BRIDGE SCOUR MITIGATION PROJECT

INITIAL STUDY

with Proposed Mitigated Negative Declaration

Sutter, Butte, and Colusa County, California

DISTRICT 3 – Various Counties – Various Post Miles

EA 03-0J630 / EFIS 0319000304

Prepared by the
State of California Department of Transportation

September 2024

❖

General Information About This Document

What is in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study with Mitigated Negative Declaration (IS/MND) which examines the potential environmental effects of the proposed project on Interstate 5 in Colusa County, State Route 20 in Sutter County, and State Route 70 in Butte County. 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 for review at Caltrans district office 703 B Street Maryville, CA 95901. 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.
- Please send comments via U.S. mail to:

  California Department of Transportation
  Attention: David Gould
  North Region Environmental–District 3
  703 B Street
  Maryville, CA 95901

- Send comments via e-mail to: david.gould@dot.ca.gov
- Be sure to send comments by the deadline: October 26, 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.

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: Public Information Office, North Region Environmental-District 3, 703 B Street Maryville, CA 95501; (530) 741-4572 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.

BRIDGE SCOUR MITIGATION PROJECT

Scour mitigation and countermeasures at various locations on
I-5 in Colusa County, State Route 20 in Sutter County, and
State Route 70 in Butte County

INITIAL STUDY

With Proposed Mitigated Negative Declaration

Submitted Pursuant to: Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

9/26/24
Date of Approval

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

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

David Gould, North Region Environmental-District 3
703 B St.
Marysville, CA 95901
(530) 821-8305
or use the California Relay Service TTY number, 711 or 1-800-735-292.

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Proposed Mitigated NEGATIVE DECLARATION

Pursuant to: Division 13, California Public Resources Code

SCH Number: Pending

Project Description

The California Department of Transportation (Caltrans) proposes to perform scour mitigation and countermeasures on bridges on Interstate 5 in Colusa County, State Route 20 in Sutter County, and State Route 70 in Butte County.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt an MND for this project. This does not mean that Caltrans' decision regarding the project is final. This MND 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 project would have *No Effect* on aesthetics, agriculture and forest resources, cultural resources, land use and planning, mineral resources, population and housing, public services, recreation, recreation, tribal cultural resources, utilities and service systems, and wildfire.

The project would have *Less than Significant Impacts* to air quality, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, and transportation.

The project would have *Less than Significant Impacts to* biological resources and mandatory findings of significance with the following mitigation measures incorporated:

Wetlands and Other Waters

- The permanent loss of 0.44 acres of jurisdictional Waters of the United States and State will be mitigated through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location. Temporary impacts of 0.32 acres of jurisdictional Waters of the United States and State will be restored on-site. Temporary impacts of 13.93 acres of wetlands will be restored on-site. The temporary impacts to wetlands will be revised once an aquatic resource delineation report is completed in Spring 2025.

Natural Communities

- The permanent loss of 0.5 acres of riparian habitat will be mitigated through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.
- The permanent loss of 0.38 acres of essential fish habitat will be mitigated through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.
- The temporary impacts of 13.93 acres of northern hardpan vernal pool habitat will be revised once an aquatic resource delineation report is completed in Spring 2025. Any permanent impacts will be mitigated through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

Threatened and Endangered Species

- Impacts to green sturgeon, steelhead, Central Valley spring-run Chinook salmon, and Sacramento River winter-run Chinook salmon habitat will be mitigated through agency-approved mitigation bank credits or mitigating off-site at an agency approved location.
- Impacts to giant garter snake habitat will be mitigated through agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

- No mitigation is currently proposed for northwestern pond turtle, but mitigation may be required once Section 7 consultation is completed with the United States Fish and Wildlife Service.

_____ _____

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

Date

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List of Acronyms and Abbreviated Terms

Acronym/Abbreviation	Description
AB	Assembly Bill
ABMPs	Additional Best Management Practices
ARZ	Absorber Root Zone
BMPs	Best Management Practices
BO	Biological Opinion
BSA	Biological Study Area
ºC	degrees Celsius
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CAL-CET	Caltrans Construction Emissions Tool
CAL EPA	California Environmental Protection Agency
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
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGP	Construction General Permit
CH_4	methane
CIA	Cumulative Impact Analysis
CNPS	California Native Plant Society
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRPR	California Rare Plant Rank
CTP	California Transportation Plan
CWA	Clean Water Act
dB	decibels
Dbh	Diameter-at-Breast-Height
Department	Caltrans
DOT	Department of Transportation

Acronym/Abbreviation	Description
DP	Director's Policy
DPS	Distinct Population Segment
DWR	Department of Water Resources
ECL	Environmental Construction Liaison
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
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
FERS	Floodplain Evaluation Report Summary
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMP	Fishery Management Plan
FR	Federal Register
GGS	Giant garter snake
GHG	greenhouse gas
GWP	Global Warming Potential
H&SC	Health & Safety Code
HFCs	hydrofluorocarbons
HVF	High-Visibility Fencing
IPaC	Information for Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
IS/MND	Initial Study / Mitigated Negative Declaration
IS/ND	Initial Study / Negative Declaration
LCFS	low carbon fuel standard
LRA	Local Responsibility Area
LSAA	Lake or Streambed Alteration Agreement
MAMU	Marbled murrelet
MBGR	Metal Beam Guardrail
MBTA	Migratory Bird Treaty Act
MGS	Midwest Guardrail System
MLD	Most Likely Descendent

Acronym/Abbreviation	Description
MMT	million metric tons
MMTC0_2e	million metric tons of carbon dioxide equivalent
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
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
NC	North Coast
NC	Northern California
NCRWQCB	North Coast Regional Water Quality Control Board
NCSC	Natural Communities of Special Concern
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHVP	Northern Hardpan Vernal Pool
NHTSA	National Highway Traffic and Safety Administration
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
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
OPR	Governor's Office of Planning and Research
PBO	Programmatic Biological Opinion
PDT	Project Development Team
PIR	Project Initiation Report
PLOC	Programmatic Letter of Concurrence
PM(s)	Post Mile(s)
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
Project	Scour Mitigation at Various Locations
PRC	Public Resources Code (California)
RCP	Representative Concentration Pathways 8.5 Emissions Scenario
RSP	Rock Slope Protection
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency

Acronym/Abbreviation	Description
RWQCB	Regional Water Quality Control Board
SAFE	Safer Avoidable Fuel-Efficient (vehicles)
SB	Senate Bill
SCS	Sustainable Communities Strategy
SF_6	sulfur hexafluoride
SEL	Sound Exposure Level
SHPO	State Historic Preservation Officer
SLR	Sea Level Rise
SNC(s)	Sensitive Natural Community(ies)
SO_2	sulfur dioxide
SPCC Plan	Spill Prevention, Control, and Countermeasures Plan
SR	State Route
SRA	State Responsibility Area
SSC	Species of Special Concern
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
THVF	Temporary High Visibility Fencing
TMDLs	Total Maximum Daily Loads
TMP	Transportation Management Plan
U.S. or US	United States
U.S. 101 or US 101	U.S. (United States) Highway 101
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VA	Value Analysis
VELB	Valley elderberry longhorn beetle
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled
VROOM	Variety in Rural Options of Mobility (County of Humboldt)
WPCP	Water Pollution Control Program
WQAR	Water Quality Assessment Report

Chapter 1. Proposed Project

The California Department of Transportation, as assigned by the Federal Highway Administration (FHWA), is the lead agency under the National Environmental Policy Act (NEPA). The California Department of Transportation is the lead agency under the California Environmental Quality Act (CEQA).

1.1 Project History

State Route (SR) 20 is an "ocean to mountains" route that begins at SR 1 near Fort Bragg and ends at Interstate (I) 80 near Emigrant Gap. Within District 3, the route runs 122 miles west to east through Colusa, Sutter, Yuba, and Nevada counties. SR 20 is a two-lane highway that serves regional, international, commute, commercial, agricultural, and recreational traffic. It serves as a major east-west connector to I-5 and SR 99, and interconnects with other major routes, including SR 70 and I-80. Sutter Bypass Bridge is located along SR 20 in Sutter County approximately 10 miles west of Yuba City (Figure 1. Vicinity Map).

SR 70 is one of the primary north-south transportation corridors for the eastern Sacramento Valley. The District 3 portion of SR 70 traverses Sutter, Yuba, and Butte counties, approximately 81 miles. SR 70 plays an important role in goods movement, particularly for transporting local agricultural products to market and to processing plants in the region. SR 70 also serves as an emergency alternative route for I-80 across the Sierra Nevada Mountains when I-80 is closed or impaired due to weather conditions or other significant incidents. Dudley Creek Bridge is located along SR 70 approximately 2 miles north of Oroville in Butte County (Figure 1. Vicinity Map).

I-5 runs north-south and extends 796 miles in California from the International Border Crossing at San Ysidro to the California/Oregon border. I-5 is an Interregional Road System which plays a critical role in California's economy by accessing a multitude of interstate, state, and local facilities and providing throughput to accommodate high volumes of commute and interregional traffic along with rapid growth in interstate/interregional freight movements. Within District 3, I-5 extends 127 miles through Sacramento, Yolo, Colusa, and Glenn counties. Hunters Creek Bridge is located along I-5 at PM R32.94 in Colusa County. Hunters Creek Bridge comprises two bridge structures that separate the north and southbound traffic along I-5. Hunters Creek Bridge is just north of the unincorporated community of Delevan and approximately 1 ½ miles south of the Colusa/Sutter County line (Figure 1. Vicinity Map).

Project Location

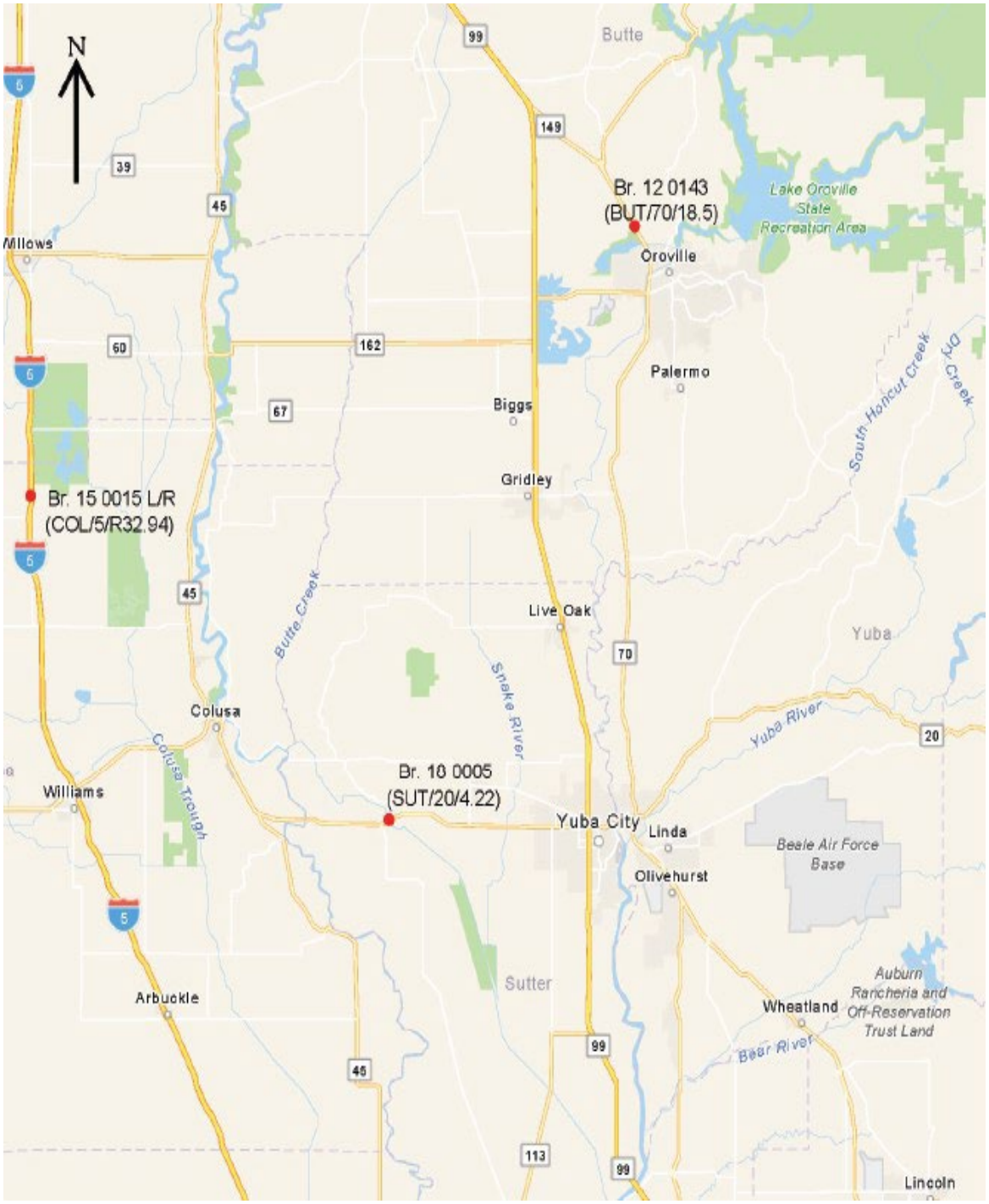


Figure 1. Vicinity Map

The proposed project would preserve bridge structures and serviceability by conducting scour mitigation and countermeasures caused by degradation of the soil and provides load support to the bridge foundations.

