSA within the Russian River, which the drainages ultimately drain to.

Per FESA, while there are occurrences of these species in the area, there would be no work in connecting waters, no ground disturbance on the banks of the connecting waters, and no work is to take place in the channel. Therefore, no effect is anticipated to coho salmon–Central California Coast ESU.

Essential Fish Habitat

The Russian River Watershed, which is identified as Essential Fish Habitat (EFH) for both coho and Chinook salmon, is outside of the project ESL; therefore, there would be no effect to coho and Chinook salmon EFH.

INVASIVE SPECIES

Executive Order 13112 requires federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem, whose introduction does or is likely to cause economic or environmental harm or harm to human health." The Federal Highway Administration (FHWA) guidance issued August 10, 1999, directs the use of the state's invasive species list, maintained by the California Invasive Species Council, to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

There are limited areas that have natural communities of special concern, with most of the BSA consisting of agriculture and ruderal areas. Caltrans Standard Measures and Best Management Practices (BMPs), as outlined earlier in Chapter 1, Section 1.6, would be implemented to ensure invasive species do not proliferate.

Discussion of CEQA Environmental Checklist Question 2.4a)— Biological Resources

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

PLANT SPECIES

No Impact

While the ESL may support habitat for several regional special status plants, focused botanical surveys completed for the project documented the absence of any special status or rare plants within the ESL. Due to negative botanical survey results, and the lack of suitable habitat for such species, special status plant species are not anticipated to occur within the ESL; therefore, there would be no impact.

ANIMAL SPECIES

No Impact

Foothill Yellow-Legged Frog–North Coast DPS

Suitable habitat does exist within the ESL, but there are no recorded occurrences of this species within the ESL, no work would take place within any culverts or streams, and Biological Resource (BR) and Water Quality (WQ) standard Measures and BMPs (Section 1.6) would be implemented as part of the proposed project and included in the construction contract. Thus, no impacts are anticipated.

Project construction could temporarily degrade water quality by increasing sediment loads associated with ground disturbance, as could any accidental spills of fuels, oils, or other construction-related fluids into or near adjacent creeks or streams. Biological Resource (BR) and Water Quality (WQ) standard Measures and BMPs (Section 1.6 and outlined in the "*Animal Species"* subsection above) would be implemented as part of the proposed project; thus, protecting water quality and minimizing potential impacts on special status amphibians. Thus, no impacts are anticipated.

Red-Bellied Newt

Suitable habitat does exist within the ESL and there are recorded occurrences of this species within the ESL. No work would take place within any culverts or streams and Biological Resource (BR) and Water Quality (WQ) standard Measures and BMPs (Section 1.6) would be implemented as part of the proposed project and included in the construction contract. Thus, no impacts are anticipated.

Project construction could degrade water quality by increasing sediment loads associated with ground disturbance, as could any accidental spills of fuels, oils, or other construction-related fluids into or near adjacent creeks or streams. Biological Resource (BR) and Water Quality (WQ) standard Measures and BMPs (Section 1.6 and outlined in the "*Animal Species"* subsection above) would be implemented as part of the proposed project; thus, protecting water quality and minimizing potential impacts on special status amphibians. Thus, no impacts are anticipated.

Northwestern Pond Turtle

Suitable basking and dispersal habitat for Northwestern Pond turtle (NWPT) does exist within the ESL; therefore, presence is presumed. Due to retaining wall construction, turtle foraging, basking, and/or dispersal habitat may be impacted. Biological Resource (BR) Standard Measures and BMPs (Section 1.6 and outlined in the "*Animal Species"* subsection above) would be implemented as part of the proposed project and included in the construction contract. Thus, no impacts are anticipated.

Project construction could degrade water quality by increasing sediment loads associated with ground disturbance, as could any accidental spills of fuels, oils, or other construction-related fluids into or near adjacent creeks or streams. The Standard Measures and BMPs indicated in Section 1.6 would be implemented as part of the proposed project; thus, protecting NWPT, as well as water quality, thereby minimizing potential impacts on special status amphibians and reptiles. Thus, no impacts are anticipated.

Discussion of CEQA Environmental Checklist Question 2.4b)— Biological Resources

b) Would the project 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?

Sensitive Natural Communities

No Impact

Construction would require the removal of fragmented oak-dominated riparian vegetation along the east side of the existing highway due to retaining wall construction and/or access, as well as culvert improvements. It is anticipated Valley Oak (*Quercus lobata*) removal would be approximately 0.516 acres of oak woodland/riparian habitat due to retaining wall construction; of this, temporary impacts consist of 0.463 acres and permanent impacts consist of 0.053 acres. Impacts would be minimized by implementation of Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, Section 1.6. In addition, Caltrans would comply

with permitting requirements put forth by the CDFW regarding oak replanting, anticipated to be at a 1:1 ratio based on the quality of the habitat. Thus, the project would have no impact on this sensitive natural community.

Discussion of CEQA Environmental Checklist Question 2.4c)— Biological Resources

c) Would the project 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?

Wetlands and Other Waters

Less Than Significant Impact

A total of 0.387 acre of potentially jurisdictional wetlands were identified and delineated within the BSA; this includes 0.35 acre of Eastern Riparian and 0.037 acre of Western Wet Meadow (Table 3 above). Due to retaining wall construction and culvert replacement, approximately 0.026 acre of wetlands within the project ESL could potentially be impacted; this includes 0.001 acre of permanent impacts and 0.025 acre of temporary impacts.

Temporary and permanent impacts would be minimized with implementation of the Standard Measures and BMPs outlined in Chapter 1, Section 1.6. In addition, Caltrans would compensate for permanent project impacts on aquatic resources in accordance with permitting requirements set forth by the USACE and RWQCB (anticipated to be at a 1:1 ratio based on on-site creation). Final permit-driven mitigation ratios would be determined by USACE and RWQCB during the permitting process; however, it would be ensured that there would be no net loss of aquatic habitat function. Thus, the project would have a less than significant impact on Wetlands and Other Waters.

Discussion of CEQA Environmental Checklist Question 2.4d)— Biological Resources

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact

No changes to habitat connectivity due to construction of this proposed project are anticipated. Although U.S. 101 is being widened to include a turn lane and wider shoulders, the limited amount of widening described in the project scope would not impact habitat connectivity or wildlife migration, nor would it impede wildlife movement or the use of native wildlife nursery sites. Thus, no impacts are anticipated.

As no work would be taking place in any aquatic habitat, no impact is anticipated with regard to fish passage.

Discussion of CEQA Environmental Checklist Question 2.4e)— Biological Resources

a) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Sensitive Natural Communities

No Impact

Construction would require the removal of fragmented oak-dominated riparian vegetation along the east side of the existing highway due to retaining wall construction and/or access, as well as culvert improvements. It is anticipated Valley Oak (*Quercus lobata*) removal would be approximately 0.516 acre of oak woodland/riparian habitat due to retaining wall construction; of this, temporary impacts consist of 0.463 acre and permanent impacts consist of 0.053 acre. Impacts would be minimized by implementation of Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, Section 1.6.

Although oak tree removal would be required for construction activities, Caltrans would adhere to Mendocino County's current oak tree/woodland policies and ordinances (County of Mendocino 2021b). Thus, no impact is anticipated.

Discussion of CEQA Environmental Checklist Question 2.4f)—Biological Resources

f) Would the project 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

Within the BSA, there are limited areas containing fragmented, low-quality Valley Oak (*Quercus lobata*) Riparian/Riparian Forest and Woodland Alliance vegetation. Since the BSA lies within a habitat which primarily consists of agriculture and highly disturbed roadside ruderal areas, it would not qualify for any conservation plans, as stated above. Thus, there would be no impact.

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 Archaeological Survey Report (Caltrans 2024a), Historic Property Survey Report (Caltrans 2024b), and consultation with the Native American Heritage Commission and local tribes. Based on the findings, it has been determined that any potential effects on Cultural Resources would be minimized by implementation of Caltrans' Standard Measures and Best managements Practices (BMPs) outlined earlier, under CR-1 through CR-4, Chapter 1, Section 1.6.

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 March 20, 2023 (Caltrans 2023e). 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.

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 April 09, 2024 (Department of Conservation 2024b), and a records search of paleontological databases performed by Engineering Geologist Paul Sundberg, shared via email on April 24, 2023.

Potential impacts to Geological or Soil resources are not anticipated due to the project scope being restricted to the disturbance of existing road prism fill and/or cut soil. The proposed project would include cut and fill excavation/replacement associated with the retaining wall, shoulder and left-turn lane widening, and guardrail installation. The excavated fill would be reused on-site, as much as possible, and managed using the Standard Measures and BMPs discussed in Chapter 1 Section 1.6 to ensure no soil erosion occurs.

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

This section outlines federal and state efforts to comprehensively reduce greenhouse gas emissions from transportation sources. 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. In January 2023, the White House Council on Environmental Quality (CEQ) issued updated and expanded interim National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change (88 Fed. Reg. 1196) (CEQ NEPA GHG Guidance), in accordance with EO 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, 86 FR 70935 (December 13, 2021) and EO 14008, *Tackling the Climate Crisis at Home and Abroad*. The CEQ guidance does not establish numeric thresholds of significance but emphasizes quantifying reasonably foreseeable lifetime direct and indirect emissions whenever possible. This guidance also emphasizes resilience and environmental justice in project-level climate change and GHG analyses.

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. 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

The project is 13 miles south of Ukiah, in and south of the town of Hopland, within a rural part of Mendocino County on U.S. 101. The project area consists primarily of a natural agricultural-based tourism economy. U.S. 101 is the main transportation route to and through the area for both passenger and commercial vehicles. The nearest alternative northbound route is SR 128, accessible approximately 13 miles to the south at the U.S. 101/SR 128 junction.

Due to the limitation of alternative routes, traffic counts can be high due to the combination of truck freight movement, interstate travelers, and local tourists. The project is within a segment of U.S. 101 that extends from the Hopland Overhead Bridge, just south of La Franchi Road, to the Feliz Creek Bridge. This section is a 2-lane conventional highway of approximately 1.5 miles, with no passing and non-standard, 4-foot-wide shoulders. A major attractor along this section are the various wineries surrounding the area, with the most notable being the Milano Winery located near the intersection of La Franchi Road and U.S. 101. Mendocino Council of Governments (MCOG) acts as the Regional Transportation Planning Agency (RTPA) and guides transportation development in the project area.

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 2021 were 5,586.0 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 12% of total U.S. emissions in 2021 [U.S. EPA 2023a].) While total GHG emissions in 2021 were 17% below 2005 levels, they increased by 6% over 2020 levels. Of these, 79.4% were CO_2, 11.5% were CH_4, and 6.2% were N_2O; the balance consisted of fluorinated gases. From 1990 to 2021, CO_2 emissions decreased by only 2% (U.S. EPA 2023a).

The transportation sector's share of total GHG emissions increased to 28% in 2021 and remains the largest contributing sector (Figures 5–7). Transportation fossil fuel combustion accounted for 92% of all CO_2 emissions in 2021. This is an increase of 7% over 2020, largely due to the rebound in economic activity following the COVID-19 pandemic (U.S. EPA 2023a, 2023b).

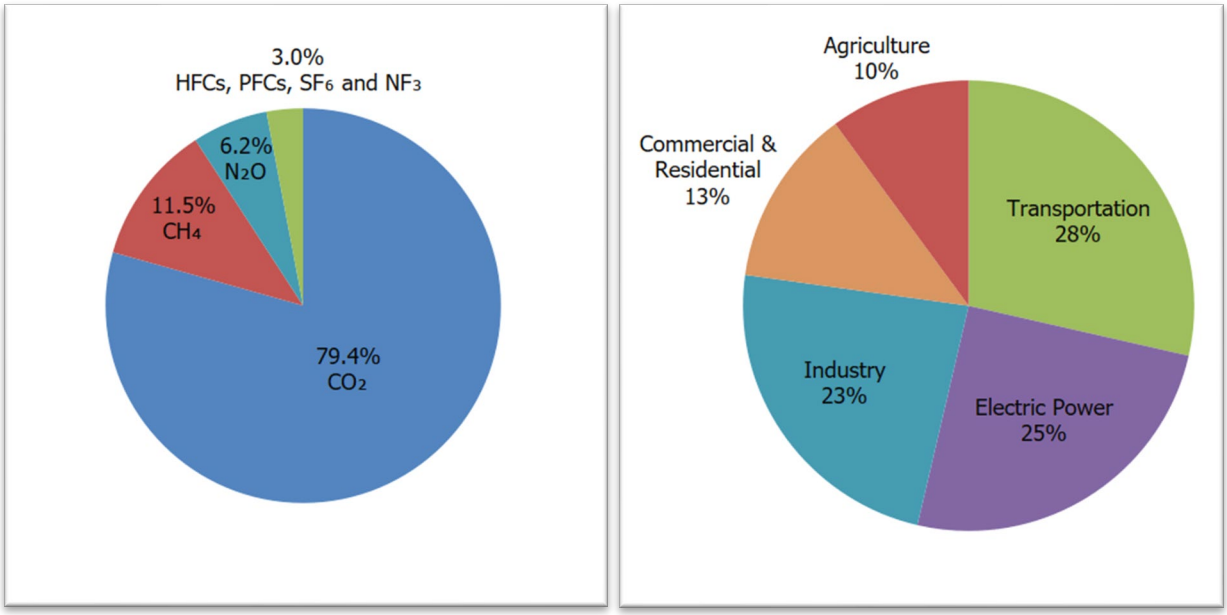

Figure 5. U.S. 2021 Greenhouse Gas Emissions

Source: U.S. EPA 2023b

STATE GHG INVENTORY

The CARB collects GHG emissions data for transportation, electricity, commercial and 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 2020 despite growth in population and state economic output (Figures 6 and 7) (CARB 2022a).

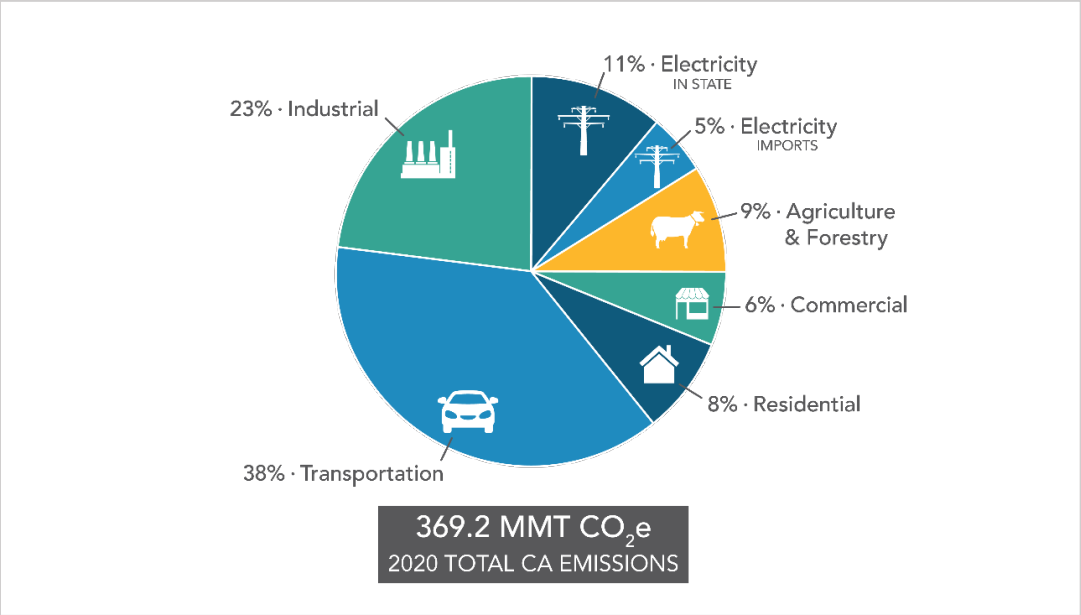

Figure 6. California 2020 Greenhouse Gas Emissions by Economic Sector
(Source: CARB 2022a)

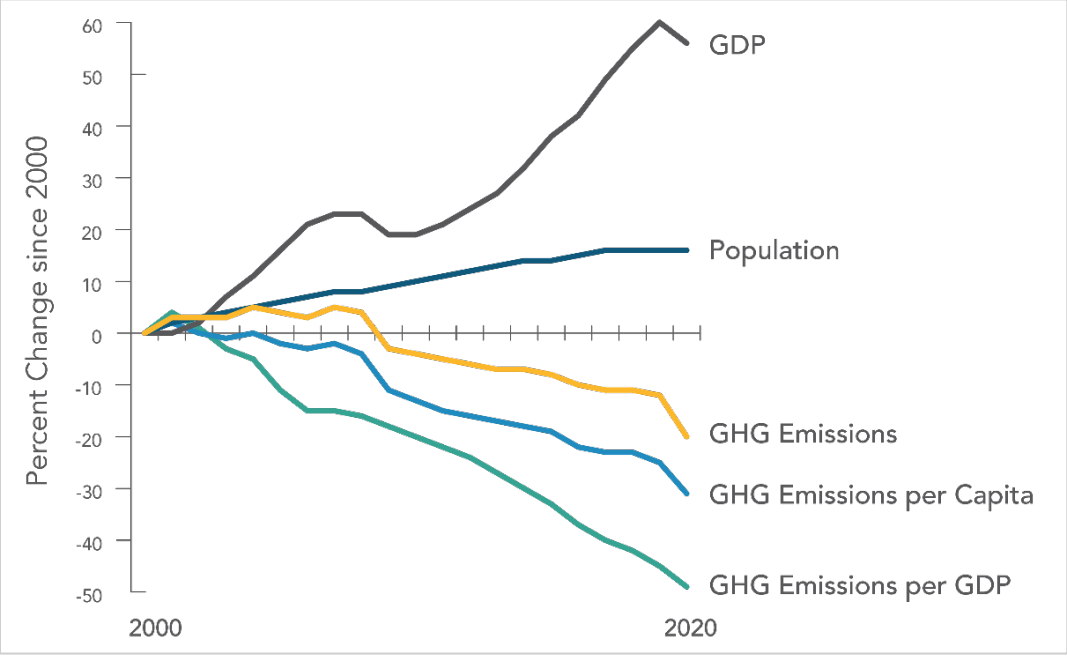

Figure 7. Change in California Gross Domestic Product (GDP), Population, and GHG Emissions since 2000

(Source: CARB 2022a)

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

REGIONAL PLANS

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

The proposed project area is not within the jurisdiction of an MPO and therefore not subject to CARB GHG reduction targets. However, Mendocino Council of Governments (MCOG) acts as the Regional Transportation Planning Agency (RTPA) for the countywide region, and the 2022 *Mendocino County Regional Transportation Plan* (RTP) recognizes that transportation is responsible for generating considerable portions of carbon dioxide emissions. While rural areas, such as Mendocino County, are not subject to the same requirements as urban regions, the RTP Guidelines require that the issue of climate change and greenhouse gas emissions be addressed during the RTP process to contribute to emission reduction targets.

Policies and actions aimed at addressing climate change and reducing GHG emissions include but are not limited to:

MCOG/RTP (2022) -

- Adopted an Active Transportation Plan (ATP) identifying needs and projects to benefit non-motorized transportation. Prior to the ATP, MCOG produced the Regional Bikeway Plan for member entities to expand the bikeway system.
- Developed a Rails with Trails Corridor Plan to develop non-motorized facilities within the rail right-of-way from the Sonoma County Line to Willits, which has led to construction of three portions of the trail in the Ukiah area, with a fourth section in progress. Construction of the first section of the Willits rail trail has also been funded and is currently underway.
- Developed the Mendocino County Zero Emission Vehicle (ZEV) Regional Readiness Plans and studies, including the ZEV and Alternative Fuels Readiness Plan Update.
- Funded Safe Routes to School Plans for the City of Willits and the County, which will facilitate future Safe Routes to School Grant applications.
- Participated in the North Coast and Upstate Fuel Cell Readiness Project to prepare nine of California's northernmost counties for the introduction of fuel cell electric vehicles.
- Supported efforts of Mendocino Transit Authority to diversify fuels for its transit fleet, including support for a TIGGER application for electric busses and solar power canopies; and continues to support their efforts to convert to a fully electric transit fleet.

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 trap 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 increase safety by widening the highway to accommodate standard eight-foot-wide shoulders and pave left-turn and merge-lanes, which would reduce the frequency and the severity of collisions along this segment of U.S. 101, the project would not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on U.S. 101, no increase in vehicle miles traveled (VMT) would occur. While some GHG emissions during construction would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction is expected to begin in 2026 and last approximately 150 working days. The proposed project would result in generation of short-term, construction related GHG emissions. These emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction.

These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction. 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.

The CAL-CET2021 tool 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 5 summarizes estimated GHG emissions generated by on-site equipment for the project. The total CO_2e produced during construction is estimated to be 372 metric tons.

Table 5. CAL-CET Estimates of GHG Emissions During Construction

Construction Year	CO_2	CH_4	N_2O	BC	HFC-134a	CO_2e
2026	258	0.007	0.012	0.011	0.010	281
2027	80	0.001	0.005	0.002	0.006	91
Total	**338**	**0.008**	**0.016**	**0.014**	**0.016**	**372**

* 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 increased operational GHG emissions since it would not increase capacity, change travel demands or traffic patterns, as compared to the No-Build Alternative. The project would not increase the number of travel lanes on U.S. 101, so no increase in VMT would occur.

The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG reduction measures and Caltrans' Standard Measures and BMPs (Section 1.6), no impact is anticipated.

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 2022c).

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 (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 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% 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 2021a).

Caltrans Strategic Plan

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

Caltrans Policy Directives and Other 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. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including the Mendocino County Air Quality Management District regulations (Mendocino County Air Quality Management District 2024) and local ordinances.
- 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.
- To the extent feasible, construction traffic would 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.
- Where feasible, the removal of established trees and vegetation would be minimized.
- Environmentally sensitive areas would have Temporary High Visibility Fencing (THVF) and/or flagging installed before start of construction to demarcate areas that will be protected. Such areas can include, but are not limited to, wetlands and vegetation, including trees and their root systems.
- If previously vegetated, temporary access roads, construction easements, and staging areas would be restored to a natural contour and revegetated with regionally appropriate native vegetation.
- Earthwork Balance: Reduce the need for transport of earthen materials by balancing cut and fill quantities.

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. Caltrans practices generally align with the *2023 CEQ Interim Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*, which offers recommendations for additional ways of evaluating project effects related to GHG emissions and climate change. These recommendations are not regulatory requirements.

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. Several 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 (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 2023a).

Caltrans Office of Vegetation and Wildfire Management

In January 2021, the Governor's Office released the California's Wildfire and Forest Resilience Action Plan, and state highways were identified as "a critical part of the solution" with direction to create fire safe roadways. Caltrans' role in the Action Plan is to assist the state toward wildfire resilience by providing a highway system that prioritizes vegetation and wildfire management along primary emergency evacuation routes, and a highway system that can also function as a shaded fuel break or fire control line during emergency operations. In response to this effort, Caltrans has established the Office of Vegetation and Wildfire Management (OVWM) which oversees and administers the Vegetation Management Program, which in turns manages district service contracts to help meet the Department's wildfire resilience goals.

The intent of the district service contract is to supplement Maintenance field forces with specialized Licensed Timber Operators (LTOs) in response to the California Wildfire and Forest Resilience Action Plan. Improving wildfire resilience requires Caltrans to conduct vegetation management work on a yearly cycle, which began in 2022, and the two-year service contract cycle has been initiated in each of the districts to support this statewide effort.