1.2 Project Description

This project proposes to perform scour mitigation and countermeasures on four bridges along Interstate 5 (I-5) in Colusa County, State Route 20 (SR 20) in Sutter County, and SR 70 in Butte County at various locations. Scour activity is causing degradation of the soil that provides lateral load support to the bridge foundations. Structure Maintenance and Investigations (SM&I) has assigned Scour Code ratings to the following 4 bridges based on their inspections between December 2020 and January 2021, as summarized in the following table.

Table 1. Bridge and Scour Code Rating

Bridge Name	Bridge Number	County and Post Mile	Scour Code and Rating
Sutter Bypass	18-0015	SUT-20-4.22	Scour Code 3 - Unstable - Critical
Dudley Creek	12-0143	BUT-70-18.5	Scour Code 4 – Stable in Need of Action – Fair
Hunters Creek	15-0015L/R	COL-5-R32.94	Scour Code 5 – Stable within Footing - Fair

Project Objective

Purpose

The purpose of this project is to reduce the risk of potential scour problems of the Sutter Bypass structure by eliminating the risk of buckling and minimizing the risk of losing additional pile capacity and prevents future structural deficiencies and scouring at the other three bridges.

Need

The Sutter Bypass (Bridge No. 18-0005) is one of four bridges identified in the scope as needing scour mitigation measures. The Sutter Bypass is susceptible to closure due to column buckling and scour at high flows. Multiple columns need to be reinforced against buckling and waterways below the bridge need to be armored to prevent local scour. Dudley Creek (Bridge No. 12-0143) has a scour hole at the north abutment footing that needs to be armored to prevent undermining of the footing. Hunters Creek (Bridge No. 15-0015L/R) has an eroded north abutment slope and needs to be armored to prevent roadway instability.

1.3 Proposed Alternatives

No-Build (No-Action) Alternative

This 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.

Alternative 1

Caltrans proposes to perform scour mitigation and countermeasures on bridges along Interstate 5 in Colusa County, State Route 20 in Sutter County, and 70 in Butte County at various locations. The following bridges and work entailed include:

Sutter Bypass (Br. No. 18-0005) - Sutter, SR 20, PM 4.2/5

- Place rock slope protection (RSP) over filter fabric at the west, middle, and east channels.
- Install struts across bents.
- Temporary Construction Easement (TCE) required for construction access and staging at the west channel of the bypass.
- Water diversion may be required during construction at all channels.
- Drainage easements will be required at all channels.

Dudley Creek (Br. No. 12-0143) – Butte, SR 70, PM 18.5

- Place RSP over filter fabric at the upstream end of the box culvert.

Hunters Creek (Br. No. 15-0015L/R) – Colusa, I-5, PM 32.94

- Stabilize embankment.
- Upgrade two-post signs at current sign standards.

Most locations will require tree and brush removal. All locations will require ground disturbing activities. At each location and if water is present, water diversion or de-watering systems may be needed to control sedimentation plumes during excavation for RSP placement.

Alternatives Considered but Eliminated from Further Consideration

Alternative 2: Bridges: Taylor Creek, Chickahominy Slough, Union School Slough, Oat Creek, Nye Creek and Bird Creek

Taylor Creek Bridge (Bridge No. 22-0024)- Yolo, SR 16, PM 20.14

Taylor Creek is located in Yolo County along SR 16 and was originally included with Alternative 1 (preferred alternative). Work at Taylor Creek included:

- lining channel bed with rock and filter fabric from the face of abutment to face of abutment and extend approximately 30-feet through the bridge to beyond the outside faces of the bridge.

- Place RSP and filter fabric along the left and right channel banks and extend approximately 10-feet from the toe of the bank and 30-feet from the faces of the bridge.

Chickahominy Slough Bridge (Bridge No. 22-0113R)- Yolo, I-505, PM 3.37

Chickahominy Slough is located in Yolo County along I-505 at Post Mile 3.37 and was originally included with Alternative 1 (preferred alternative). Work at Chickahominy Slough included:

- Placing RSP on top of filter fabric along Abutment 4 embankment to extend 5- to 10-feet beyond the faces of the bridge.

Union School Slough Bridge (Bridge No. 22-0114L/R)- Yolo, I-505, PM 5.71

Union School Slough is located in Yolo County along I-505 at Post Mile 5.71 in Yolo County. Union School Slough was originally included with Alternative 1 (preferred alternative). Work at Union School Slough included:

- Placing RSP along the width of Abutment 4.

Oat Creek Bridge (Bridge No. 22-0135R)- Yolo, I-5, PM R21.84

Oat Creek is located in Yolo County along I-5 at Post Mile R21.84 in Yolo County and was originally included with Alternative 1 (preferred alternative). Work at Oat Creek included:

- Replacing the eroded RSP at Abutment 1.

Nye Creek (Bridge No. 11-0088)- Glenn, SR 162, PM 51.69

Downstream:

- Remove the existing trees and debris in the channel just downstream of the concrete apron.
- Backfill the large cavity under the existing concrete apron with grouted rock.
- Place loose RSP in the channel from the end of the existing concrete apron to a point 40 feet downstream. Excavate the channel bed approximately 2 feet deep for the last 20 feet so the grouted RSP is keyed into the channel at the downstream end of the mitigation work.
- Line the channel banks from the culvert to 40 feet downstream of the culvert with concreted RSP.

Upstream:

- Excavate the channel bed to 3 feet deep in front of the structure to a point 20 feet upstream.
- Place grouted RSP in this excavated hole to protect the upstream end of this structure.
- Remove and replace approximately 75-foot culvert system.
- Remove approximately 230-feet of Metal Beam Guardrail (MBGR) and replace with Midwest Guardrail System (MGS).

Bird Creek (Bridge No. 22-0135R) Yolo, I-5, PM R21.84

- Repair slope along wingwall at the left side of Abutment 1 and place RSP at this location.
- Remove approximately 320-feet of MBGR and replace with approximately 600-feet of MGS with minor concrete vegetation control.

Taylor Creek was removed from the preferred alternative due to a future project, Capay Valley Rehab Project (EA 03-2J670 / EFIS 0322000086), which proposes to replace the bridge with a wider and larger bridge. It was recommended that scour mitigation at Taylor Creek be removed from this project and included in the Capay Valley Rehab Project as all work proposed for Taylor Creek would need to be redone to accommodate the new wider and longer bridge structure.

Chickahominy Slough, Union School Slough, Oat Creek, Nye Creek, and Bird Creek were removed from the preferred alternative after a hydraulic investigation determined that all three bridges did not require scour mitigation and countermeasures. The hydraulic investigation identified that all three bridges were misidentified, and the assigned scour code should be lower than what they were originally assigned.

The estimated cost for Alternative 2 is $5,1700,000.00.

General Plan Description, Zoning, and Surrounding Land Uses

Sutter County-SR 20

According to the Sutter County General Plan 2030, land use around the project area is primarily agriculture and open space (County of Sutter 2011).

Butte County-SR 70

The land use around the project location is primarily agriculture, according to the Butte County General Plan 2040 (County of Butte 2023).

Colusa County-I-5

According to the Colusa County 2030 General Plan, the land use surrounding the project area is primarily agriculture (County of Colusa 2012).

1.4 Permits and Approvals Needed

The following table indicates the permitting agency, permits/approvals and status of permits required for the project.

Table 2. Agency, Permit/Approval and Status

Agency	Permit/Approval	Status
California Department of Fish and Wildlife (CDFW)	1602 Lake and Streambed Alteration Agreement	Pending Application Submittal; February 1, 2025
California Department of Fish and Wildlife (CDFW)	2081 Incidental Take permit	Pending Application Submittal; February 1, 2025
Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification	Pending Application Submittal; February 1, 2025
U.S. Army Corps of Engineers (USACE)	Section 404 Nationwide Permit	Pending Application Submittal; February 1, 2025
U.S. Fish and Wildlife Service (USFWS)	Biological Opinion	Pending Application Submittal; January 27, 2025
National Marine Fisheries Service (NMFS)	Biological Opinion	Pending Application Submittal; January 27, 2025

1.5 Standard Measures and Best Management Practices Included in All Alternatives

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

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

description. Any project-specific avoidance, minimization, or mitigation measures that would be applied to reduce the effects of project impacts are listed further below or in Section 2.4.–Biological Resources.

Standard measures relevant to the protection of environmental resources deemed applicable to the proposed project include:

Aesthetics Resources

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

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

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

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

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. A *Bird Exclusion Plan* would be prepared by a qualified biologist prior to construction. Exclusion devices would be designed so they would not trap or entangle birds or bats. Exclusion devices would be installed outside of the breeding season (September 16 through January 31) to eliminate the re-occupancy of existing structures by migratory bird species that may attempt to nest on the structure during construction. On structures or parts of structures where it is not feasible to install bird exclusion devices, partially constructed and unoccupied nests within the construction area would be removed and disposed of on a regular basis throughout the breeding season (February 1 through September 15, with biologist discretion) to prevent their occupation. Nest removal would be repeated weekly under guidance of a qualified biologist to ensure nests are inactive prior to removal.

C. 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.

D. 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.

E. A qualified biologist would monitor in-stream construction activities that could potentially impact sensitive biological receptors (e.g., amphibians, fish). The biological monitor would be present during activities such as installation and removal of dewatering or diversion systems, riparian and aquatic vegetation removal, RSP installation, etc. to ensure adherence to permit conditions. In-water work restrictions would be implemented.

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

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.

H. Protocol surveys would be performed for Swainson's hawk, tricolored blackbird, giant garter snake and northwestern pond turtle during the breeding season for each construction season (every year of construction). If species are discovered during construction, work would stop in the area of discovery and coordination with the appropriate resource agencies would occur.

I. A Limited Operating Period would be observed, whereby all construction activities would occur during daytime hours and between May and October, which is the time of year when the following listed species would not be expected to have dependent young: giant garter snake and northwestern pond turtle (May 1 – October 1), green sturgeon, Chinook, and steelhead (June 1 - October 15).

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

K. An Aquatic Giant Garter Snake (GGS) Habitat Dewatering Plan would be prepared. The plan would include appropriate measures, including the identification of dewatering areas. The Contractor will dewater suitable habitat (e.g., wetlands, drainages, rice fields) and ensure the habitat remains dry for at least 15 consecutive days after April 15 and prior to excavating or filling potential habitat. Dewatering would be limited to April 15 to October 1.