PROJECT ADAPTATION EFFORTS

The impacts of climate change and extreme weather events may impact the State Highway System (SHS) and other transportation infrastructure in the state. As the climate continues to change at an increasingly rapid pace, Caltrans must ensure climate change adaptation measures are identified and implemented when appropriate and feasible. The project would not exacerbate the effects of climate change related to CEQA topics. Rather, the proposed project would include specific elements to prepare for increased precipitation, increased risk of wildfire, and hazards that may result from climate change, such as flooding, landslides, and road closures (Caltrans 2019a). Standard Measures and Best Management Practices (BMPs) implemented as part of the proposed project would further protect the asset, reduce the long-term risk to the finished project, and help build a more resilient highway system.

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 8).

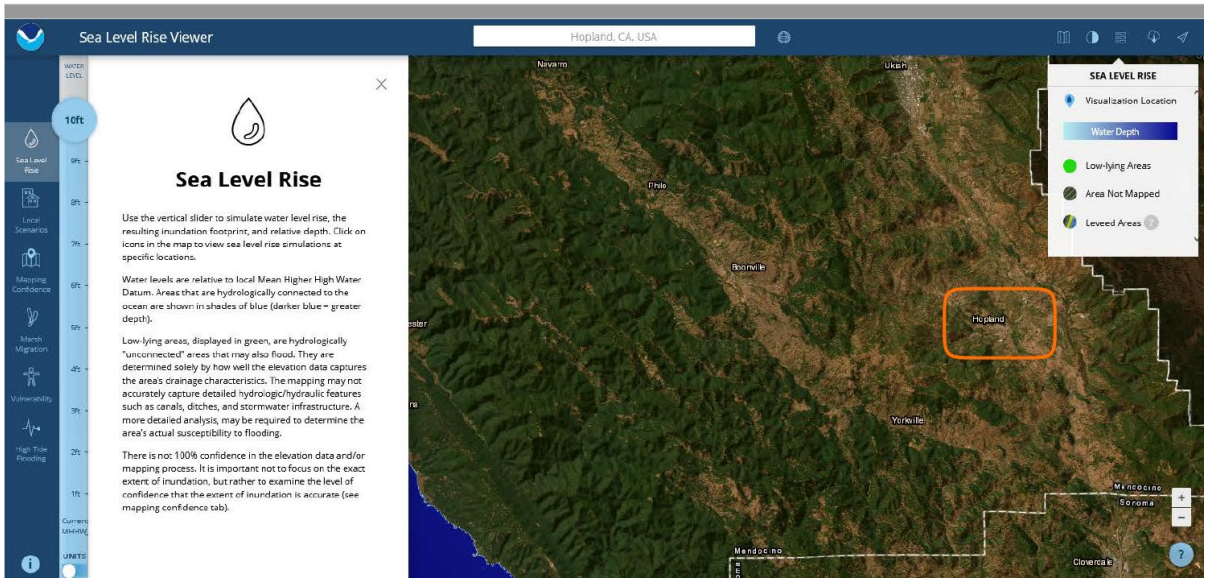

Figure 8. Sea Level Rise within Project Study Area from NOAA Sea Level Rise Viewer

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 limits lie within the floodplain of the adjacent Russian River, and are within Federal Emergency Management Agency (FEMA) 1) Special Flood Hazard Area with Base Flood Elevation or Depth-*Zone AE;* or 2) Other Areas of Flood Hazard 0.2% Annual Chance Flood Hazard, Areas with 1% annual chance of flood with average depth of less than one (1) foot or with drainage areas of less than one square mile-*Zone X* per FEMA's "National Flood Hazard Layer Viewer FIRMette" map (FEMA 2024a). However, according to FEMA's National Risk Index (FEMA

2024b), Mendocino County has a rating of Relatively Moderate for Riverine Flooding Risk, and Caltrans' "District 1 Climate Change Vulnerability Asset Map" estimates that the project vicinity would experience an approximate increase in 100-Year Precipitation Depth of approximately 3.86% in 2055 (Caltrans 2019c).

The upsizing of one (1) existing 30" corrugated steel pipe (CSP) culvert at PM 10.35 to a 36" CSP would accommodate proximate flow increases. In addition, compliance with Caltrans' MS4 Permit would require post-construction treatment BMPs to be incorporated into the project design to treat new impervious area(s) onsite, to the maximum extent practicable. Per Caltrans' SWMP and approved guidance documents, an analysis of site characteristics would be performed to optimize water quality volume, water quality flow, and to maximize site perviousness, and BPMs meant to treat general pollutants would be implemented.

Wildfire

According to the *Caltrans Climate Change Vulnerability Assessment for District 1* (D1) (Caltrans 2019a), 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.

Caltrans mitigates wildfire risk in many ways. A district landscape specialist prepares site-specific fire risk plans which provide details on fire risk and vegetation control. Caltrans District 1 (D1) performs annual inspections of fire suppression equipment to ensure its suitability for effective response. When response is necessary, D1 employs additional traffic signals, detour signage, and other tools to help emergency vehicles and drivers to navigate hazardous areas. The district also prepares for subsequent flooding and landslides with debris control and slope stabilization strategies. Of particular concern to D1 is the disproportionate impacts wildfires have on disadvantaged and low-income communities. Many wildfires occur in rural areas having higher-than-state-average low-income households. Providing transportation options for these households to evacuate when wildfires threaten, as well as providing resources for recovery in these areas, is a challenge to government agencies at all levels.

The project limits are within both a State Responsibility Area (SRA) served by CAL FIRE and a Local Responsibility Area (LRA). Project limits within both the SRA and LRA are considered *Very High* Fire Hazard Severity Zones (FHSZs) according to the FHSZ Viewer adopted by CAL FIRE in November 2007.

Although there is work proposed in a *Very High* FHSZ, project elements would assist in building a wildfire resilient highway system. Examples of resilient components incorporated within this project's scope include:

Fire hardening of highway components (installation/upgrade)-

- Concrete culvert 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 ladder fuels, such as small diameter trees, adjacent to the roadway.
- Removal of weeds and/or annual vegetation within and around culverts, which are potentially combustible in dry months.

For further discussion of this topic, please see Section 2.20 *Wildfire* below.

Temperature

The *District 1 Climate Change Vulnerability Assessment* does not indicate temperature changes during the project's design life that would require adaptive changes in pavement design or maintenance practices (Caltrans 2019c).

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 (Cortese list) 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 20, 2023 (Caltrans 2023f).

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 Standard Measures and Best Management Practices (BMPs) as outlined in Chapter 1, 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 2019b; Caltrans 2023b; Caltrans 2023c).

This project is not located on a "Cortese" site.

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 or public use.

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) (MCOG 2022). Caltrans' "Transportation Management Plan" (Caltrans 2023d) would ensure that emergency response agencies and service providers would be notified of the project construction schedule, would have access to U.S. 101 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.

2.10 Hydrology and Water Quality

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

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

Regulatory Setting

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

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

Affected Environment

The project is in the vicinity of the Russian River Canyon at an elevation of 502 feet (153 meters). This project is located within the hydrologic area of the Upper Russian River, the Upper Russian River watershed, and sub watershed is Cummiskey Creek-Russian River. This area is under the jurisdiction of the State Water Resources Control Board (SWRCB) Region 1, whose water quality regulations are administered by the North Coast Regional Water Quality Control Board (NCRWQCB) and lies within the Ukiah Hydrologic Sub-Area #114.31 in the Russian River Hydrologic Unit. Highway drainage features typical to this corridor include stabilized shoulder backing, vegetated ditches, and cross culverts.

Basin Plan Requirements

The Basin Plan sets forth water quality standards and WQOs for surface water and groundwater of the Klamath River and North Coastal basins (Caltrans 2024e). The plan designates beneficial uses for water bodies and establishes water quality objectives (WQOs), waste discharge prohibitions, and other implementation measures to protect those beneficial uses. State water quality standards also include an Anti-degradation Policy for the protection of beneficial uses. Water quality control measures include total maximum daily loads (TMDLs), which are often, but not always, adopted as Basin Plan amendments. Stormwater discharges from Caltrans right of way are required to meet water quality criteria established in the NCRWQCB Basin Plan, in accordance with the Caltrans NPDES requirements.

NPDES & CGP Permit Requirements

The Caltrans' MS4 Permit (NPDES No. CAS000003, SWRCB Order No. 2022-0033-DWQ (adopted on June 22, 2022, and effective January 1, 2023)) regulates stormwater and non-stormwater discharges from Caltrans properties and facilities associated with operation and maintenance of the State Highway System. The Caltrans NPDES Permit also requires post-construction temporary Best Management Practices (TBMPs) for increases in impervious surface area of one acre or more and any alterations to existing flow patterns (e.g., hydromodification). The permit also requires that Caltrans construction projects disturbing one or more acres of soil obtain coverage under the Statewide Construction General Permit (CGP).

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

Waste Discharge Requirements

Every applicant for a federal permit or license for any activity that may result in a discharge of dredge or fill material to Waters of the U.S. must obtain a CWA Section 401 certification. However, if a proposed project does not require a federal permit but does involve dredge or fill activities that may result in a discharge to Waters of the State, the NCRWQCB has the option to regulate the project under state authority (Porter-Cologne) in the form of Waste Discharge Requirements (WDRs) or Waiver of Waste Discharge Requirements (Caltrans 2024e).

Additionally, projects with a 401 Certification or Waste Discharge Requirement from the State Board must follow the State Water Boards' Procedures for Discharges of Dredged or Fill Material to Waters of the State. These procedures include a Water Boards-specific Alternatives Analysis.

Environmental Consequences

The culvert at PM 10.5 is proposed to be increased from a 30"-diameter corrugated steel pipe (CSP) pipe to a 36"-diameter CSP. This increase in diameter of a culvert conveying jurisdictional waters may improve the channel condition by reducing the occurrence of flowing water upstream of the culvert and decreasing water velocities at the outlet. This would decrease the erosion of bed, bank, and channel both upstream and downstream of the culvert. Potential temporary impacts to water quality could occur during construction activities, roadway widening, and culvert work.

The potential for turbidity impacts from erosion is specifically of concern from construction-related activities; however, would be minimized through implementation of Section 13 of the Standard Specifications which guide the standard measures that will be implemented to comply with water quality laws, regulations and permits. Any impacts to wetlands must be addressed, as per No Net Loss policies for wetlands (Caltrans 2024c). If construction takes more than one season, winterization strategies would need to be implemented. Any temporary impacts to Waters of the State or Waters of the U.S. lasting more than one year are deemed permanent impacts by permitting agencies due to temporal loss of function.

The proposed project scope and associated construction scenario proposes temporary or permanent fill to jurisdictional waterways; therefore, the project is anticipated to be subject to CWA Section 404 regulations and permitting and a 401 Certification and/or WDRs (dredge/fill projects) (Caltrans 2024e).

Standard Measures and Best Management Practices (BMPs) as outlined in Chapter 1, Section 1.6 will be incorporated into the project, as well as BMPs from the *Caltrans Construction Site BMP Manual* (Caltrans 2017). Additional BMPs will also likely be incorporated in the approved project-specific Stormwater Pollution Plan during the construction phase of the project to address BMPs for specific items of work.

Avoidance, Minimization and Mitigation Measures

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

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

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

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

No Impact

Construction of the proposed project would follow the guidelines and procedures outlined in the latest SWMP, follow all permit conditions, and implement Caltrans' Standard Measures and BMPs. In addition, project-specific, post-construction temporary Best Management Practices (TBMPs) would be implemented and followed, as outlined above and in Chapter 1, Section 1.6. Thus, there would be no impact.

The project is a Caltrans safety project and would not require use of groundwater sources before, during, or after construction. Furthermore, all drainages would retain their current pattern flow, with operation improvement compared to pre-construction levels, including any existing ability to recharge groundwater. Thus, there would be no impact.

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

(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 off-site?

(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?

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. Thus, there would be no impact.

Although the project scope would increase the amount of impervious area, Caltrans' post-construction TBMPs, Standard Measures and BMPs, as outlined above and in Section 1.6, would be implemented to minimize impacts. Therefore, there would be no impact.

All drainages would retain their current pattern flow, with operation improvement compared to pre-construction levels. These drainages generally flow into the Russian River, either through roadside drainages or culverts. All slopes and DSA would be stabilized and vegetated in accordance with plans approved by the District Landscape Architect. Thus, there would be no impact.

(iv) impede or redirect flood flows?

Less Than Significant Impact

The project limits fall within FEMA 1) Special Flood Hazard Area with Base Flood Elevation or Depth-*Zone AE;* or 2) Other Areas of Flood Hazard 0.2% Annual Chance Flood Hazard, Areas with 1% annual chance of flood with average depth of less than one (1) foot or with drainage areas of less than one square mile-*Zone X* (FEMA 2024a; 2024b).

All drainages within the project limits would retain their current flow pattern. Although there would be a retaining wall placed along the northbound lane on U.S. 101 from PM R9.76 to PM 9.80 and from PM 9.81 to PM 10.02, these two linear structures would be incorporated into the existing highway fill for stability and would not be outside the footprint of the original highway slope fill. Thus, there would be a less than significant impact.

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

No Impact

This project is not located within a tsunami or seiche zone. Although this proposed project is within a flood hazard zone, as stated above, it would be designed to follow the guidelines and procedures outlined in the latest SWMP and would be combined with post-construction TBMPs and Caltrans' Standard Measures and BMPs, as outlined above and in Section 1.6. Thus, there would be no impact.

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

No Impact

This project would be designed to follow the guidelines and procedures outlined in the latest SWMP and would be combined with post-construction TBMPs, Caltrans' Standard Measures and BMPs, as noted above and in Section 1.6; thus, it would not conflict or obstruct implementation of any water quality control plan or sustainable groundwater management plan.

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 *Mendocino County General Plan– Chapter 3: Development Element* dated August 2009, revised 2021 (County of Mendocino 2021a).

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.

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 April 09, 2024 (California Department of Conservation 2024b), and the *Mendocino County General Plan–Chapter 4: Resource Management Element* dated August 2009, revised 2021 (County of Mendocino 2021a).

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.

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

This portion of U.S. 101 is a two-lane, conventional highway facility, and the project area is surrounded by a mix of residential, commercial, and agricultural areas. Adjacent parcels include vineyards and orchards, with several small wineries in the area, including the adjacent Milano Winery.

Environmental Consequences

Residents and business visitors may be temporarily exposed to elevated noise levels during roadway construction operations.

Avoidance, Minimization and Mitigation Measures

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

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?***

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

Less Than Significant Impact

According to the *Air Quality, Noise, GHG and Energy Analysis Memo* prepared November 1, 2023 (Caltrans 2023e), permanent impacts to ambient noise are not anticipated as the proposed project does not construct a new highway in a new location. Traffic volumes, composition and speeds would remain the same in the build and no-build condition.

During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise would primarily result from the operation of heavy construction equipment and arrival and departure of heavy-duty trucks. Construction noise levels would vary on a day-to-day basis during each phase of construction depending on the specific task being completed. The closest receptors to the construction noise would be hikers or campers during the summer months. Construction is expected to begin in 2026 and last for one (1) year, so the potential noise impact would be temporary and transient.

The project is not expected to generate excessive groundborne vibration or groundborne noise. Implementation of the Standard Measures and BMPs (Section 1.6) would minimize or eliminate the impacts of construction-related noise. Thus, there would be a less than significant impact.

Noise associated with construction is controlled by Caltrans *Standard Specification Section 14-8.02, "Noise Control,"* which states:

- Control and monitor noise resulting from work activities.
- Do not exceed 86 dBA Lmax at 50 feet from the job site from 9 p.m. to 6 a.m.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact

This project is not 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. Therefore, there would be no impact.

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 *Mendocino County General Plan–Chapter 3: Development Element* dated August 2009; revised 2021 (County of Mendocino 2021a).

Potential impacts to population growth are not anticipated since the project is a Caltrans safety project and 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.

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 *Mendocino County General Plan Chapter 3: Development Element 3-15 Fire Protection* dated August 2009; revised 2021 (County of Mendocino 2021a) and the *Transportation Management Plan* dated September 11, 2023 (Caltrans 2023d).

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.

Potential impacts to transportation 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 TMP.

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 *Mendocino County General Plan Chapter 3: Development Element*, *3-10 Parks and Recreation* dated August 2009; revised 2021 (County of Mendocino 2021a).

There are no existing neighborhood or regional parks, and the project scope does not include any recreational facilities, nor would it require the construction or the expansion of any recreational facilities.

2.17 Transportation

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Mendocino Council of Governments (MCOG) *Regional Transportation Plan* (RTP) (MCOG 2022), dated February 25, 2022, and the project's *Transportation Management Plan* (TMP) dated September 11, 2023 (Caltrans 2023d).

Potential impacts to transportation systems are not anticipated due to the project being a non-capacity increasing safety project; therefore, the project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit, bicycle, and pedestrian facilities; would not increase vehicle miles traveled (VMT)s; and would not increase hazards due to a geometric design feature or an incompatible use.

Emergency service providers would receive prior notification of lane closures, and emergency vehicles and public transit would be accommodated through the project area. Potential impacts to transportation 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 TMP.

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. Studies identified tribal cultural resources within the proposed project's study limits. It is anticipated that with ESA fencing, adverse impacts to these resources would be avoided during construction; therefore, construction would not significantly affect these properties.

On February 7, 2023, Caltrans and the Hopland Band of Pomo Indians executed a Memorandum of Understanding detailing the parameters of consultation and tribal monitoring for the project.

Caltrans informed tribes with archaeological resources within the Environmental Study Limits that these cultural resources would be protected using an Environmental Sensitive Area (ESA) Action Plan, which would be shared with the tribes listed in the "Consultation Section" below, upon its completion. Thus, no impact is anticipated.

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 *Mendocino County General Plan Chapter 3: Development Element, 3-12 Utility Systems* dated August 2009; revised 2021 (County of Mendocino 2021a) and Caltrans' "*Water Quality Assessment Memorandum for La Franchi Safety*" (Caltrans 2024e).

Potential impacts to Utilities and Service Systems are not anticipated as the scope of the project is restricted to work within the existing state right of way that does not include 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, nor would the project generate an excess of solid waste more than the capacity of existing local infrastructure, and 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. Therefore, there would be no impact.

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 Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection (CAL FIRE) to develop amendments to the "CEQA Environmental Checklist" for the inclusion of questions related to fire hazard impacts for projects located on lands classified as *very high* Fire Hazard Severity Zones (FHSZ). 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 the Mendocino County Fire Safe Council's *Mendocino County Community Wildfire Protection Plan* (CWPP) accessed on April 11, 2022, Mendocino Council of Governments (MCOG), the *Transportation Management Plan* (TMP) dated September 11, 2023 (Caltrans 2023d), and *Fire Hazard Severity Zones in State Responsibility Area* (CAL FIRE 2024). Standard Measures and Best Management Practices (BMPs), as outlined in Chapter 1, 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 (MCOG 2022). Caltrans' Transportation Management Plan would ensure that emergency response agencies and service providers would be notified of the project construction schedule, would have access to U.S. 101 throughout the construction period, 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 the Section 2.8 "Greenhouse Gas Emissions" and Section 2.9 "Hazards and Hazardous Materials" above, would reduce the existing road infrastructure advancing fire events. 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, so 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 one (1) upsized culvert at PM 10.35, as compared to pre-construction levels. These efforts, combined with the statements in the paragraphs directly 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.

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

The California Environmental Quality Act of 1970 (CEQA) requires preparation of an Environmental Impact Report (EIR) when certain specific impacts may result from construction or implementation of a project. Project analyses indicated the potential impacts associated with this project would not require an EIR. *Mandatory Findings of Significance are not required for projects where an EIR has not been prepared.*

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 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." Based on the scope and scale of the potential effects and the inclusion of Standard Measures and Best Management Practices (Section 1.6) to minimize impacts, the proposed project would not have cumulative impacts. Given this, an EIR and CIA were not required for this project.

Chapter 3. Agency and Public Coordination

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

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

Coordination with Resource Agencies

Coordination would commence when permit applications are prepared during the next phase of this project.

Coordination with Tribes

An initial consultation letter to comply with Section 106 of the National Historic Preservation Act and AB 52 was mailed to the following individuals from the NAHC list on October 27, 2022, and follow-up calls were made in November 2022:

RECORD OF NATIVE AMERICAN CONSULTATION **01-0L110 La Franchi Safety Project, U.S. 101; Post Miles R9.5 / 10.8** **01-MEN-101 EFIS: 0121000072**		
TRIBE	**CONTACT**	**TITLE**
Bear River Band of Rohnerville Rancheria	Erika Cooper	THPO
Bear River Band of Rohnerville Rancheria	Edward Bowie	Cultural Liaison
Bear River Band of Rohnerville Rancheria	Josefina Cortez	Chairperson
Cahto Tribe	Mary Norris	Chairperson
Cahto Tribe	Sonny Elliot	EPA Director
Coyote Valley Band of Pomo Indians	Michael Hunter	Chairperson
Guidiville Indian Rancheria	Donald Duncan	Chairperson

RECORD OF NATIVE AMERICAN CONSULTATION 01-0L110 La Franchi Safety Project, U.S. 101; Post Miles R9.5 / 10.8 01-MEN-101 EFIS: 0121000072		
TRIBE	**CONTACT**	**TITLE**
Habematolel Pomo of Upper Lake	Robert Geary	THPO
Habematolel Pomo of Upper Lake	Tracey Treppa	Vice Chairperson
Habematolel Pomo of Upper Lake	Sherry Treppa	Chairperson
Hopland Band of Pomo Indians	Sonny Elliott	Chairperson
Hopland Band of Pomo Indians	Ramon Billy	THPO
Kashia Band of Pomo Indians of the Stewarts Point Rancheria	Loren Smith	THPO
Kashia Band of Pomo Indians of the Stewarts Point Rancheria	Dino Franklin	Chairperson
Manchester Band of Pomo Indians of the Manchester Rancheria	Jaime Cobarrubia	Chairperson
Noyo River Indian Community	Tribe	Tribe
Pinoleville Pomo Nation	Erica Carson	THPO
Pinoleville Pomo Nation	Leona Willams	Chairperson
Potter Valley Tribe (Pomo)	Salvador Rosales	Chairperson
Redwood Valley or Little River Band of Pomo Indians	Debra Ramirez	Chairperson
Round Valley Reservation/Covelo Indian Community	James Russ	President
Sherwood Valley Rancheria of Pomo	Melanie Rafanan	Chairperson
Sherwood Valley Rancheria of Pomo	Valerie Stanley	THPO
Yokayo Tribe	Tribe	Chairperson

The Tribes below responded to consultation letters from the DNAC and requested additional mapping of the project, as well as Caltrans' plan for protecting sites in and around the project area:

- On November 1, 2022, Valerie Stanley with the Sherwood Band of Pomo Indians responded with a letter that the project was outside of their traditional tribal territory and they would not be consulting regarding the project.

- On November 14, 2022, Robert Geary of the Habematolel Pomo responded stating the project was not in their territory and they would not be consulting on the project, but suggested we consult with the Hopland Band of Pomo Indians.
- In a follow up call from Caltrans to Ramon Billy, Tribal Historic Preservation Officer for the Hopland Band of Pomo Indians, Mr. Billy stated the tribe wished to be a consulting party regarding the project.
    - The project is in the heart of their traditional tribal territory, is highly sensitive for cultural resources and they wished to monitor any ground-disturbing activities.
    - Consultation with the Hopland Band of Pomo Indians is ongoing and would continue through the completion of construction.
- No other tribe expressed any concerns or interest in consulting regarding the project.