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. Seasonally appropriate, pre-construction floristic surveys for sensitive plant species would be completed (or updated) by a qualified biologist prior to construction in accordance with *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018).

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

C. 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.

D. 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. The contractor would be required to prepare and submit a *Temporary Creek Diversion System Plan* to Caltrans for approval prior to any creek diversion. Depending on site conditions, the plan may also require specifications for the relocation of sensitive aquatic species (see also Aquatic Species Relocation Plan in **BR-2**). Water generated from the diversion operations would be pumped and discharged according to the approved plan and applicable permits.

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

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

D. 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: 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-2: If human remains and related items are discovered on private or State land, they would be treated in accordance with State Health and Safety Code (H&SC) § 7050.5. Further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to California Public Resources Code (PRC) § 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD).

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

Geology, Seismic/Topography, and Paleontology

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

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

Greenhouse Gas Emissions

GHG-1: Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality (Caltrans Standard Specification [SS] 14-9).

GHG-2: Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of diesel-fueled commercial motor vehicles and equipment with gross weight ratings of greater than 10,000 pounds to no more than 5 minutes.

GHG-3: Caltrans Standard Specification "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource 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.

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 sign posts or guardrail) is generated during this project, it would be disposed of in accordance with Standard Specification "Treated Wood Waste."

Traffic and Transportation

TT-1: Pedestrian and bicycle access would be maintained during construction.

TT-2: 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 State Routes 70, 20 and Interstate 5 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 locations for Colusa County is in a State Responsible Area (SRA) designated "*Very High*". Fire severity in Butte County is split along SR 99 where east of the project area is designated "High", and west is "Moderate". The project located within the Sutter County is in a non-Local Responsible Area and has no fire severity. The contractor would be required to submit a jobsite Fire Prevention Plan as required by Cal/OSHA before starting job site activities. In the event of an emergency or wildfire, the contractor would cooperate with fire prevention authorities.

Water Quality and Stormwater Runoff

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

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

NPDES permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES permit is adhered to.

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

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

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

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

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

WQ-2: The project would incorporate pollution prevention and design measures consistent with the *2016 Caltrans Storm Water Management Plan* (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.

1.6 Discussion of the NEPA Categorical Exclusion

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

Potential Impact Area	Impacted: Yes / No
Aesthetics	No
Agriculture and Forest Resources	No
Air Quality	**Yes**
Biological Resources	**Yes**
Cultural Resources	No
Energy	**Yes**
Geology and Soils	**Yes**
Greenhouse Gas Emissions	**Yes**
Hazards and Hazardous Materials	**Yes**
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	**Yes**
Tribal Cultural Resources	No
Utilities and Service Systems	No
Wildfire	No
Mandatory Findings of Significance	**Yes**

The CEQA Environmental Checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the project will indicate there are no impacts to a particular resource. A "NO IMPACT" answer in the last column of the checklist reflects this determination.

The words "significant" and "significance" used throughout the CEQA Environmental Checklist are only related to potential impacts pursuant to CEQA. The questions in the CEQA Environmental Checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

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

Project Impact Analysis Under CEQA

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

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

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

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

If the action may have a potentially significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the lead agency may adopt a negative declaration (ND) if there is no substantial evidence that the project may have a potentially significant effect on the environment (14 CCR § 15070(a)). A proposed negative declaration must be circulated for public review, along with a document known as an Initial Study. CEQA 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 (CAL. PUB. RES. 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 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 Environmental Setting 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 ESL in that it sets the beginning and ending limits of a project along the highway. It is the limits programmed for a project, and every report, memo, etc. associated with a project should use the same post mile limits. In some cases, there may be areas associated with a project that are outside of the project limits, such as staging and disposal locations.

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

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

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

2.1 Aesthetics

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Visual Impact Assessment dated January 22, 2024 (Caltrans 2024c). Project locations in Sutter, Butte, and Colusa County are neither a designated scenic highway nor an eligible scenic highway.

Discussion of CEQA Environmental Checklist Question 2.1—Aesthetics

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact. The project would not have a substantial adverse effect on a scenic vista as there are no direct views of scenic resources at ground level on the project site that would potentially be blocked due to construction of the project. Therefore, there is no impact.

b) Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings, within a state scenic highway?

No Impact. The proposed project would not damage scenic resources such as trees, rock outcroppings, and historic buildings. The project would not construct any buildings or structures and would not remove or modify surrounding rock outcroppings considered a scenic resource. Vegetation removal may be required; however, the character of the surrounding area would remain consistent for highway users. Therefore, the project would have no impact on scenic resources.

c) Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact. The proposed project would not substantially degrade the existing visual character or quality of public views as none are present at any of the project locations. Therefore, there is no impact.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. The proposed project would not create a new source of substantial light or glare as temporary construction lighting would not be directed towards the highway. Motorists' exposure to the lighting would be brief and minimal, and there are no sensitive land uses adjacent to the project sites that would be impacted by the nighttime lighting. All nighttime illumination sources coming from the project would comply with standard Caltrans practices controlling illumination for public safety pursuant to Cal/OSHA and any light and glare from construction activities would be temporary. Therefore, there is 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 U.S. Department of Agriculture Conversion Impact Rating Form dated January 29, 2024 (NRCS 2024). Potential impacts to Agriculture and Forest Resources are not anticipated due to no forest resources present within or near the project areas. Agriculture resources are present within or near the project areas, but none would be converted to non-agriculture use.

Discussion of CEQA Environmental Checklist Question 2.2—Agriculture and Forest Resources

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, to non-agriculture use. Farmlands are present around the project area, but none will be converted during construction.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. There are no properties under the Williamson Act contract within the proposed project limits or adjacent to the project area (NRCS 2024). The project would not change zoning for any agricultural land. Therefore, the project would not conflict with the existing zoning for agricultural use, or any Williamson Act contracts.

c) Would the project conflict with existing zoning or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. The proposed project would not conflict with existing zoning or cause rezoning of forest land, timberland, or timberland zoned Timberland Production as none are present.

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

No Impact. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use as none are present.

e) Would the project 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. The proposed project would not involve other changes in the existing environment as forest lands are not present. Farmlands are present adjacent to the project locations, but none would be converted.

2.3 Air Quality

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

Regulatory Setting

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

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

Affected Environment

An Environmental Impact Evaluation- Air Quality, Traffic Noise, and GHG was prepared on January 18, 2024 (Caltrans 2024a). The proposed project is exempt from all air quality conformity analysis requirements per Table 2 of 40 Code of Federal Regulations (CFR) § 93.126, subsection "Safety-Safety Improvement Program" and no further air quality analysis is required.

Environmental Consequences

The proposed project is exempt from all air quality conformity analysis requirements per Table 2 of 40 Code of Federal Regulations (CFR) § 93.126, subsection "Safety-Safety Improvement Program". During construction, the proposed project would generate short-term emissions from construction activities. Caltrans Standard Measures and Best Management Practices (BMPs) outlined in Section 1.5 above, would minimize air pollutants during construction.

Avoidance, Minimization and Mitigation Measures

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

Discussion of CEQA Environmental Checklist Question 2.3—Air Quality

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

No Impact. The proposed project does not conflict or obstruct implementation of the applicable air quality plans. The proposed project would perform scour mitigation and countermeasures on several bridges.

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

No Impact. The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant as the project is exempt from all air quality conformity.

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

No Impact. The proposed project would not expose sensitive receptors to substantial pollutant concentrations.

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

Less Than Significant Impact. Emissions emitted during construction activities will be generated, however, it would be short-term. The project would comply with construction standards, and implementation of Caltrans Standard Measures and Best Management Practices would minimize air pollutants during construction.

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 of Concern, Wetlands and Other Waters, Plant Species, Animal Species, and Invasive Species. Threatened and endangered special status plant and animal species, including USFWS and NMFS candidate species, CDFW Fully Protected (FP) species, Species of Special Concern (SSC), and California Native Plant Society (CNPS) rare plants are covered in the respective Plant and Animal sections. This section of the document focuses on the issues covered in Chapter 4 of the Natural Environment Study (NES) (Caltrans 2024e).

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, fish passage, 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.

Wetlands and Other Waters

Waters of the United States (including wetlands) 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
- 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–Section 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. 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 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. 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 primary laws governing threatened and endangered species include:

- FESA–USC 16 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.

Affected Environment

A Natural Environment Study (NES) (Caltrans 2024e) was prepared for the project. Caltrans coordinated with fisheries biologists and water quality specialists, and agency personnel from USFWS, NMFS, CDFW, NCRWQCB, and USACE will be coordinated with after the Final Environmental Document is completed. See Chapter 3 for a summary of these coordination efforts and professional contacts.

The proposed project is located at three different locations: along I-5 in Colusa County, SR 20 in Sutter County, and SR 70 in Butte County. Biological resources were evaluated within the Environmental Study Limits (ESL) encompassing Sutter Bypass, Dudley Creek, and Hunters Creek. The ESL includes all areas of work, staging, and stockpiling that would occur.

The Biological Study Area (BSA) encompasses the ESL, as well as areas adjacent to the ESL where standard environmental assessments for sensitive resources are conducted. The BSA considers elements of construction that reach beyond the immediate construction footprint, such as elevated noise levels and modifications to surface and subsurface hydrology, or permanent and temporary changes in solar or sound exposure. The potential for direct and indirect impacts are considered when determining the BSA.

Sutter Bypass (Bridge No. 18-0005) - Sutter, SR 20, PM 4.2/5

The Sutter Bypass ESL encompasses a wide area including the existing bypass that SR 20 runs through, three different water channels, access roads, and vegetation including grasslands, wetlands, vernal pools, and riparian areas. This project location has climate typical of the northern part of central valley, which is a Mediterranean Climate characterized by summers that are hot and dry and winters that are mild and rainy.

Dudley Creek (Bridge No. 12-0143) – Butte, SR 70, PM 18.5

The ESL within Dudley Creek encompasses the existing bridge and northbound portion of SR 70, the shoulder, and seasonal waterway. There is riparian vegetation, grasses, ruderal weeds on disturbed lands, and farmland. The climate at the project location is Mediterranean which characterized by hot and dry summers and mild and rainy winters.

Hunters Creek (Bridge No. 15-0015L/R) – Colusa, I-5, PM 32.94

Hunter Creek ESL includes the existing bridges and roadways, the median, the shoulders, and channel. There is some riparian vegetation, grasses, and ruderal weeds. This project location has climate typical of the northern part of the Central Valley which is Mediterranean Climate characterized by summers that are hot and dry and winters that are mild and rainy.

Sensitive Natural Communities

Habitats and natural communities of special concern are habitats considered sensitive because of their high species diversity, high productivity, unusual nature, limited distribution, or declining status. Local, state, and federal agencies consider these habitats important, and compensation for loss of sensitive communities is generally required by agencies. Streams, wetlands, riparian habitat, sensitive natural communities (SNCs), critical habitat (CH), and Essential Fish Habitat (EFH) are regulated by federal, state, and local laws; therefore, they are considered habitats of concern. These habitat types are discussed below.

Riparian Habitat

Riparian habitat is characterized by an assemblage of plant species that grow exclusively in an area that interfaces between land and a river stream system. Vegetation found in riparian habitats are often unique to riparian zones and include a variety of species that thrive in moist environments and can tolerate seasonal flooding.

Within Sutter Bypass, riparian habitat is present along all three channels. Species observed include valley oak (*Quercus lobata*), Oregon ash (*Fraxinus latifolia*), willow (*Salix sp*.), elderberry (*Sambucus sp*.), black walnut (*Juglans californica*), wolly rose-mallow (*Hibiscus lasiocarpos var. occidentalis*), buttonwillow (Cephalanthus occidentalis) and Himalayan blackberry (*Rubus armeniacus*).

Riparian habitat at Dudley Creek consists of ruderal species and grasses, buckwheat (*Eriogonum sp.*), and wild grape (*Vitis californica*).