Circulation

Public circulation will commence on the date indicated in the signature page found at the beginning of this document 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 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
Danielle Ruiz	Environmental Coordinator
Jana Marquardt	Biologist
Kim Tanksley	Archaeologist
Sonia Miller	Architectural Historian
Oscar Rodriguez	Water Quality Specialist
Paul Sundberg	Hazardous Waste Specialist
Aaron Bali	Air/Noise/GHG Specialist
Erin Ponte	Visual Specialist
Gio Campos	Project Engineer
Taimur Khan	Project Engineer
Dung Sy	Senior Engineer
Ash Arreola	Project Engineer
Yvonne Becker	Right of Way Coordinator
Kevin Waxman	Right of Way Agent
Samantha Hadden	Storm Water Coordinator

Pacific Legacy

Lisa Shapiro	Project Manager, Archaeologist

Chapter 5. Distribution List

Federal and State Agencies

U.S. Army Corps of Engineers
Attn: Michael Orellana
1455 Market Street, 16th Floor.
San Francisco, CA 94103
michael.orellana@usace.army.mil

U.S. Fish and Wildlife Service
Attn: Greg Schmidt
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Arcata, CA 95518
gregory_schmidt@fws.gov

California Department of Fish & Wildlife
Attn: Gregory O'Connell
619 Second Street
Eureka, CA 95501
gregory.oconnell@wildlife.ca.gov

North Coast Regional Water Quality Control Board
Attn: Susan Stewart
5550 Skylane Blvd, Suite A
Santa Rosa, CA 95403-1072
susan.stewart@waterboards.ca.gov

Regional/County/Local Agencies

Mendocino County Department of Transportation
Attn: Howard Dashiell
340 Lake Mendocino Drive
Ukiah, CA 95482
dashielh@mendocinocounty.org

Mendocino County Clerk
Attn: Katrina Bartolomie
501 Low Gap Road, Room 1020
Ukiah, CA 95482
acr@mendocinocounty.org

Mendocino Council of Governments
Attn: Nephele Barrett
525 South Main Street, Suite B
Ukiah, CA 95482
barrettn@dow-associates.com

Hopland Fire Protection District
21 Feliz Creek Road
Hopland, CA 95449

Hopland Municipal Advisory Council
Attn: Julie Golden
P.O. Box 340
Hopland, CA 95449

Mendocino Transit Authority
Attn: Jacob King, Executive Director
241 Plant Road
Ukiah, CA 95482
jacob@mendocinotransit.org

Mendocino County Department of Planning & Building Services
Attn: Julia Krog
860 North Bush Street
Ukiah, CA 95482
krogj@mendocinocounty.org

Local Elected Officials

Mendocino County Board of Supervisors (1st District)
Attn: Glenn McGourty
501 Low Gap Road, Room 1010
Ukiah, CA 95482
mcgourtyg@mendocinocounty.org

Tribal Partners

Hopland Band of Pomo Indians
3000 Shanel Drive
Hopland, CA 95449
sjelliott@hoplandtribe.com

Utilities, Service Systems, Businesses, and Other Property Owners

AT&T
2125 Occidental Road
Santa Rosa, CA 95401

Hopland Public Utility District
P.O. Box 386
Hopland, CA 95449

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

Great Redwood Trail Agency
Attn: Mitch Stogner, Executive Director
419 Talmage Road, Suite M
Ukiah, CA 95482
ncra.mstogner@sbcglobal.net

Chapter 6. References

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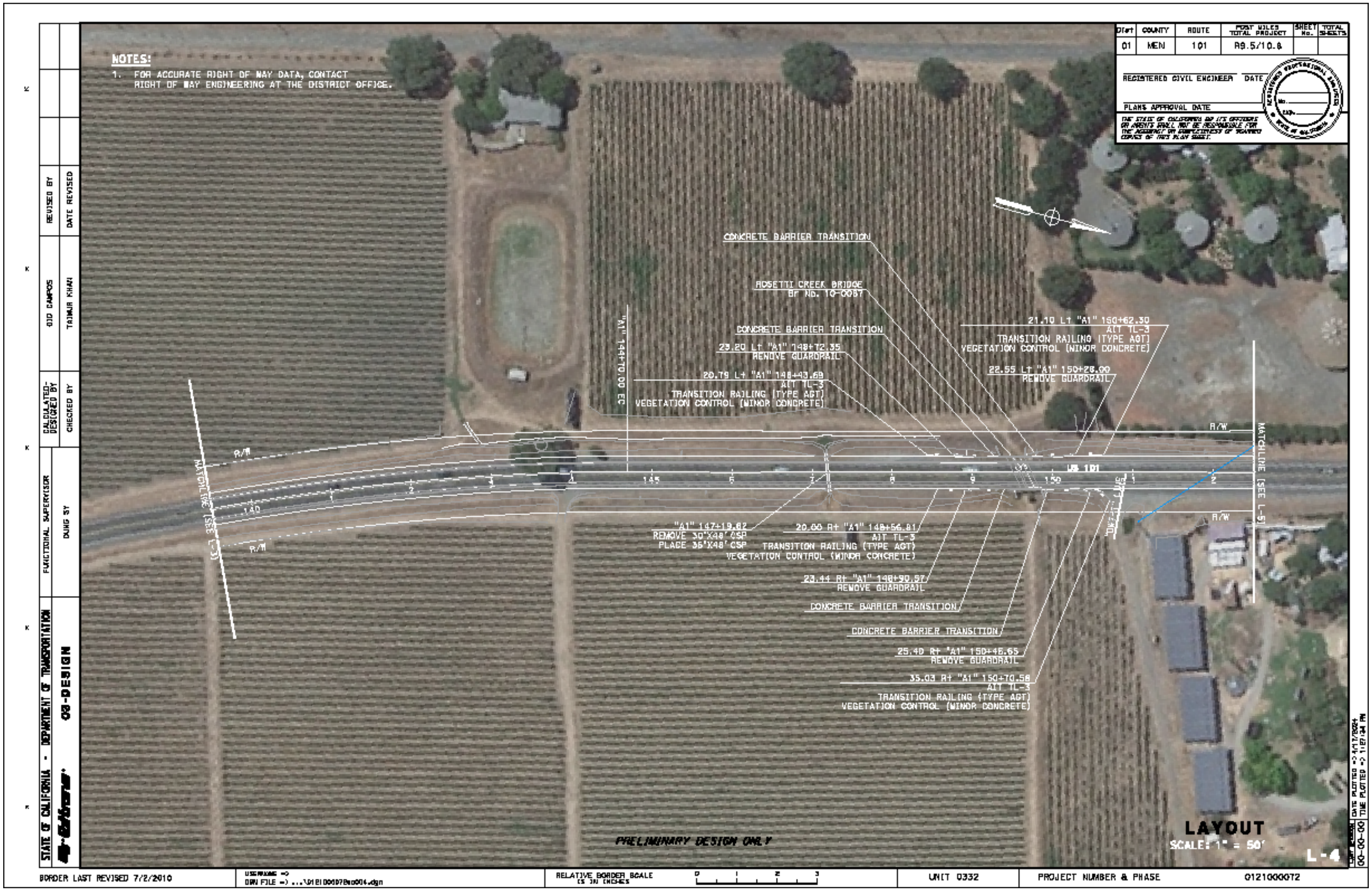
Appendix A. Project Layouts


NOTES:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
ABBREVIATIONS:
RHMA-O RUBBERIZED HOT MIX ASPHALT-OPEN GRADED (OPEN GRADED FRICTION COURSE)
RHMA-G RUBBERIZED HOT MIX ASPHALT (GAP GRADED)
HMA-A HOT MIX ASPHALT (TYPE A)
SPGA SOLDIER PILE GROUND ANCHOR
PG&E PACIFIC GAS & ELECTRIC COMPANY
TCE TEMPORARY CONSTRUCTION EASEMENT
Dist COUNTY ROUTE POST MILES TOTAL PROJECT SHEET No. TOTAL SHEETS
01 MEN 101 R9.5/10.6
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
MODIFY ROADWAY WEATHER INFORMATION SYSTEM
HOPLAND OVERHEAD BRIDGE Br No. 10-0081
"A1" 100+00.00 Beg CONSTRUCTION
"A1" 103+50 Beg REMOVE RUMBLE STRIP Beg CENTER LINE RUMBLE STRIP (GROUND-IN INDENTATIONS)
"A1" 104+21.25 REMOVE GUARDRAIL TRANSITION RAILING (TYPE AGT) MGS (STEEL POST) AIT TL-3 VEGETATION CONTROL (MINOR CONCRETE)
"A1" 104+70.42 Beg WIDENING Beg COLD PLANE AC Pvmt Beg RHMA-G Beg HMA-A Beg CLASS 2 AB END REMOVE RUMBLE STRIP END CENTER LINE RUMBLE STRIP (GROUND-IN INDENTATIONS)
"A1" LINE
US 101
31.94' Rt "A1" 110+35.96 Beg AIT TL-3
36.00' Rt "A1" 110+38.16 Beg SPGA WALL
36.00' Rt "A1" 110+85.98 END AIT TL-3 Beg MGS (STEEL POST)
36.00' Rt "A1" 112+88.49 END MGS (STEEL POST) Beg AIT TL-3
RELOCATE SIGN
36.00' Rt "A1" 113+33.49 END SPGA WALL
36.00' Rt "A1" 113+38.49 END SPGA WALL
MATCHLINE (SEE L-2)
R/W
PRELIMINARY DESIGN ONLY
LAYOUT
SCALE: 1" = 50'
L-1
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
03-DESIGN
BORDER LAST REVISED 7/2/2010
UNIT 0332
PROJECT NUMBER & PHASE
0121000072

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 MEN 101 R9.5/10.8
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
LA FRANCHI ROAD
TASTING ROOM
"A1" 115+24.31
Exist 30"X140' WSP
(PROTECT-IN-PLACE)
R/W
WATCHLINE (SEE L-1)
"A1" 118+94.31
Beg CENTER LINE RUMBLE STRIP
(GROUND-IN INDENTATIONS)
Beg SHOULDER WIDENING
US 101
"A1" LINE
115
120
125
GRTA ACCESS PERMIT
RELOCATE PG&E OVERHEAD POLE
"A1" 118+08.47
Exist 8'X7' RCB
(PROTECT-IN-PLACE)
32.00' Rt "A1" 115+50.00
END AIT TL-3
Beg MGS (STEEL POST)
32.00' Rt "A1" 115+00.00
Beg AIT TL-3
36.00' Rt "A1" 115+00.00
Beg SPGA WALL
RELOCATE CALTRANS MAINTENANCE GATE
32.00' Rt "A1" 115+00.00
Beg AIT TL-3
END MGS (STEEL POST)
32.00' Rt "A1" 115+00.00
END AIT TL-3
36.00' Rt "A1" 125+00.00
END SPGA WALL
GRTA R/W
WATCHLINE (SEE L-3)
+41.54
PRELIMINARY DESIGN ONLY
LAYOUT
SCALE: 1" = 50'
L-2
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
03-DESIGN
FUNCTIONAL SUPERVISOR
DUNG SY
CALCULATED-DESIGNED BY
CHECKED BY
TAIMUR KHAN
REVISED BY
DATE REVISED
BORDER LAST REVISED 7/2/2010
RELATIVE BORDER SCALE IS IN INCHES
UNIT 0332
PROJECT NUMBER & PHASE
0121000072


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 MEN 101 R9.5/10.6
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
INSTALL CABLE RAILING
"A1" LINE
US 101
MATCHLINE (SEE L-2)
MATCHLINE (SEE L-4)
"A1" 127+78.92
Exist 10'X6' RCB
(PROTECT-IN-PLACE)
INSTALL CABLE RAILING
R/W
PRELIMINARY DESIGN ONLY
LAYOUT
SCALE: 1" = 50'
L-3
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
O3-DESIGN
FUNCTIONAL SUPERVISOR
DUNG SY
CALCULATED-DESIGNED BY
CHECKED BY
OID CAMPOS
TAIMUR KHAN
REVISED BY
DATE REVISED
BORDER LAST REVISED 7/2/2010
RELATIVE BORDER SCALE IS IN INCHES
UNIT 0332
PROJECT NUMBER & PHASE
01210000T2


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 MEN 101 R9.5/10.8
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
CONCRETE BARRIER TRANSITION
ROSETTI CREEK BRIDGE
CONCRETE BARRIER TRANSITION
23.20 Lt "A1" 148+72.35
REMOVE GUARDRAIL
20.79 Lt "A1" 148+43.69
AIT TL-3
TRANSITION RAILING (TYPE AGT)
VEGETATION CONTROL (MINOR CONCRETE)
21.10 Lt "A1" 150+62.30
AIT TL-3
TRANSITION RAILING (TYPE AGT)
VEGETATION CONTROL (MINOR CONCRETE)
22.55 Lt "A1" 150+28.00
REMOVE GUARDRAIL
"A1" 144+70.00 EC
R/W
US 101
MATCHLINE (SEE L-5)
"A1" 147+19.62
REMOVE 30"X48' CSP
PLACE 36"X48' CSP
20.00 Rt "A1" 148+56.81
AIT TL-3
TRANSITION RAILING (TYPE AGT)
VEGETATION CONTROL (MINOR CONCRETE)
23.44 Rt "A1" 148+90.97
REMOVE GUARDRAIL
CONCRETE BARRIER TRANSITION
CONCRETE BARRIER TRANSITION
25.40 Rt "A1" 150+46.65
REMOVE GUARDRAIL
35.03 Rt "A1" 150+70.58
AIT TL-3
TRANSITION RAILING (TYPE AGT)
VEGETATION CONTROL (MINOR CONCRETE)
PRELIMINARY DESIGN ONLY
LAYOUT
SCALE: 1" = 50'
L-4
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
O3-DESIGN
FUNCTIONAL SUPERVISOR
DUNG SY
CALCULATED-DESIGNED BY
CHECKED BY
OID CAMPOS
TAIMUR KHAN
REVISED BY
DATE REVISED
BORDER LAST REVISED 7/2/2010
RELATIVE BORDER SCALE IS IN INCHES
UNIT 0332
PROJECT NUMBER & PHASE
0121000072


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 | MEN | 101 | R9.5/10.6
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 ELECTRONIC COPIES OF THIS PLAN SHEET.
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
08-DESIGN
FUNCTIONAL SUPERVISOR
DUNG SY
CALCULATED-DESIGNED BY
CHECKED BY
OID RAMOS
TAIMUR KHAN
REVISED BY
DATE REVISED
CONCRETE BARRIER TRANSITION
"A1" 153+30.16
END CENTER LINE RUMBLE STRIP
(GROUND-IN INDENTATIONS)
30.07 Lt "A1" 160+01.44
REMOVE GUARDRAIL
29.33 Lt "A1" 159+97.70
AIT TL-3
TRANSITION RAILING (TYPE AGT)
VEGETATION CONTROL (MINOR CONCRETE)
FELIZ CREEK BRIDGE
Br No. 10-0003
"A1" 165+49.56 END
MATCHLINE (SEE L-4)
R/W
"A1" LINE
"A1" 160+93.04
END WIDENING
END COLD PLANE AC Pvmt
END RHMA-G
END HMA-A
END CLASS 2 AB
"A1" 165+49.56
END CONSTRUCTION
27.30 Rt "A1" 159+78.62
AIT TL-3
TRANSITION RAILING (TYPE AGT)
VEGETATION CONTROL (MINOR CONCRETE)
CONCRETE BARRIER TRANSITION
29.04 Rt "A1" 160+07.06
REMOVE GUARDRAIL
PRELIMINARY DESIGN ONLY
LAYOUT
SCALE: 1" = 50'
L-5
BORDER LAST REVISED 7/2/2010
USERNAME =>
DGN FILE =>
RELATIVE BORDER SCALE
IS IN INCHES
UNIT 0332
PROJECT NUMBER & PHASE
0121000072
DATE PLOTTED => 11/7/2024
TIME PLOTTED => 11:19:46 PM

Appendix B. Title VI 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 2022

NON-DISCRIMINATION POLICY STATEMENT

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

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

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

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

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

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

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Arcata Fish And Wildlife Office
1655 Heindon Road
Arcata, CA 95521-4573
Phone: (707) 822-7201 Fax: (707) 822-8411

In Reply Refer To: 04/24/2024 14:22:28 UTC
Project Code: 2024-0030538
Project Name: LA FRANCHI RD LEFT TURN CHANNELIZATION AND SHOULDER WIDENING

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
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

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:

Arcata Fish And Wildlife Office
1655 Heindon Road
Arcata, CA 95521-4573
(707) 822-7201

PROJECT SUMMARY

Project Code: 2024-0030538

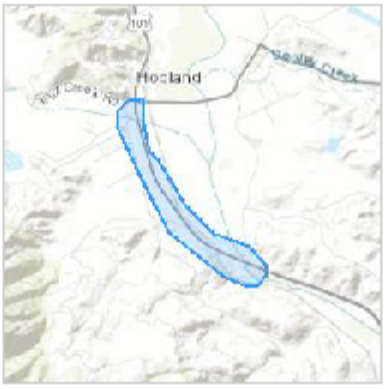
Project Name: LA FRANCHI RD LEFT TURN CHANNELIZATION AND SHOULDER WIDENING

Project Type: Road/Hwy - Maintenance/Modification

Project Description: 01-MEN-101-PM9 .5/ 10.8The purpose of this project is to reduce the frequency and the severity of collisions along this segment of highway.The majority of collisions within the project limits were associated with left turn movements with the remaining collisions likely associated with narrow shoulders.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.9612434,-123.11268100428117,14z



Counties: Mendocino County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 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
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

REPTILES

NAME	STATUS
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* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

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
Contra Costa Goldfields *Lasthenia conjugens* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7058	Endangered
Showy Indian Clover *Trifolium amoenum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6459	Endangered

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.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31

NAME	BREEDING SEASON
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

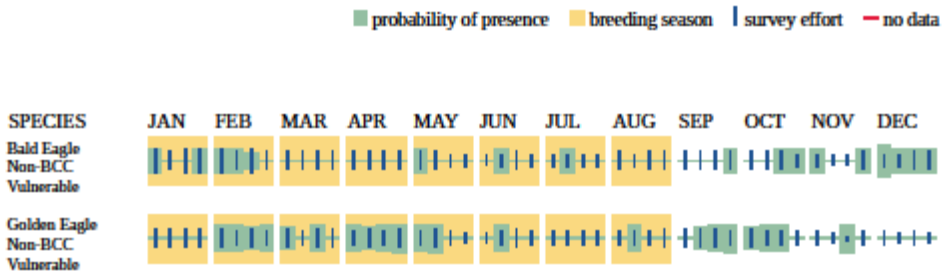
Probability of Presence (▒)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (▒)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management

- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird *Selasphorus sasin* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15

NAME	BREEDING SEASON
Bullock's Oriole *Icterus bullockii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9458	Breeds Mar 21 to Jul 25
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10955	Breeds Mar 1 to Jul 31
California Thrasher *Toxostoma redivivum* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9436	Breeds Jan 1 to Jul 31
Common Yellowthroat *Geothlypis trichas sinuosa* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lawrence's Goldfinch *Spinus lawrencei* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Northern Harrier *Circus hudsonius* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8350	Breeds Apr 1 to Sep 15
Nuttall's Woodpecker *Dryobates nuttallii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse *Baeolophus inornatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31

NAME	BREEDING SEASON
Santa Barbara Song Sparrow *Melospiza melodia graminea* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/5513	Breeds Mar 1 to Sep 5
Tricolored Blackbird *Agelaius tricolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Western Screech-owl *Megascops kennicottii cardonensis* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11923	Breeds Mar 1 to Jun 30
Wrentit *Chamaea fasciata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10668	Breeds Mar 15 to Aug 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

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Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

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No Data (–)
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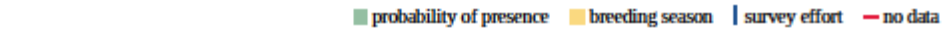
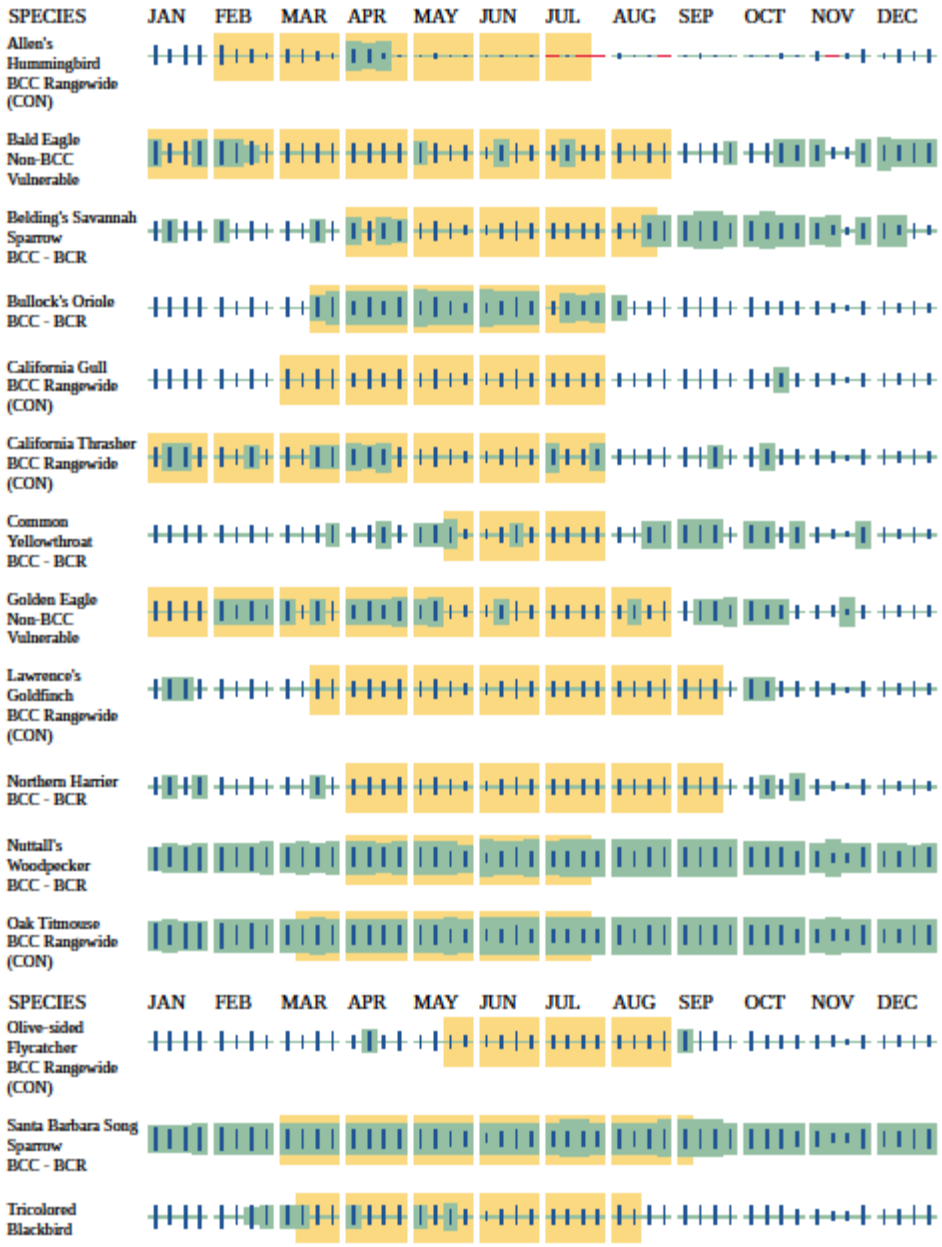
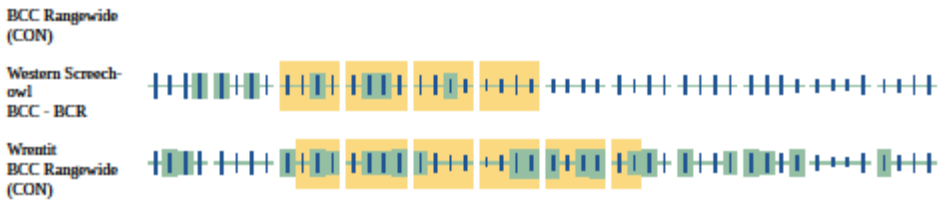