Riparian habitat at Hunters Creek consists of ruderal species and grasses such as, black mustard (*Brassica nigra*), wild radish (*Raphanus raphanistrum*), Tule (*Schoenoplectus acutus*) and common fig (*Ficus carica*).

Wetlands and Other Waters

Caltrans biologists identified potential jurisdictional Waters of the United States and Waters of the State within the ESL at all three locations. Wetlands were identified at Hunters Creek and Sutter Bypass. Hunters Creek is an intermittent stream that flows under Hunters Creek Bridge. Dudley Creek is an intermittent stream that flows under the Dudley Creek Bridge. Sutter Bypass has three year-round, interconnected water channels comprising the east, west, and middle channels. Wetlands were present at Sutter Bypass surrounding the eastern access road, as well as a small wetland south of the bridge between the middle and east channels. An aquatic resource delineation for the project will be completed spring 2025 to document the boundaries of all wetlands and other aquatic resources within the BSA.

Northern Hardpan Vernal Pool

Northern hardpan vernal pool (NHVP) systems are shallow ephemeral waterbodies found in depressions among grasslands and open woodlands throughout the northern Central Valley of California. Northern claypan vernal pools include a clay hardpan that retains water inputs throughout some portions of the spring, but typically the depression dries down entirely into early summer months. Given their relative isolation in upland-dominated landscapes, many

endemic and federally listed plant species are common in California vernal pools. Within the Sutter Bypass ESL, the northernmost portion of the eastern access road occurs within a documented NHVP occurrence published on the California Natural Diversity Database (CNDDB) and there's potential for NHVP and vernal pool species to occur within the wetlands along most of the eastern access road.

Essential Fish Habitat

Essential Fish Habitat (EFH) is defined for the purpose of the Magnuson-Stevens Act as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity". All three ESL locations were determined to be EFH for Chinook salmon. The Sacramento River and its tributaries are well documented as important habitat for green sturgeon–Southern Distinct Population segment (DPS), California Central Valley (CCV) steelhead DPS, Central Valley spring-run (CVSR) Chinook salmon Evolutionarily Significant Unit (ESU), and (Sacramento River winter-run) SRWR Chinook salmon ESU. These species have the potential to be found within the ESLs of the project.

Plant Species

Plants are considered to be of special concern based on (1) federal, state, or local laws and regulations; (2) limited distribution; and/or (3) the presence of unique or rare habitat required by sensitive plants occurring on site.

Botanical surveys were conducted during the appropriate time of the year when potentially occurring rare plants are present and identifiable following CDFW and Caltrans protocols. Botanical surveys were conducted on July 19, 2023, to assess the presence of sensitive plants and sensitive natural communities within the ESL at Sutter Bypass, Donner Creek, and Hunters Creek. Botanical surveys would be repeated in accordance with the CDFW *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018) in spring 2025 (Caltrans 2024e).

While the following special status plants have the potential to occur within the ESL, none were observed during botanical surveys:

- Red-stemmed cryptantha (*Cryptantha rostellata*)
- Shield-bracted monkeyflower (*Erythranthe glaucescens*)
- Hogwallow starfish (*Hesperevax caulescens*)
- Butte County meadowfoam (*Limnanthes floccosa ssp. californica*)

- Baker's navarretia (*Navarretia leucocephala ssp. bakeri*)
- Ahart's paronychia (*Paronychia ahartii*)
- Hartweg's golden sunburst (*Pseudobahia bahiifolia*)
- Butte County golden clover (*Trifolium jokerstii*)

During botanical surveys, four individual woolly rose mallow (*Hibiscus lasiocarpos* var. *occidentalis*) were identified within the ESL at Sutter Bypass.

Woolly Rose Mallow

Wooly rose mallow (*Hibiscus lasiocarpos* var. *occidentalis*) is a perennial rhizomatous herb with large white flowers and rose-red center. It can be found growing in freshwater marches and swamps, as well as in loose stones on sides of levees. This plant does not have federal or state protection status but meets the criteria for sensitivity under CEQA with a 1B.2 California Rare Plant Rank.

During botanical surveys, four individual woolly rose mallow were found in three different locations within the ESL of Sutter Bypass. The first individual was found on the bank of the east channel away from likely work and staging areas. The second individual was found in small wetland just south of the bypass between the middle and east channels. The third and fourth individual were found along agricultural ditch running along a rice field and ESL border.

Animal Species

Animals considered special status or species of special concern" (SSC) are based on (1) federal, state or local laws regulating their development; (2) limited distributions, and/or (3) the habitat requirements of special status animals occurring on-site. Special status species occurrences within the region were identified based on the USFWS, NMFS and CDFW-CNDDB queries (Appendix D).

Based on queries to the USFWS and CDFW-CNDDB databases, the following special status animal species were identified as potentially present within the Environmental Study Limits.

Bats

Of the total 25 bat species that live in California, there are 16 species of bats that use bridges and culverts as habitat and may do so as a result of destroyed or degraded natural habitats. Bats are classified as non-game mammals by CDFW. Bats are afforded protection under various Fish and Game Code sections, including Sections 86, 2000, 2014, 3007, and 4150. Pallid bat (*Antrozous pallidus*) has the potential to occur at the Sutter Bypass and Townsend's big-eared bat (*Corynorhinus townsendii*) has the potential to occur at the Dudley Creek location. Surveys were conducted at all three locations. There is no appropriate bridge habitat for day roosting or maternity colonies within any of the project ESLs. Day roosting was observed at an old bridge adjacent to the access road to the west bank of the middle channel approximately 0.25 miles from the Sutter Bypass bridge. All three ESL locations could support night roosting habitat.

Marysville California Kangaroo Rat

Marysville California kangaroo rat (*Dipodomys californicus eximius*) is state Species of Special Concern (SSC) and is a subspecies of California kangaroo rat only known from the Sutter Buttes. It prefers habitat of well-drained soils of valley grasslands, open chaparral, and open foothill woodland. In underground burrow when inactive; burrows at base of shrub, under rock; may use ground. squirrel burrow. Marysville California kangaroo rats uses paths of other animals, trails, and dirt roads. It has not been seen around the Sutter Buttes since 1983. No Marysville California kangaroo rats were observed at the Sutter Bypass location. Only marginal grassland habitat is present at the site.

Threatened and Endangered Species

The following special status plant and wildlife species could potentially occur within the ESL and be affected by the proposed project:

Butte County Meadowfoam

Butte County meadowfoam (*Limnanthes floccose* ssp. *californica*) is both federally and state endangered and has a California Rare Plant Rank of 1B.1. Butte County meadowfoam is a small plant with white flowers that grows in seasonal wetlands along the edges of vernal pools. It is only found in a narrow 25-mile strip along the eastern flank of California's Sacramento Valley in Butte County. Populations of the plant are declining due to urban and agricultural development, and conversion of vernal pool-containing lands to other uses. Butte County meadowfoam was listed as endangered on June 8, 1992.

The Dudley Creek location in Butte County is designated as critical habitat. No Butte County meadowfoam were observed during surveys at Dudley Creek.

California Tiger Salamander

The California tiger salamander (*Ambystoma californiense*) is both a federally and state threatened species. The California tiger salamander is a large, stocky salamander with a broad, rounded snout. Adults average 6 to 9.5 inches (16 to 24 centimeters) in length and have random white or yellowish spots or bars against a black body. Their small eyes, which have black irises, protrude from their heads. Males are typically larger than females. California tiger salamanders require access to both aquatic and upland habitat throughout their life cycle. They use standing bodies of fresh water, like ponds, vernal pools and other ephemeral or permanent water bodies for breeding. No California tiger salamander were observed within the ESL, but suitable habitat was identified within the Sutter Bypass ESL.

Northwestern Pond Turtle

Northwestern pond turtle (*Actinemys marmorata*) (NWPT) is federally proposed threatened species. NWPT can be found near permanent ponds, lakes, streams, and irrigation ditches. They favor habitats with large numbers of emergent logs or boulders, where they gather to bask. NWPT are omnivorous and most of their animal diet includes insects, crayfish, and other aquatic invertebrates. Fish, tadpoles, and frogs are eaten occasionally, and carrion is eaten when available. Plant foods include filamentous algae, lily pads, tule, and cattail roots. Females typically move overland for up to 100 feet to find suitable nesting sites for egg laying. Eggs are laid from March to August and incubate underground for approximately 75 days. No species-specific surveys were conducted for NWPT and none were observed within the ESLs. Suitable basking and dispersal habitat is present within the ESLs of all three locations.

Foothill Yellow-Legged Frog

The foothill yellow-legged frog (*Rana. boylii*) (FYLF) North Sierra district population segment (DPS) is state threatened and not currently federally listed. The FYLF is a stream-breeding species typically found in small to mid-sized streams and rivers from the coast to the western slope of the Sierra Nevada. In California, FYLF were historically found in most Pacific drainages from the Coast Ranges of the Western Sierra Nevada and San Gabriel Mountain foothills, but the current range has contracted considerably, likely due in part to alteration of seasonal water flows resulting from barriers such as dams. Breeding occurs during the spring in California, typically from April to June, although rainfall during the breeding season can cause females to delay oviposition.

FYLF has the potential to occur at the Sutter Bypass and Dudley Creek locations. No FYLF or egg masses were observed during field surveys. Suitable spawning habitat was not observed at any of the project sites during field visits.

Giant Garter Snake

The giant garter snake (*Thamnophis gigas*) (GGS) is a state and federally threatened species found in California, from Butte and Glenn counties in the north, to Fresno County in the south. GGS inhabit marshes, sloughs, ponds, small lakes, small streams, and other waterways. They are also found in agricultural wetlands such as rice fields and irrigation and drainage canals. GGS are viviparous and breed from March through April. GGS were not observed within the ESL, nor are there documented occurrences within the ESL. However, GGS is documented in the water ways that pass through the Sutter Bypass and Hunters Creek locations.

Tricolored Blackbird

The tricolored blackbird (*Agelaius tricolor*) is a state threatened species. Tricolored blackbirds are a highly colonial species that requires open water such as marshes, swamps, or wetlands to protect nesting substrate, and a foraging area close to the colony habitat. Tricolored blackbird was not observed at any of the three locations. However, confirmed sightings have occurred within 2 miles of each of the ESLs. Suitable habitat occurs at each location, particularly the Sutter Bypass location.

Greater Sandhill Crane

Greater sandhill crane (*Antigone canadensis tabida*) is a state threatened species that can be found in a variety of habitats like wetlands, meadows, grasslands, and open agricultural fields. Greater sandhill cranes are omnivores that feed mainly by probing for subsurface food items with their bills. They are threatened by habitat loss and fragmentation of migration stopover sites. Greater sandhill cranes were not observed at the Sutter Bypass location. However, documented sightings have occurred less than a mile northwest of the ESL. There is suitable habitat in around the entire Sutter Bypass ESL.

Valley Elderberry Longhorn Beetle

Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (VELB) is federally listed as threatened. The presumed historical range and current range of VELB extend from Tehama County south to Fresno County through California's Central Valley and associated foothills from about the 3,000-foot contour on the east and the watershed of the Central Valley on the west. VELB is dependent on its host plant, elderberry, which is a common component of riparian corridors and adjacent upland areas in the Central Valley. A single elderberry shrub was found in a patch of riparian vegetation along the eastern bank of the west channel at the Sutter Bypass location. The ESL does not occur in VELB critical habitat.

Vernal Pool Tadpole Shrimp

Vernal pool tadpole shrimp (*Lepidurus packardi*) is federally listed as endangered. This species is a California Central Valley endemic species, with the majority of populations in the Sacramento Valley. Vernal pool tadpole shrimp has also been reported from the Sacramento River Delta east of San Francisco Bay and from scattered localities in the San Joaquin Valley from San Joaquin to Madera Counties. Vernal pool tadpole shrimp occur in a wide variety of seasonal habitats including vernal pools, ponded clay flats, alkaline pools, ephemeral stock tanks, and roadside ditches. Habitats where vernal pool tadpole shrimp have been observed range in less than 25 square feet, clear, vegetated vernal pools to highly turbid alkali scald pools to more than 100 acres winter lakes. No vernal pool tadpole shrimp surveys were conducted. The Dudley Creek and Hunters Creek locations do not have suitable wetland habitat. The Sutter Bypass does have suitable vernal pool-like wetland habitat where vernal pool tadpole shrimp could occur. Vernal pool tadpole shrimp critical habitat occurs seven miles west of the Sutter Bypass ESL.