SPECIES
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Allen's Hummingbird BCC Rangewide (CON)
Bald Eagle Non-BCC Vulnerable
Belding's Savannah Sparrow BCC - BCR
Bullock's Oriole BCC - BCR
California Gull BCC Rangewide (CON)
California Thrasher BCC Rangewide (CON)
Common Yellowthroat BCC - BCR
Golden Eagle Non-BCC Vulnerable
Lawrence's Goldfinch BCC Rangewide (CON)
Northern Harrier BCC - BCR
Nuttall's Woodpecker BCC - BCR
Oak Titmouse BCC Rangewide (CON)
SPECIES
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Olive-sided Flycatcher BCC Rangewide (CON)
Santa Barbara Song Sparrow BCC - BCR
Tricolored Blackbird



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- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R3USC
- R4SBA
- R3UBH
- R3UBF
- R4SBJ

FRESHWATER EMERGENT WETLAND

- PEM1A
- PEM1J

FRESHWATER POND

- PUBKx

IPAC USER CONTACT INFORMATION

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City: Marysville
State: CA
Zip: 95901
Email jana.marquardt@dot.ca.gov
Phone: 5307414580

Quad Name	*Hopland*	Lakeport	Purdys Gardens	Elledge Peak	Highland Springs	Yorkville	Asti	Cloverdale	Big Foot Mountain
Quad Number	38123-H1	39122-A8	39123-A1	39123-A2	38122-H8	38123-H2	38122-G8	38123-G1	38123-G2
ESA Anadromous Fish									
SONCC Coho ESU (T) -									
CCC Coho ESU (E) -	X	X	X	X	X	X	X	X	X
CC Chinook Salmon ESU (T) -	X	X	X	X	X	X	X	X	X
CVSR Chinook Salmon ESU (T) -									
SRWR Chinook Salmon ESU (E) -									
NC Steelhead DPS (T) -						X			X
CCC Steelhead DPS (T) -	X	X	X	X	X	X	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	X	X	X	X	X	X
CC Chinook Salmon Critical Habitat -	X		X	X		X	X	X	
CVSR Chinook Salmon Critical Habitat -									

SRWR Chinook Salmon Critical Habitat -									
NC Steelhead Critical Habitat -						X			X
CCC Steelhead Critical Habitat -	X		X	X	X		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									
Black Abalone Critical Habitat -									
ESA Sea Turtles									
East Pacific Green Sea Turtle (T) -									
Olive Ridley Sea Turtle (T/E) -									
Leatherback Sea Turtle (E) -									
North Pacific Loggerhead Sea Turtle (E) -									
ESA Whales									
Blue Whale (E) -									

Fin Whale (E) -									
Humpback Whale (E) -									
Southern Resident Killer Whale (E) -									
North Pacific Right Whale (E) -									
Sei Whale (E) -									
Sperm Whale (E) -									
ESA Pinnipeds									
Guadalupe Fur Seal (T) -									
Steller Sea Lion Critical Habitat -									
Essential Fish Habitat									
Coho EFH -	X	X	X	X	X	X	X	X	X
Chinook Salmon EFH -	X	X	X	X	X	X	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 -									

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE RareFind

Query Summary:
Quad IS (Hopland (3812381) OR Purdys Gardens (3912311) OR Lakeport (3912218) OR Elledge Peak (3912312) OR Highland Springs (3812288) OR Yorkville (3812382) OR Asti (3812278) OR Cloverdale (3812371) OR Big Foot Mtn. (3812372))

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
Dicamptodon ensatus	California giant salamander	Amphibians	AAAAH01020	234	1	None	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Aquatic, Meadow & seep, North coast coniferous forest, Riparian forest
Rana boylii pop. 1	foothill yellow-legged frog - north coast DPS	Amphibians	AAABH01051	1608	46	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
Taricha rivularis	red-bellied newt	Amphibians	AAAAF02020	136	7	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
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	960	7	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
Ammodramus savannarum	grasshopper sparrow	Birds	ABPBXA0020	27	2	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Valley & foothill grassland
Ardea herodias	great blue heron	Birds	ABNGA04010	156	1	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland
Artemisiospiza belli belli	Bell's sparrow	Birds	ABPBX97021	61	2	None	None	G5T2T3	S3	null	CDFW_WL-Watch List	Chaparral, Coastal scrub
Nannopterum auritum	double-crested cormorant	Birds	ABNFD01020	39	1	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
Pandion haliaetus	osprey	Birds	ABNKC01010	504	9	None	None	G5	S4	null	CDF_S-Sensitive, CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest
Entosthodon kochii	Koch's cord moss	Bryophytes	NBMUS2P050	6	1	None	None	G1	S1	1B.3	BLM_S-Sensitive	Cismontane woodland
Grimmia torenii	Toren's grimmia	Bryophytes	NBMUS32330	13	1	None	None	G2	S2	1B.3	BLM_S-Sensitive	Chaparral, Cismontane woodland, Limestone, Lower montane coniferous forest
Amsinckia lunaris	bent-flowered fiddleneck	Dicots	PDBOR01070	93	3	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

Antirrhinum subcordatum	dimorphic snapdragon	Dicots	PDSCR28070	49	1	None	None	G3	S3	4.3	USFS_S-Sensitive	Chaparral, Lower montane coniferous forest, Ultramafic
Arctostaphylos manzanita ssp. elegans	Konocti manzanita	Dicots	PDERI04271	69	3	None	None	G5T3	S3	1B.3	SB_UCSC-UC Santa Cruz	Chaparral, Cismontane woodland, Lower montane coniferous forest
Arctostaphylos stanfordiana ssp. raichei	Raiche's manzanita	Dicots	PDERI041G2	13	8	None	None	G3T2	S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_USDA-US Dept of Agriculture	Chaparral, Lower montane coniferous forest, Ultramafic
Brasenia schreberi	watershield	Dicots	PDCAB01010	43	1	None	None	G5	S3	2B.3	IUCN_LC-Least Concern	Marsh & swamp, Wetland
Calycadenia micrantha	small-flowered calycadenia	Dicots	PDAST1P0C0	22	1	None	None	G2	S2	1B.2	USFS_S-Sensitive	Chaparral, Meadow & seep, Ultramafic, Valley & foothill grassland
Camissonia lacustris	grassland suncup	Dicots	PDONA030W0	14	4	None	None	G2	S2	1B.2	null	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley & foothill grassland
Ceanothus confusus	Rincon Ridge ceanothus	Dicots	PDRHA04220	33	3	None	None	G1	S1	1B.1	BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Ultramafic
Cryptantha dissita	serpentine cryptantha	Dicots	PDBOR0A0H2	23	8	None	None	G3	S3	1B.2	BLM_S-Sensitive	Chaparral, Ultramafic
Gratiola heterosepala	Boggs Lake hedge-hyssop	Dicots	PDSCR0R060	99	2	None	Endangered	G2	S2	1B.2	BLM_S-Sensitive	Freshwater marsh, Marsh & swamp, Vernal pool, Wetland
Harmonia guggolziorum	Guggolz's harmonia	Dicots	PDAST650M0	2	2	None	None	G1	S1	1B.1	SB_UCSC-UC Santa Cruz	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 adenophyllum	glandular western flax	Dicots	PDLIN01010	48	11	None	None	G2G3	S2S3	1B.2	BLM_S-Sensitive	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Horkelia bolanderi	Bolander's horkelia	Dicots	PDROS0W011	13	2	None	None	G1	S1	1B.2	BLM_S-Sensitive	Cismontane woodland, Lower montane coniferous forest, Meadow & seep, Valley & foothill grassland
Kopsiopsis hookeri	small groundcone	Dicots	PDORO01010	21	1	None	None	G4?	S1S2	2B.3	null	North coast coniferous forest
Layia septentrionalis	Colusa layia	Dicots	PDAST5N0F0	69	15	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_UCBG-UC Botanical Garden at Berkeley	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Lupinus sericatus	Cobb Mountain lupine	Dicots	PDFAB2B3J0	46	3	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

Malacothamnus mendocinensis	Mendocino bush-mallow	Dicots	PDMAL0Q0D0	2	1	None	None	G1Q	S1	1B.1	null	Chaparral, Cismontane woodland
Plagiobothrys lithocaryus	Mayacamas popcornflower	Dicots	PDBOR0V0P0	2	1	None	None	GX	SX	1A	null	Chaparral, Cismontane woodland, Valley & foothill grassland
Silene bolanderi	Bolander's catchfly	Dicots	PDCAR0U2L0	30	2	None	None	G2	S2	1B.2	null	Chaparral, Cismontane woodland, Lower montane coniferous forest, Meadow & seep, North coast coniferous forest, Ultramafic
Streptanthus glandulosus ssp. hoffmanii	Hoffman's bristly jewelflower	Dicots	PDBRA2G0J4	16	2	None	None	G4T2	S2	1B.3	SB_UCSC-UC Santa Cruz	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Tracyina rostrata	beaked tracyina	Dicots	PDAST9D010	15	7	None	None	G2	S2	1B.2	USFS_S-Sensitive	Chaparral, Cismontane woodland, Valley & foothill grassland
Trichostema ruygtii	Napa bluecurls	Dicots	PDLAM220H0	19	1	None	None	G1G2	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 buckwestiorum	Santa Cruz clover	Dicots	PDFAB402W0	64	1	None	None	G2	S2	1B.1	BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden, SB_UCSC-UC Santa Cruz, SB_USDA-US Dept of Agriculture	Broadleaved upland forest, Cismontane woodland, Coastal prairie
Viburnum ellipticum	oval-leaved viburnum	Dicots	PDCPR07080	39	1	None	None	G4G5	S3	2B.3	null	Chaparral, Cismontane woodland, Lower montane coniferous forest
Archoplites interruptus	Sacramento perch	Fish	AFCQB07010	5	1	None	None	G1	S1	null	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered	Aquatic, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters
Hysterocarpus traskii lagunae	Clear Lake tule perch	Fish	AFCQK02013	3	1	None	None	G5T3	S3	null	CDFW_SSC-Species of Special Concern	Aquatic
Lavinia exilicauda chi	Clear Lake hitch	Fish	AFCJB19011	4	2	None	Threatened	G4T1	S1	null	AFS_VU-Vulnerable, USFS_S-Sensitive	Aquatic, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters
Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	Fish	AFCHA0213Q	96	2	Threatened	None	G5T3Q	S3	null	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern	Aquatic, Estuary, Klamath/North coast flowing waters
Oncorhynchus mykiss irideus pop. 8	steelhead - central California coast DPS	Fish	AFCHA0209G	44	1	Threatened	None	G5T3Q	S3	null	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern	Aquatic, Sacramento/San Joaquin flowing waters
Northern Interior Cypress Forest	Northern Interior Cypress Forest	Forest	CTT83220CA	22	1	None	None	G2	S2.2	null	null	Closed-cone coniferous forest
Serpentine Bunchgrass	Serpentine Bunchgrass	Herbaceous	CTT42130CA	22	1	None	None	G2	S2.2	null	null	Valley & foothill grassland