Green Sturgeon

The North American green sturgeon (*Acipenser medirostris*)–southern Distinct Population Segment (DPS), listed as threatened under Federal Endangered Species Act (FESA), is under the jurisdiction of National Marine Fisheries Service (NMFS). Although anadromous, green sturgeon is primarily a marine-dwelling species of estuaries, bays, and oceanic waters. During the breeding season, mature green sturgeon navigate upstream to freshwater riverine environments from February to July. Spawning is relatively infrequent and believed to occur once every 2 to 5 years, from March to July, in cold, clean waters. Among the threats contributing to the green sturgeon's decline are invasive species, inaccessibility to reaches within its native range, pollution, water development projects, insufficient water levels, fishing, and habitat.

Within the project area, the Sacramento River's Sutter Bypass provides suitable habitat for green sturgeon and is designated critical habitat. This species is known to occur in the Sutter Bypass and is presumed present in the BSA on a seasonal basis.

Steelhead

The steelhead (*Oncorhynchus mykiss*)–California Central Valley (CCV) Distinct Population Segment (DPS) was listed as threatened under the FESA and is under the jurisdiction of NMFS. This DPS consists of steelhead in the Sacramento and San Joaquin River basins in the Central Valley. Steelhead are anadromous fish that spend part of their life cycle in fresh water and part in salt water. This species spawns in small, freshwater streams where the young remain from one to several years before migrating to the ocean to feed and grow. Adults return to their natal streams to spawn and complete their life cycle. CCV steelhead use the Sacramento River and its tributaries for migration (adults and juveniles), spawning (adults), and rearing (juveniles). Both hatchery and wild (naturally produced) CCV steelhead occur in the Sacramento River and its tributaries, although hatchery fish likely make up a large percentage of the in-river spawning population. The Sutter Bypass and Hunters Creek locations provides suitable habitat for CCV steelhead and the Sutter Bypass location lies within designated critical habitat. The occurrence of CCV steelhead in the Sacramento River is well documented. CCV steelhead use the BSA as a migration corridor during upstream and downstream migration and for juvenile rearing. Based on project habitat assessments, the BSA lacks riffle habitat that adult CCV steelhead use for spawning. Consequently, spawning and egg incubation do not occur within the BSA. CCV Steelhead is presumed present in the BSA of the Sutter Bypass and Hunters Creek locations on a seasonal basis.

Chinook Salmon-Central Valley Spring-Run

The Chinook salmon (*Oncorhynchus tshawytscha*)–Central Valley spring-run Evolutionarily Significant Unit (ESU) is listed as threatened under both FESA and CESA under the jurisdictions of NMFS and CDFW. The Chinook salmon–Central Valley Spring-run ESU consists of populations in the Sacramento River and its tributaries in California. Adult spring-run Chinook salmon enter the mainstem Sacramento River from February through September, with the peak upstream migration occurring from May through June. Spawning habitat occurs in the upper reaches of the Sacramento River and tributaries, including Butte Creek. Spawning and egg incubation do not occur within the BSA. Juvenile spring-run Chinook salmon typically spend up to one year rearing in fresh water before migrating to sea as yearlings, but some may migrate downstream as young-of-year juveniles. Rearing takes place in their natal streams, the mainstem of the Sacramento River, inundated floodplains (including the Sutter and Yolo bypasses), and the Delta.

Based on observations in Butte Creek and the Sacramento River, young-of-year juveniles typically migrate from November through May. Adult Chinook salmon use the BSA of the Sutter Bypass location as a migration corridor to migrate upstream from March through. The BSA also supports non-natal rearing habitat for juvenile spring-run Chinook salmon in winter and spring, particularly when high flows in the Sacramento River coincide with the downstream movement of juvenile spring-run Chinook salmon in the Sacramento River.

Chinook Salmon-Sacramento River Winter-Run

The Chinook salmon (*Oncorhynchus tshawytscha*)–Sacramento River winter-run ESU is listed as endangered under FESA. The ESU includes all naturally spawned populations of winter-run Chinook salmon in the Sacramento River and its tributaries, as well as artificially propagated fish from the Livingston-Stone National Fish Hatchery. The Sacramento River winter-run Chinook salmon ESU was listed as endangered under CESA in September 1989. Winter-run Chinook salmon spend 1–3 years in the ocean. Adult winter-run Chinook salmon leave the ocean and migrate through the Delta into the Sacramento River from December through July, with peak migration in March. Downstream movement of juvenile winter-run Chinook salmon begins in August, soon after fry emerge. The peak abundance of juveniles moving downstream at Red Bluff occurs in September and October. Winter-run Chinook salmon smolts may migrate through the Delta and San Francisco Bay to the ocean from November through May. The Sutter Bypass location lies within designated as critical habitat for winter-run Chinook salmon.

Western Spadefoot

Western spadefoot (*Spea hammondii*) is a California proposed threatened species. Western spadefoot is a lowland toad that occurs in washes, river floodplains, alluvial fans, playas, and alkali flats within valley and foothill grasslands, open chaparral, and pine-oak woodlands. It breeds in quiet streams and temporary rain pools. Western spadefoot prefers habitats with open vegetation and short grasses where the soil is sandy or gravely. Focused surveys for western spadefoot were not conducted. Western spadefoot has the potential to occur at the Dudley Creek location. Grassland in areas surrounding breeding habitats provide suitable upland and estivation habitat for western spadefoot. The pools collecting in the channel near the bridge could provide suitable breeding habitat for western spadefoot.

Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is not listed under the FESA, however is listed as threatened under the CESA and is a migratory bird species protected under the federal Migratory Bird Treaty Act (MBTA). Swainson's hawks breed in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Its breeding range spans from southwestern Canada to northern Mexico. While most of the population overwinters in Central America, some small populations have been found overwintering in the Sacramento-San Joaquin Delta area. Swainson's hawk has the potential to occur at the Hunters Creek location. During biological surveys, Swainson's hawk was not observed within the BSA, but one raptor next was observed approximately one mile north of the project area. However, Swainson's hawk could nest in areas with mature trees near the BSA, such as riparian forest/shrub and oak woodland savanna and could forage in the larger grassland and wetland areas.

California Red-legged Frog

The California red-legged frog (*Rana draytonii*) is a federally threatened species and a state species of special concern. The California red-legged frog is the largest native frog in the western United States. Adult females are larger than males at 5.4 inches and males reaching 4.5 inches. The abdomen and hind legs of adults are often red or salmon pink. The back of this species is characterized by small black flecks and larger irregular dark blotches, with indistinct outlines on a brown, gray, olive or reddish-brown background color. The California red-legged frog spends the bulk of its life in or near water sources like streams or stock ponds, which the species uses for breeding. The frog moves into neighboring upland areas to feed and shelter when stream flow levels are high. California red-legged frog has the potential to occur at the Dudley Creek location. The site lacks the slow moving or still water important for breeding, but could provide suitable upland foraging habitat seasonally.

Invasive Species

Various non-native and invasive species including, but not limited to Himalayan blackberry (*Rubus armeniacus*), black mustard (*Brassica nigra*), milk thistle (*Silybum marianum*), Pepperweed (*Lepidium* latifolium), wild oat (*Avena fatua*), bindweed (*Convolvulus arvensis*), vetch (*Vicia sativa*), wild radish (*Raphanus sativa*), poison hemlock (*Conium maculatum*), yellow star thistle (*Centaurea solstitialis*), longbeak stork's bill (*Erodium botrys*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), whitetop (*Lepidium draba*), catnip (*Nepeta cataria*), German chamomile (*Matricaria chamomilla*), Bermuda grass

(*Cynodon dactylon*), yellow sweet clover (*Melilotus officinalis*), Hyssop loosestrife (*Lythrum hyssopifolia*), purple top vervain(*Verbena bonariensis*), Italian thistle (*Carduus tenuiflorus*), Italian rye grass (*Festuca perennis*), fennel (*Foeniculum vulgare*), bulbous canary grass (*Phalaris aquatica*), bird's foot trefoil (*Lotus corniculatus*), grape (*Vitis vinifera*), mulberry (*Morus alba*), prickly lettuce (*Lactuca serriola),* white sweet clover (*Melilotus albus*), and scarlet pimpernel (*Lysimachia arvensis*) were identified during botanical and reconnaissance surveys. The proposed project would not contribute to the increasing number of invasive species beyond what is currently present within the ESL. After construction is completed and all materials are removed, the project areas would be restored to a natural setting by placing erosion control and replanting of native plant species.

Environmental Consequences

This section evaluates potential effects of project construction activities on sensitive biological resources within the ESL.

Sensitive Natural Communities

Riparian Habitat

The proposed project would result in approximately 0.5 acres of permanent impacts to riparian habitat due to the placement of rock slope protection, erosion control, and construction staging. During construction, removal of riparian vegetation shall not exceed the minimum amount necessary for construction activities. ESA fencing will be placed for riparian areas to be avoided during construction. At the end of construction, revegetation planting would be implemented onsite to the greatest extent feasible. Caltrans Standard Measures and BMPs, outlined in Chapter 1, Section 1.5, would be implemented as part of the proposed project and would minimize impacts to riparian habitat. Permanent impacts to riparian habitat that could not be addressed onsite would be addressed through an agency-approved mitigation bank credits or mitigating off-site at an agency approved location. Any additional avoidance and minimization measures developed during environmental permitting will be incorporated into the project.

Wetlands and Other Waters

The proposed project would result in the permanent impact of 0.44 acres to Waters of the U.S. and State from the placement of rock slope protection and erosion control measures during construction. Temporary impacts to Waters of the U.S. and State would be approximately 0.32 acres from temporary channel impacts and 13.93 acres to wetlands (preliminary estimates) due to staging and access activities during construction. A comprehensive aquatic resource delineation is scheduled for spring 2025 and the impact estimate to wetlands would be revised. Permanent impacts to Waters of the U.S. and State will be unavoidable due to construction activities (i.e., RSP installation in stream channels). Caltrans proposes to address permanent impacts to Waters of the U.S. and State through the purchase of agency-approved mitigation bank credit or mitigating off-site at an agency approved location. To avoid and minimize temporary impacts to Waters of the U.S. and State and wetlands, Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, Section 1.5 would be implemented. In addition, the proposed project would require permits from the following agencies: United States Army Corp of Engineers (USACE), Central Valley Regional Water Quality Control Board (CVRWQCB), and the California Department of Fish and Wildlife (CDFW). Any additional avoidance and minimization measures developed during environmental permitting will be incorporated into the project.

Northern Hardpan Vernal Pool

The proposed project would not result in any permanent impacts to northern hardpan vernal pool (NHVP) during construction. As a preliminary estimate, the proposed project would result in the temporary impact of 13.9 acres to NHVP at Sutter Bypass from construction staging activities. A comprehensive aquatic resource delineation is scheduled for spring 2025 and the impact estimate to NHVP would be revised. To avoid and minimize potential impacts to NHVP, ground-disturbing activities within 250 feet of suitable habitat would be avoided during the rainy season (approximately October 15 to May 15). In addition, Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, Section 1.5 would be implemented to avoid and minimize temporary impacts to NHVP. Permanent impacts to NHVP that could not be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

Essential Fish Habitat

The proposed project would result in approximately 0.38 acres of permanent impacts to EFH due to the placement of Rock Slope Protection and erosion control measures during construction. Temporary impacts to EFH would be approximately 0.38 acres from access and staging activities during construction. Pursuant to FESA, Caltrans has concluded that the proposed project ***may adversely affect*** EFH. Caltrans proposes to offset any permanent impacts to EFH through the purchase of agency-approved mitigation bank credits within the service area of the project location or through an agency-approved off-site mitigation project. Prior to the start of construction, an ESA fence will be installed along the construction limits to prevent encroachment into riparian areas adjacent to the construction site that are not targeted for clearing. Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, Section 1.5 would be incorporated to minimize temporary and permanent impacts to ESH. In addition, Caltrans would initiate Section 7 consultation with NMFS. Any additional avoidance and minimization measures developed during the FESA Section 7 consultation with NMFS would be incorporated into the project.