Andrena biennospermatis	Biennosperma vernal pool andrenid bee	Insects	IIHYM35030	15	3	None	None	G2	S1	null	null	Vernal pool
Bombus caliginosus	obscure bumble bee	Insects	IIHYM24380	181	3	None	None	G2G3	S1S2	null	IUCN_VU-Vulnerable	null
Bombus pensylvanicus	American bumble bee	Insects	IIHYM24260	408	1	None	None	G3G4	S2	null	IUCN_VU-Vulnerable	Coastal prairie, Great Basin grassland, Valley & foothill grassland
Dubiraphia brunnescens	brownish dubiraphian riffle beetle	Insects	IICOL5A010	1	1	None	None	G1	S1	null	null	Aquatic
Usnea longissima	Methuselah's beard lichen	Lichens	NLLEC5P420	206	1	None	None	G4	S4	4.2	BLM_S-Sensitive	Broadleaved upland forest, North coast coniferous forest, Oldgrowth, Redwood
Antrozous pallidus	pallid bat	Mammals	AMACC10010	420	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
Arborimus pomo	Sonoma tree vole	Mammals	AMAFF23030	222	1	None	None	G3	S3	null	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	North coast coniferous forest, Oldgrowth, Redwood
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	635	4	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
Erethizon dorsatum	North American porcupine	Mammals	AMAFJ01010	523	7	None	None	G5	S3	null	IUCN_LC-Least Concern	Broadleaved upland forest, Cismontane woodland, Closed-cone coniferous forest, Lower montane coniferous forest, North coast coniferous forest, Upper montane coniferous 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
Lasiurus frantzii	western red bat	Mammals	AMACC05080	128	1	None	None	G4	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Riparian woodland
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
Taxidea taxus	American badger	Mammals	AMAJF04010	647	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, Ione formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	Marsh	CTT52410CA	60	2	None	None	G3	S2.1	null	null	Marsh & swamp, Wetland
Gonidea angulata	western ridged mussel	Mollusks	IMBIV19010	158	1	None	None	G3	S2	null	IUCN_VU-Vulnerable	Aquatic
Allium peninsulare var. franciscanum	Franciscan onion	Monocots	PMLIL021R1	25	1	None	None	G4G5T2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Cismontane woodland, Ultramafic, Valley & foothill grassland
Carex comosa	bristly sedge	Monocots	PMCYP032Y0	31	1	None	None	G5	S2	2B.1	IUCN_LC-Least Concern	Coastal prairie, Freshwater

												marsh, Marsh & swamp, Valley & foothill grassland, Wetland
Piperia candida	white-flowered rein orchid	Monocots	PMORC1X050	222	1	None	None	G3?	S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Lower montane coniferous forest, North coast coniferous forest, Ultramafic
Pleuropogon hooverianus	North Coast semaphore grass	Monocots	PMPOA4Y070	34	1	None	Threatened	G2	S2	1B.1	SB_BerrySB-Berry Seed Bank, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Meadow & seep, North coast coniferous forest, Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1559	14	Proposed Threatened	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland

CALIFORNIA NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

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▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Allium peninsulare var. franciscanum	Franciscan onion	Alliaceae	perennial bulbiferous herb	(Apr)May-Jun	None	None	G4G5T2	S2	1B.2	Yes	2001-01-01	 © 2019 Aaron Arthur
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	None	None	G3	S3	1B.2	Yes	1974-01-01	 © 2011 Neal Kramer
Antirrhinum subcordatum	dimorphic snapdragon	Plantaginaceae	annual herb	Apr-Jul	None	None	G3	S3	4.3	Yes	1974-01-01	 © 2015 Dean Wm. Taylor
Antirrhinum virga	twig-like snapdragon	Plantaginaceae	perennial herb	Jun-Jul	None	None	G3?	S3?	4.3	Yes	1974-01-01	 © 2013 Aaron Schusteff
Arctostaphylos hispidula	Howell's manzanita	Ericaceae	perennial evergreen shrub	Mar-Apr	None	None	G4	S3	4.2		1974-01-01	 © 2006 Steve Matson
Arctostaphylos manzanita ssp. elegans	Konocti manzanita	Ericaceae	perennial evergreen shrub	(Jan)Mar-May(Jul)	None	None	G5T3	S3	1B.3	Yes	2001-01-01	 ©2018 Dean Wm. Taylor

Arctostaphylos stanfordiana ssp. raichei	Raiche's manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	None	None	G3T2	S2	1B.1	Yes	1988-01-01	No Photo Available
Astragalus breweri	Brewer's milk-vetch	Fabaceae	annual herb	Apr-Jun	None	None	G3	S3	4.2	Yes	1974-01-01	No Photo Available
Brasenia schreberi	watershield	Cabombaceae	perennial rhizomatous herb (aquatic)	Jun-Sep	None	None	G5	S3	2B.3		2010-10-27	 ©2014 Kirsten Bovee
Bryum chryseum	brassy bryum	Bryaceae	moss		None	None	G5	S3	4.3		2014-05-05	No Photo Available
Calamagrostis ophitidis	serpentine reed grass	Poaceae	perennial herb	Apr-Jul	None	None	G3	S3	4.3	Yes	1974-01-01	No Photo Available
Calycadenia micrantha	small-flowered calycadenia	Asteraceae	annual herb	Jun-Sep	None	None	G2	S2	1B.2	Yes	2005-01-01	 ©2021 Aaron Arthur
Calyptridium quadripetalum	four-petaled pussypaws	Montiaceae	annual herb	Apr-Jun	None	None	G4	S4	4.3	Yes	1974-01-01	No Photo Available
Calystegia collina ssp. oxyphylla	Mt. Saint Helena morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jun	None	None	G4T3	S3	4.2	Yes	1984-01-01	No Photo Available
Camissonia lacustris	grassland suncup	Onagraceae	annual herb	Mar-Jun	None	None	G2	S2	1B.2		2022-09-19	 © 2021 Ryan O'Dell
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	None	None	G5	S2	2B.1		1994-01-01	 Dean Wm. Taylor 1997
Ceanothus confusus	Rincon Ridge ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	None	None	G1	S1	1B.1	Yes	1980-01-01	 © 2012 Jake Ruygt
Clarkia gracilis ssp. tracyi	Tracy's clarkia	Onagraceae	annual herb	Apr-Jul	None	None	G5T3	S3	4.2	Yes	2001-01-01	No Photo Available
Collomia diversifolia	serpentine collomia	Polemoniaceae	annual herb	May-Jun	None	None	G4	S4	4.3	Yes	1974-01-01	 ©2019 Zoya Akulova

Cryptantha dissita	serpentine cryptantha	Boraginaceae	annual herb	Apr-Jun	None	None	G3	S3	1B.2	Yes	1994-01-01  ©2019 Terry Gosliner
Cypripedium californicum	California lady's-slipper	Orchidaceae	perennial rhizomatous herb	Apr-Aug(Sep)	None	None	G3	S4	4.2		1980-01-01  © 2012 Barry Rice
Cypripedium montanum	mountain lady's-slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	None	None	G4G5	S4	4.2		1980-01-01  ©2021 Scot Loring
Entosthodon kochii	Koch's cord moss	Funariaceae	moss		None	None	G1	S1	1B.3	Yes	2001-01-01 No Photo Available
Epilobium septentrionale	Humboldt County fuchsia	Onagraceae	perennial herb	Jul-Sep	None	None	G4	S4	4.3	Yes	1974-01-01  Image by BLM,Arcata Field Office
Erythranthe nudata	bare monkeyflower	Phrymaceae	annual herb	May-Jun	None	None	G4	S4	4.3	Yes	1974-01-01  John Doyen 2015
Erythronium helenae	St. Helena fawn lily	Liliaceae	perennial bulbiferous herb	Mar-May	None	None	G3	S3	4.2	Yes	1974-01-01 No Photo Available
Fritillaria purdyi	Purdy's fritillary	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G4	S4	4.3		1974-01-01  Aaron Schusteff, 2004
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	None	CE	G2	S2	1B.2		1974-01-01  ©2004 Carol W. Witham
Grimmia torenii	Toren's grimmia	Grimmiaceae	moss		None	None	G2	S2	1B.3	Yes	2014-05-14  ©2021 Scot Loring
Harmonia guggolziorum	Guggolz's harmonia	Asteraceae	annual herb	Apr-May	None	None	G1	S1	1B.1	Yes	2004-01-01  © 2019 Steve Matson

Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	None	None	G5T2	S2	1B.2	Yes	1988-01-01	 © 2015 Vernon Smith
Hesperolinon adenophyllum	glandular western flax	Linaceae	annual herb	May-Aug	None	None	G2G3	S2S3	1B.2	Yes	1974-01-01	 © 2002 John Game
Horkelia bolanderi	Bolander's horkelia	Rosaceae	perennial herb	(May)Jun-Aug	None	None	G1	S1	1B.2	Yes	1988-01-01	 © 2012 Barry Rice
Iris longipetala	coast iris	Iridaceae	perennial rhizomatous herb	Mar-May(Jun)	None	None	G3	S3	4.2	Yes	2006-10-12	 © 2014 Aaron Schusteff
Kopsiopsis hookeri	small groundcone	Orobanchaceae	perennial rhizomatous herb (parasitic)	Apr-Aug	None	None	G4?	S1S2	2B.3		1994-01-01	 ©2016 Vernon Smith
Layia septentrionalis	Colusa layia	Asteraceae	annual herb	Apr-May	None	None	G2	S2	1B.2	Yes	1994-01-01	 © 2013 Jake Ruygt
Leptosiphon aureus	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2	Yes	1994-01-01	 © 2007 Len Blumin
Leptosiphon latisectus	broad-lobed leptosiphon	Polemoniaceae	annual herb	Apr-Jun	None	None	G4	S4	4.3	Yes	2001-01-01	 © 2015 Steve Matson
Leptosiphon rattanii	Rattan's leptosiphon	Polemoniaceae	annual herb	May-Jul	None	None	G4	S4	4.3	Yes	1974-01-01	 © Bob Patterson and CNPS

Lilium rubescens	redwood lily	Liliaceae	perennial bulbiferous herb	(Mar)Apr-Aug(Sep)	None	None	G3	S3	4.2	Yes	1974-01-01	 Gerald and Buff Corsi © 2022 California Academy of Sciences
Lupinus sericatus	Cobb Mountain lupine	Fabaceae	perennial herb	Mar-Jun	None	None	G2?	S2?	1B.2	Yes	1974-01-01	No Photo Available
Malacothamnus mendocinensis	Mendocino bush-mallow	Malvaceae	perennial deciduous shrub	Jun-Aug	None	None	G1Q	S1	1B.1	Yes	1974-01-01	 © 2021 Keir Morse
Monardella viridis	green monardella	Lamiaceae	perennial rhizomatous herb	Jun-Sep	None	None	G3	S3	4.3	Yes	1974-01-01	No Photo Available
Perideridia gairdneri ssp. gairdneri	Gairdner's yampah	Apiaceae	perennial herb	Jun-Oct	None	None	G5T3T4	S3S4	4.2	Yes	1974-01-01	 ©2007 Neal Kramer
Piperia candida	white-flowered rein orchid	Orchidaceae	perennial herb	(Mar-Apr)May-Sep	None	None	G3?	S3	1B.2		1994-01-01	 ©2016 Barry Rice
Plagiobothrys lithocaryus	Mayacamas popcornflower	Boraginaceae	annual herb	Apr-May	None	None	GX	SX	1A	Yes	1974-01-01	No Photo Available
Pleuropogon hooverianus	North Coast semaphore grass	Poaceae	perennial rhizomatous herb	Apr-Jun	None	CT	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
Ranunculus lobbii	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	None	None	G4	S3	4.2		1974-01-01	No Photo Available
Silene bolanderi	Bolander's catchfly	Caryophyllaceae	perennial herb	May-Jun	None	None	G2	S2	1B.2		2021-07-30	No Photo Available
Streptanthus barbiger	bearded jewelflower	Brassicaceae	annual herb	May-Jul	None	None	G3	S3	4.2	Yes	2001-01-01	 © 2017 John Doyen

Streptanthus glandulosus ssp. hoffmanii	Hoffman's bristly jewelflower	Brassicaceae	annual herb	Mar-Jul	None	None	G4T2	S2	1B.3	Yes	1980-01-01	No Photo Available
Tracyina rostrata	beaked tracyina	Asteraceae	annual herb	May-Jun	None	None	G2	S2	1B.2	Yes	1974-01-01	 ©2018 John Game
Trichostema rogersii	Napa bluecurls	Lamiaceae	annual herb	Jun-Oct	None	None	G1G2	S2	1B.2	Yes	2007-01-03	No Photo Available
Trifolium buckwestiorum	Santa Cruz clover	Fabaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.1	Yes	1994-01-01	No Photo Available
Usnea longissima	Methuselah's beard lichen	Parmeliaceae	fruticose lichen (epiphytic)		None	None	G4	S4	4.2		2014-03-01	 © 2021 Scot Loring
Viburnum ellipticum	oval-leaved viburnum	Viburnaceae	perennial deciduous shrub	May-Jun	None	None	G4G5	S3	2B.3		1974-01-01	 © 2006 Tom Engstrom

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