Plant Species

Woolly Rose Mallow

Four individual woolly rose mallow were observed within the ESL of Sutter Bypass. Three of the four individuals are outside the immediate area where work is to occur. One individual is located near the east channel where work is to occur. To ensure that no incidental impacts were to occur to the four individual woolly rose mallow, temporary high-visibility fencing will be placed around them prior to construction. Caltrans Standard Measures and Best Management Practices outlined in Chapter 1, Section 1.5 would be implemented to avoid woolly rose mallow and any special status plant species.

Animal Species

Bats

The project would cause temporarily impact night roost habitat on the bridge structures of the Sutter Bypass and Hunters Creek, due to planned construction activities. There would also be potential temporary and permanent loss of tree roosting habitat at all three locations. Due to the lack of suitable crevice habitat within the bridges within the BSA, Caltrans does not propose to install bat exclusion material, and will instead keep the night-roosting habitat under the bridges available during construction.

With the Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5, Caltrans does not anticipate "take" of any species of bats.

Marysville California Kangaroo Rat

Marysville California kangaroo rat is unlikely to be impacted from the proposed project as the last known siting was in 1983. Only marginal grassland habitat exists along the Sutter Bypass and no work will occur within those areas, or areas where it was last seen. Due to the lack of suitable habitat for Marysville California kangaroo rat within the BSAs, no species-specific avoidance and minimization measures are proposed at this time.

Threatened and Endangered Species

Butte County Meadowfoam

The proposed project would result in approximately 0.0065 acres of permanent impact to Butte County meadowfoam suitable habitat as a result of RSP placement. Temporary impacts of approximately 0.046 acres to Butte County meadow foam habitat would be the result of construction staging activities. Although no individual Butte County meadowfoams were obsereved during botanical surveys, it was determined that the ESL for Dudley Creek falls within designated critical habitat.

Pursuant to FESA, Caltrans has determined the project ***may affect, but is not likely to adversely affect*** Butte County meadowfoam. Caltrans Standard Measures and Best Management Practices (BMPs) outlined earlier in Chapter 1, Section 1.5 would be incorporated to avoid and minimize impacts to Butte County meadowfoam habitat.

- Pre-construction surveys would be conducted, and any identified individuals would be protected with ESA fencing for the duration of construction. If individuals are discovered within the ESL and are unable to be avoided during construction, the project would incorporate species-specific measures such as seed collection, plant salvage, and/or plant establishment procedures to ensure impacts are negligible. Potential indirect impacts that could occur due to invasive non-native plants colonizing the disturbed area would be minimized through onsite restoration efforts and standard measures to control/reduce the spread of invasive non-native species.
- Any additional avoidance and minimization measures developed during the FESA Section 7 consultation with USFWS will be incorporated into the project.

Pursuant to CESA, Caltrans has determined there would be no take/no impact on Butte meadowfoam.

California Tiger Salamander

The proposed project would result in approximately 0.69 acres of permanent impacts to potentially suitable California tiger salamander habitat as a result of RSP placement during construction. Temporary impacts of approximately 14.2 acre to potentially suitable California tiger salamander upland habitat would be the result of construction staging activities.

Pursuant to FESA, due to the low likelihood of California tiger salamander being present, Caltrans has concluded the project ***may affect, but is not likely to adversely affect*** California tiger salamander. Caltrans would initiate FESA Section 7 consultation with USFWS where additional avoidance and minimization measures might be developed.

Pursuant to CESA, Caltrans is not anticipating "take" of California tiger salamander. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to California tiger salamander.

Northwestern Pond Turtle

The proposed project would result in approximately 0.44 acres of permanent channel impacts to NWPT habitat as a result of RSP placement during construction. Temporary channel impacts would result in approximately 0.32 acres and 13.93 acres of temporary impacts to potential seasonal wetlands from construction staging activities (preliminary estimate to be refined spring 2025). Construction activities could negatively impact NWPT individuals and suitable habitat.

Pursuant to FESA, due to the potential construction-related direct and indirect effects, Caltrans has concluded the project ***may affect, and is likely to adversely affect*** NWPT. To avoid and minimize impacts to NWPT, pre-construction surveys would be conducted. If any individual NWPT were discovered, they would be protected under an Aquatic Species Relocation Plan for the duration of construction. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to NWPT. Caltrans would initiate FESA Section 7 consultation with USFWS to further develop additional avoidance and minimization measures. Caltrans is not proposing any species-specific compensatory mitigation for NWPT but may be required depending on FESA Section 7 consultation with USFWS.

Foothill Yellow-Legged Frog

The proposed project would result in approximately 0.44 acres of permanent impacts to potentially suitable FYLF habitat from construction activities and placement of RSP. Temporary impacts of approximately 3.65 acres to potentially suitable FYLF habitat will be the result of construction staging activities.

Pursuant to CESA, Caltrans is ***not anticipating "take"*** of FYLF. To avoid and minimize impacts to FYLF the following avoidance and minimization measures would be implemented:

- Prior to construction, pre-construction surveys will be conducted by a qualified biologist to determine the presence of FYLF adults, juveniles, tadpoles, or egg masses within the project area.
- If water pumps are used for dewatering, the pump intakes would be screened with 0.2- inch mesh to prevent frogs from entering the pump system. Even if no FYLF were seen during diversion installation, this measure is to ensure that frogs that were unobserved are not harmed or killed by water pumps. If FYLF are observed during water diversion installation, they will be relocated by a qualified biologist outside of the construction area to appropriate aquatic habitat. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to FYLF during construction.

Giant Garter Snake

The proposed project would result in approximately 0.7 acres of permanent impacts to GGS habitat from construction activities and placement of RSP. Temporary impacts of approximately 14.3 acres to potentially suitable seasonal wetland GGS habitat will be the result of construction staging activities.

Pursuant to FESA, due to potential construction-related direct and indirect effects, Caltrans has concluded that the project ***may affect, and is likely to adversely affect*** GGS. Caltrans would initiate FESA Section 7 consultation with USFWS.

Pursuant to CESA, Caltrans is anticipating potential ***"take"*** of GGS. Caltrans would initiate CESA consultation with CDFW. Prior to construction, construction activities will be conducted between May 1 through October 1 to minimize impacts to GGS.

- Construction personnel will attend a Worker Environmental Awareness Training Program to recognize GGS and their habitat.
- In addition, the project area will be surveyed by USFWS approved biologist within twenty-four hours prior to construction and repeated if a two-week or greater lapse in construction activity occurs.
- Dewatered areas will remain dry for at least 15 consecutive days prior to construction activities in the channels. Areas within the project area that were disturbed will be replanted using native plant species.
- Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to GGS during construction.
- Permanent impacts to GGS habitat that could not be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.
- Any additional avoidance and minimization measures developed during FESA Section 7 consultation with USFWS and CESA consultation with CDFW will be incorporated into the project.

Tricolored Blackbird

The proposed project would result in approximately 0.44 acres of permanent impact to potentially suitable tricolored blackbird habitat as a result of construction activities and placement of RSP. Temporary impacts of approximately 3.65 acres to potentially suitable tricolored blackbird habitat would be the result of construction staging activities. Impacts to potentially suitable tricolored blackbird habitat would be avoided with incorporation of Standard Measures and BMPs outlined in Chapter 1, Section 1.5. In addition, trees and vegetation would be prioritized to be removed outside of the nesting bird season from February 1 to September 30. If tree or vegetation removal cannot be completed outside of the bird nesting season, a qualified biologist must be present to conduct nesting bird surveys within five days prior to schedule removal.

Pursuant to CESA,Caltrans ***does not anticipate the project activities to result in "take"*** of the species, due to restrictions on vegetation removal and required bird nesting surveys.

Greater Sandhill Crane

The proposed project would result in approximately 0.44 acres of permanent impact to potentially suitable greater sandhill crane habitat as a result of construction activities and placement of RSP. Temporary impacts of approximately 3.65 acres to potentially suitable greater sandhill crane habitat would be the result of construction staging activities.

Pursuant to CESA, Caltrans is ***not anticipating "take"*** of greater sandhill crane. Impacts to potential suitable greater sandhill crane habitat would be avoided with incorporation of Standard Measures and BMPs outlined in Chapter 1, Section 1.5. In addition, trees and vegetation would be prioritized to be removed outside of the nesting bird season from February 1 to September 30. If tree or vegetation removal cannot be completed outside of the bird nesting season, a qualified biologist must be present to conduct nesting bird surveys within five days prior to schedule removal.

Valley Elderberry Longhorn Beetle

A single elderberry shrub was found in a patch of riparian vegetation along the eastern bank of the west channel at the Sutter Bypass location. The ESL does not occur in VELB critical habitat. Construction activities will be at least 100 feet from the elderberry shrub and, as a result, no indirect effects on valley elderberry longhorn beetle are expected.

Pursuant to FESA, Caltrans has determined that the proposed project would have ***no effect*** on valley elderberry longhorn beetle.

Vernal Pool Tadpole Shrimp

No protocol vernal pool tadpole shrimp surveys were conducted. Dudley Creek and Hunters Creek location do not have suitable wetland habitat to support vernal pool tadpole shrimp. However, the Sutter Bypass ESL has seasonal wetlands that may support vernal pool tadpole shrimp. Critical habitat was identified approximately seven miles west of the Sutter Bypass ESL.

Pursuant to FESA, Caltrans has determined the project ***may affect, but is not likely to adversely affect*** vernal pool tadpole shrimp. An aquatic resource delineation is planned for spring 2025 to confirm habitat suitability. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to vernal pool tadpole shrimp during construction. To account for potential impacts to vernal pool tadpole shrimp, Section 7 Consultation with USFWS will be initiated, and a letter of concurrence will

be obtained. Any additional avoidance and minimization measures developed during the FESA Section 7 consultation with USFWS would be incorporated into the project.

Green Sturgeon/Steelhead/ CVSR Chinook Salmon/ SRWR Chinook Salmon

The proposed project would impact green sturgeon, steelhead, CVSR Chinook salmon, and SRWR chinook salmon habitat as a result of construction-related activities along the Sutter Bypass. Permanent impacts would be the result of removal of riparian vegetation and associated shaded riverine aquatic cover within the project area. Prior to construction, ESA fencing will be installed along the construction limits to prevent encroachment into riparian areas adjacent to the construction site. Temporary impacts would be a result of sedimentation and turbidity, stranded fish individuals in cofferdams, and harm to fish as a result of accidental hazardous materias and chemical spills. To minmize sedimentation and turbidity, all construction work within the channel will occur between June 1 and October 15 during the summer low flow period to minimize potential exposure of juveniles and to minimize fish entrapment within the cofferdams. A qualified biologist will prepare and implement a Fish Salvage Plan to recover any individuals entrapped in cofferdams. The Fish Salvage Plan will receive approval from NMFS prior to intiating any in-channel work.To minimize the potential for accidnental spills of hazardous materials into the aquatic envrionment, a Spill Prevention Control and Countermeasure Plan (SPCCP) will be prepared. Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to minimize potential impacts to salmonids and their habitat.

Per FESA, due to potential construction-related direct and indirect effects, the project ***may affect, and is likely to adversely affect*** salmonids species. To account for potential impacts to salmonids species and designated critical habitat, Caltrans will initiatate FESA Section 7 consultation with NMFS and a Biological Opinion will be obtained.

Pursuant to CESA, Caltrans will initiate CESA consultation with CDFW and will be acquiring an Incidental Take Permit (ITP) for potential ***"take"*** of CVSR Chinook salmon and SRWR Chinook salmon. Any additional avoidance and minimization measures developed during the FESA Section 7 consultation with USFWS and CESA consultation with CDFW would be incorporated into the project.

Western Spadefoot

The proposed project would result in approximately 0.0065 acres of permanent impact to western spadefoot habitat as a result of construction activities and placement of RSP. Temporary impacts of approximately 0.046 acres to western spadefoot habitat would be the result of construction staging activities. Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to minimize potential impacts to western spadefoot and their habitat.

Pursuant to CESA, Caltrans is ***not anticipating "take"*** of western spadefoot. Caltrans will initiate CESA consultation with CDFW and include additional measures that might be developed for western spadefoot.

Swainson's Hawk

Swainson's hawk were not observed during surveys within the project vicinity; however, suitable foraging habitat was identified within the BSA. Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to minimize potential impacts to Swainson's hawk and their habitat. Prior to construction, vegetation removal should not occur during the nesting season between February 1 to September 30. If not possible, pre-construction surveys will be performed to determine the presence of nesting birds and ensure active nests are not directly or indirectly impacted during construction. If the nest of a protected bird is found, the perimeter shall be flagged, and a qualified biologist will coordinate with USFWS and CDFW to determine an appropriate buffer distance from construction to ensure protection of the nest. The contractor shall stop work in the nesting area and is prohibited from conducting work that could disturb the nesting birds until the buffer is established.

Pursuant to CESA, Caltrans ***does not anticipate "take"*** of Swainson's hawk or their nests.

California Red-Legged Frog

The proposed project would result in approximately 0.0065 acres of permanent impact to potentially suitable California red-legged frog habitat as a result of construction activities and placement of RSP. Temporary impacts of approximately 0.046 acres to potentially suitable California red-legged frog habitat would be the result of construction staging activities.

Pursuant to FESA, due to the potential construction-related direct and indirect effects, the project ***may affect, and is not likely to adversely affect*** California red-legged frog. Caltrans will initiate FESA Section 7 consultation with USFWS and include additional measures that might be developed for California red-legged frog. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to California red-legged frog.

Avoidance, Minimization and Mitigation Measures

Riparian Habitat

The following avoidance, minimization, and mitigation measures will be implemented for riparian habitat during construction:

- Removal of riparian vegetation shall not exceed the minimum amount necessary for construction activities. Riparian areas to be avoided will be marked as ESAs with high visibility fencing.
- Upon completion of the project, areas of disturbance on streambanks shall be stabilized with a hydroseed mixture of native species.
- Hay and/or straw used in erosion control application shall be certified weed-free or weed seed free.
- Revegetation planting would be implemented onsite to the greatest extent feasible to riparian areas under the jurisdiction of natural resource permitting agencies, and all other areas will be addressed through landscape architecture using only native species from regionally appropriate seed.

Permanent impacts to riparian habitat thatcould not be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

Wetlands and Other Waters

The following avoidance, minimization, and mitigation measures will be implemented for wetlands and other waters during construction:

- Work in the channel would likely be limited to the driest/low flow season (approximate dates of June 15 - October 15) by environmental permits (1602, 404, 401).

- Upon completion of project, areas of disturbance on streambanks shall be stabilized with a hydroseed mixture of native species.
- Hay and/or straw used in erosion control application shall be certified weed-free or weed seed free.
- A contractor supplied biologist would relocate aquatic species if necessary, during dewatering or water diversions.
- Permits: Caltrans would include a copy of all relevant permits within the construction bid package of the proposed Project. The Resident Engineer or their designee would be responsible for implementing the Terms and Conditions of all other permits.
- Storm water pollution prevention plan (SWPPP): The Storm Water Pollution Prevention Plan (SWPPP) is a document that addresses water pollution control for a construction project. The contractor would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) that includes erosion control BMPs and construction waste containment measures to ensure that waters of the U.S. and state are protected during and after project construction. The SWPPP would include sedimentation, siltation, turbidity, and non-visual pollutant monitoring, and outline a sampling and analysis strategy, monitoring and reporting schedule, and inspection schedule (Caltrans 2016).
- Spill prevention control and countermeasure plan (SPCCP): To minimize the potential for accidental spills of materials hazardous to the aquatic environment, a SPCCP would be prepared.
- Water diversion structures: If water diversion structures are necessary, the contractor would submit a water diversion plan to Caltrans to send to appropriate regulatory agencies prior to construction.

Onsite restoration of Waters of the U.S. and State will be implemented to the greatest extent possible. However, some permanent impacts will be unavoidable due to construction activities. Permanent impacts to Waters of the U.S. and State that would not be able to be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

Northern Hardpan Vernal Pool

The following avoidance, minimization, and mitigation measures will be implemented for northern hardpan vernal (NHVP) pool during construction:

- Ground disturbance within 250 feet of suitable habitat will be avoided during the rainy season (approximately October 15 through May 15).

Potential permanent impacts to NHVP that could not be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

Essential Fish Habitat

The following avoidance, minimization, and mitigation measures will be implemented for essential fish habitat pool during construction:

- Prior to initiating construction, an ESA fence will be installed along the construction limits to prevent encroachment into riparian areas adjacent to the construction site that are not targeted for clearing.
- BMPs will be implemented to guarantee the smallest practicable footprint to minimize temporary, indirect, and permanent impacts to jurisdictional wetlands and Waters of the United States.
- Work in the channel would likely be limited to the driest/low flow season (approximate dates of June 15–October 15) pursuant to environmental permits.

Caltrans proposes to offset any permanent impact of essential fish habitat through the purchase of agency-approved mitigation bank credits within the service area of the project location or through an agency-approved off-site mitigation project.

Plant Species

The following avoidance, minimization, and mitigation measures will be implemented for plant species during construction:

- Pre-construction surveys would be conducted and identified individual plants would be protected with ESA fencing for the duration of construction.
- If special status plant species are found in a new location within the ESL and is unable to be avoided during construction, the project would incorporate species-

specific measures such as seed collection, plant salvage, and/or plant establishment procedures to ensure impacts are negligible.

- Potential indirect impacts that could occur due to invasive non-native plants colonizing the disturbed area would be minimized through onsite restoration efforts and standard measures to control/reduce the spread of invasive non-native species.

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

Northwestern Pond Turtle

The following avoidance, minimization, and mitigation measures will be implemented for NWPT during construction:

- Pre-construction surveys would be conducted, and any individual northwestern pond turtles discovered would be protected under an Aquatic Species Relocation Plan for the duration of construction.
- Any additional avoidance and minimization measures developed during the FESA Section 7 consultation with USFWS will be incorporated into the project.
- Installing RSP in all locations may positively impact NWPT by increasing suitable basking habitat along stream banks. Caltrans is not proposing any species-specific compensatory mitigation for NWPT. However, this may change during FESA Section 7 consultation with USFWS, and any required compensatory mitigation would be incorporated into the project.

California Tiger Salamander

Impacts to potentially suitable California tiger salamander habitat would be avoided with incorporation of the Standard Measures and Best Management Practices outlined in Chapter 1, Section 1.5. Any additional avoidance and minimization measures developed during the FESA Section 7 consultation with USFWS.

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

Foothill Yellow-legged Frog

The following avoidance, minimization, and mitigation measures will be implemented for FYLF during construction:

- Conduct a Pre-Construction Survey: Within 3-5 days prior to entering or working at the project site, a qualified biologist shall examine the project site to determine the presence/absence of standing or flowing water, and the presence and/or the potential for presence of FYLF adults, juveniles, tadpoles, or egg masses within the project area.
- If water pumps are used for dewatering, the pump intakes would be screened with 0.2- inch mesh to prevent frogs from entering the pump system. Even if no FYLF were seen during diversion installation, this measure is to ensure that frogs that were unobserved are not harmed or killed by water pumps.
- If FYLF are observed during water diversion installation, they would be relocated by a qualified biologist outside of the construction area to appropriate aquatic habitat.

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

Giant Garter Snake

The following avoidance, minimization, and mitigation measures will be implemented for GGS during construction:

- Construction activity will be conducted between May 1 and October 1, which is the active season for GGS in order to minimize impacts to the species.
- A Worker Environmental Awareness Training Program for construction personnel will be conducted by USFWS-approved biologist for all construction workers including contractors, prior to the start of construction activities. This training instructs workers to recognize GGS and their habitats.
- Twenty-four hours prior to construction activities, the project area shall be surveyed for GGS by USFWS-approved biologist. Surveys of the project area should be repeated if a two-week or greater lapse in construction activity occurs. If GGS is encountered during construction, activities will cease until appropriate corrective measures have been completed or it has been determined that the GGS will not be

harmed. Any sightings and any incidental take will be reported to the USFWS immediately.

- The dewatered areas will remain dry (no standing water) for at least 15 consecutive days prior to doing the construction activities in the channels.
- Dewatered areas will then be surveyed by USFWS-approved biologist before construction activity commences following the 15 day dry period.
- Disturbed areas within the action area will be replanted using native plant species.
- Any additional avoidance and minimization measures developed during the FESA Section 7 consultation with USFWS and CESA consultation with CDFW will be incorporated into the project.

Permanent impacts to GGS habitat that would not be able to be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

Tricolored Blackbird

The following avoidance, minimization, and mitigation measures will be implemented for tricolored blackbird during construction:

- For all three bridges, trees and other vegetation would be prioritized to be removed outside of the nesting bird season (February 1 - September 30). If tree/vegetation removal cannot be completed outside of the bird nesting season, a biologist must conduct nesting bird surveys within five days prior to scheduled removal.

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

Greater Sandhill Crane

The following avoidance, minimization, and mitigation measures will be implemented for greater sandhill crane during construction:

- For all three bridges, trees and other vegetation would be prioritized to be removed outside of the nesting bird season (February 1 - September 30). If tree/vegetation removal cannot be completed outside of the bird nesting season, a biologist must conduct nesting bird surveys within five days prior to scheduled removal.

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

Valley Elderberry Longhorn Beetle

No avoidance or minimization measures are proposed for the valley elderberry longhorn beetle because all project activities would be at least 100 feet from known elderberry shrubs.

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

Vernal Pool Tadpole Shrimp

The following avoidance, minimization, and mitigation measures will be implemented for vernal pool tadpole shrimp during construction:

- Ground disturbance within 250 feet of suitable habitat will be avoided during the rainy season (approximately October 15 through May 15)

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

Green Sturgeon

The following avoidance, minimization, and mitigation measures will be implemented for green sturgeon during construction:

- All construction work that will take place in the live channel will occur between June 1 and October 15 during the summer low flow period to minimize potential exposure of juveniles and to minimize fish entrapment within cofferdams.
- In-channel work will not be conducted at night to afford fish quiet, unobstructed passage during nighttime migratory hours.
- A qualified biologist will prepare and implement a Fish Salvage Plan to recover any individuals entrapped in cofferdams. The Fish Salvage Plan will receive approval from NMFS prior to initiating any in-channel work. At a minimum, the plan will:
    - Provide for the collection, transfer, and release of all entrapped sensitive fish by a qualified biologist to a designated location downstream of project activities.

  - Record the electrical conductivity, temperature (water and air), and pH within both the cofferdam and the free-flowing river.
  - Ensure all rescued sensitive fish are kept in aerated water and at appropriate temperatures at all times prior to release.
- To minimize the potential for accidental spills of materials hazardous to the aquatic environment, a Spill Prevention Control and Countermeasure Plan (SPCCP) will be prepared.
- Prior to initiating construction, an ESA fence shall be installed along the construction limits to prevent encroachment into the riparian areas adjacent to the construction site.
- Project activities that may affect the flow of the river through placement of fill and pier construction shall comply with the 2001 NMFS Guidelines for Salmonid Passage at Stream Crossings, where applicable. The guidelines include, but are not limited to:
  - a minimum water depth (12 inches for adults and 6 inches for juveniles) at the low fish passage
  - a maximum hydraulic drop of 1 foot for adults and 6 inches for juveniles
  - avoidance of abrupt changes in water surface and velocities, and
  - structures aligned with the stream, with no abrupt changes to inflow direction upstream or downstream of the crossing.
- All water pumping or withdrawal from the river shall comply with 1997 NMFS Fish Screening Criteria for Anadromous Salmonids, where applicable, to avoid entrainment of fish. The criteria include, but are not limited to:
  - The screen design must provide for uniform flow distribution over the surface of the screen.
  - Screen material openings shall not exceed 3/32 inch for fry-sized sturgeon and shall not exceed 1/4 inch for fingerling-sized sturgeon.
  - Where physically practical, the screen shall be constructed at the diversion entrance. The screen face should be generally parallel to river flow and aligned with the adjacent bank line.
  - The design approach velocity shall not exceed 0.33 feet per second for fry sized sturgeon or 0.8 feet per second for fingerling sized sturgeon.

  - The screen design must provide for uniform flow distribution over the surface of the screen.

Permanent impacts to green sturgeon habitat that would not be able to be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

Steelhead

The following avoidance, minimization, and mitigation measures will be implemented for steelhead during construction:

- All construction work that will take place in the live channel will occur between June 1 and October 15 during the summer low flow period to minimize fish entrapment within cofferdams.
- In-channel work will not be conducted at night to afford fish quiet, unobstructed passage during nighttime migratory hours.
- A qualified biologist will prepare and implement a Fish Salvage Plan to recover any individuals entrapped in cofferdams. The fish salvage plan will receive approval from NMFS prior to initiating any in-channel work. At a minimum, the plan will:
  - Provide for the collection, transfer, and release of all entrapped sensitive fish by a qualified biologist to a designated location downstream of project activities.
  - Record the electrical conductivity, temperature (water and air), and pH within both the cofferdam and the free-flowing river.
  - Ensure all rescued sensitive fish are kept in aerated water and at appropriate temperatures at all times prior to release.
- To minimize the potential for accidental spills of materials hazardous to the aquatic environment, a Spill Prevention Control and Countermeasure Plan (SPCCP) will be prepared.
- Prior to initiating construction, an ESA fence shall be installed along the construction limits to prevent encroachment into the riparian areas adjacent to the construction site.

- Project activities that may affect the flow of the river through placement of fill and pier construction shall comply with the 2001 NMFS Guidelines for Salmonid Passage at Stream Crossings, where applicable. The guidelines include, but are not limited to:
    - a minimum water depth (12 inches for adults and 6 inches for juveniles) at the low fish passage.
    - a maximum hydraulic drop of 1 foot for adults and 6 inches for juveniles.
    - avoidance of abrupt changes in water surface and velocities, and structures aligned with the stream, with no abrupt changes to inflow direction upstream or downstream of the crossing.
- All water pumping or withdrawal from the river shall comply with 1997 NMFS Fish Screening Criteria for Anadromous Salmonids, where applicable, to avoid entrainment of fish. The criteria include, but are not limited to:
    - The screen design must provide for uniform flow distribution over the surface of the screen.
    - Screen material openings shall not exceed 3/32 inch for fry-sized sturgeon and shall not exceed 1/4 inch for fingerling-sized sturgeon.
    - Where physically practical, the screen shall be constructed at the diversion entrance. The screen face should be generally parallel to river flow and aligned with the adjacent bank line.
    - The design approach velocity shall not exceed 0.33 feet per second for fry sized sturgeon or 0.8 feet per second for fingerling sized sturgeon.
    - The screen design must provide for uniform flow distribution over the surface of the screen.

Permanent impacts to CCV steelhead habitat that could not be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

CVSR Chinook Salmon

The following avoidance, minimization, and mitigation measures will be implemented for CVSR Chinook salmon during construction:

- All construction work that will take place in the live channel will occur between June 1 and October 15 during the summer low flow period to minimize fish entrapment within cofferdams.
- In-channel work will not be conducted at night to afford fish quiet, unobstructed passage during nighttime migratory hours.
- A qualified biologist will prepare and implement a Fish Salvage Plan to recover any individuals entrapped in cofferdams. The fish salvage plan will receive approval from NMFS prior to initiating any in-channel work. At a minimum, the plan will:
    - Provide for the collection, transfer, and release of all entrapped sensitive fish by a qualified biologist to a designated location downstream of project activities.
    - Record the electrical conductivity, temperature (water and air), and pH within both the cofferdam and the free-flowing river.
    - Ensure all rescued sensitive fish are kept in aerated water and at appropriate temperatures at all times prior to release.
- To minimize the potential for accidental spills of materials hazardous to the aquatic environment, a Spill Prevention Control and Countermeasure Plan (SPCCP) will be prepared.
- Prior to initiating construction, an ESA fence shall be installed along the construction limits to prevent encroachment into the riparian areas adjacent to the construction site.
- Project activities that may affect the flow of the river through placement of fill and pier construction shall comply with the 2001 NMFS Guidelines for Salmonid Passage at Stream Crossings, where applicable. The guidelines include, but are not limited to:
    - a minimum water depth (12 inches for adults and 6 inches for juveniles) at the low fish passage.
    - a maximum hydraulic drop of 1 foot for adults and 6 inches for juveniles.

  - avoidance of abrupt changes in water surface and velocities, and structures aligned with the stream, with no abrupt changes to inflow direction upstream or downstream of the crossing.

- All water pumping or withdrawal from the river shall comply with 1997 NMFS Fish Screening Criteria for Anadromous Salmonids, where applicable, to avoid entrainment of fish. The criteria include, but are not limited to:
  - The screen design must provide for uniform flow distribution over the surface of the screen.
  - Screen material openings shall not exceed 3/32 inch for fry-sized sturgeon and shall not exceed 1/4 inch for fingerling-sized sturgeon.
  - Where physically practical, the screen shall be constructed at the diversion entrance. The screen face should be generally parallel to river flow and aligned with the adjacent bank line.
  - The design approach velocity shall not exceed 0.33 feet per second for fry sized sturgeon or 0.8 feet per second for fingerling sized sturgeon.
  - The screen design must provide for uniform flow distribution over the surface of the screen.

Permanent impacts to CCV steelhead habitat that could not be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

SRWR Chinook Salmon

The following avoidance, minimization, and mitigation measures will be implemented for SRWR Chinook salmon during construction:

- All construction work that will take place in the live channel will occur between June 1 and October 15 during the summer low flow period to minimize fish entrapment within cofferdams.
- In-channel work will not be conducted at night to afford fish quiet, unobstructed passage during nighttime migratory hours.
- A qualified biologist will prepare and implement a Fish Salvage Plan to recover any individuals entrapped in cofferdams. The fish salvage plan will receive approval from NMFS prior to initiating any in-channel work. At a minimum, the plan will:

  - Provide for the collection, transfer, and release of all entrapped sensitive fish by a qualified biologist to a designated location downstream of project activities.
  - Record the electrical conductivity, temperature (water and air), and pH within both the cofferdam and the free-flowing river.
  - Ensure all rescued sensitive fish are kept in aerated water and at appropriate temperatures at all times prior to release.
- To minimize the potential for accidental spills of materials hazardous to the aquatic environment, a Spill Prevention Control and Countermeasure Plan (SPCCP) will be prepared.
- Prior to initiating construction, an ESA fence shall be installed along the construction limits to prevent encroachment into the riparian areas adjacent to the construction site.
- Project activities that may affect the flow of the river through placement of fill and pier construction shall comply with the 2001 NMFS Guidelines for Salmonid Passage at Stream Crossings, where applicable. The guidelines include, but are not limited to:
  - a minimum water depth (12 inches for adults and 6 inches for juveniles) at the low fish passage.
  - a maximum hydraulic drop of 1 foot for adults and 6 inches for juveniles.
  - avoidance of abrupt changes in water surface and velocities, and structures aligned with the stream, with no abrupt changes to inflow direction upstream or downstream of the crossing.
- All water pumping or withdrawal from the river shall comply with 1997 NMFS Fish Screening Criteria for Anadromous Salmonids, where applicable, to avoid entrainment of fish. The criteria include, but are not limited to:
  - The screen design must provide for uniform flow distribution over the surface of the screen.
  - Screen material openings shall not exceed 3/32 inch for fry-sized sturgeon and shall not exceed 1/4 inch for fingerling-sized sturgeon.
  - Where physically practical, the screen shall be constructed at the diversion entrance. The screen face should be generally parallel to river flow and aligned with the adjacent bank line.

- The design approach velocity shall not exceed 0.33 feet per second for fry sized sturgeon or 0.8 feet per second for fingerling sized sturgeon.
- The screen design must provide for uniform flow distribution over the surface of the screen.

Permanent impacts to CCV steelhead habitat that could not be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

Bats

The following avoidance, minimization, and mitigation measures will be implemented for bats during construction:

- For all three bridges, trees and other vegetation would be prioritized to be removed outside of the nesting bird season (February 1 - September 30). If tree/vegetation removal cannot be completed outside of the bird nesting season, a biologist must conduct nesting bird surveys within five days prior to scheduled removal.
- 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.

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

Marysville California Kangaroo Rat

Due to the lack of suitable habitat for Marysville California kangaroo rat within the BSA, no species-specific avoidance and minimization measures are proposed.

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

Western Spadefoot

The following avoidance, minimization, and mitigation measures will be implemented for Western spadefoot during construction:

- A qualified biologist would monitor in-stream construction activities that could potentially impact sensitive biological receptors (e.g., amphibians, fish). The biological monitor would be present during activities such as installation and removal of dewatering or diversion systems, riparian and aquatic vegetation removal, RSP installation, etc. to ensure adherence to permit conditions. In-water work restrictions would be implemented.
- A Limited Operating Period would be observed, whereby all in-stream work below ordinary high water would be restricted to the period between June 15 and October 15 to protect water quality and vulnerable life stages of sensitive fish species.
- The contractor would be required to prepare and submit a Temporary Creek Diversion System Plan to Caltrans for approval prior to any creek diversion. Depending on site conditions, the plan may also require specifications for the relocation of sensitive aquatic species (see also Aquatic Species Relocation Plan in BR-2). Water generated from the diversion operations would be pumped and discharged according to the approved plan and applicable permits.
- 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.

Swainson's Hawk

The following avoidance, minimization, and mitigation measures will be implemented for Swainson's hawk during construction:

- 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 one week 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.

- 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.
- Protocol surveys would be performed for Swainson's hawk during the breeding season for each construction season (every year of construction). If species are discovered during construction, work would stop in the area of discovery and coordination with the appropriate resource agencies would occur.

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

California Red-Legged Frog

The following avoidance, minimization, and mitigation measures will be implemented for California red-legged frog during construction:

- A qualified biologist would monitor in-stream construction activities that could potentially impact sensitive biological receptors (e.g., amphibians, fish). The biological monitor would be present during activities such as installation and removal of dewatering or diversion systems, riparian and aquatic vegetation removal, RSP installation, etc. to ensure adherence to permit conditions. In-water work restrictions would be implemented.
- A Limited Operating Period would be observed, whereby all in-stream work below ordinary high water would be restricted to the period between June 15 and October 15 to protect water quality and vulnerable life stages of sensitive fish species.
- The contractor would be required to prepare and submit a Temporary Creek Diversion System Plan to Caltrans for approval prior to any creek diversion. Depending on site conditions, the plan may also require specifications for the relocation of sensitive aquatic species (see also Aquatic Species Relocation Plan in

BR-2). Water generated from the diversion operations would be pumped and discharged according to the approved plan and applicable permits.

- 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.
- Any additional avoidance and minimization measures developed during FESA Section 7 consultation with USFWS would be implemented.

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?

Less than Significant with Mitigation Incorporated. Caltrans has determined the project would have a Less Than Significant Impact with Mitigation Incorporated for species identified as candidate, sensitive or special status species based on the following:

Threatened and Endangered Species

Giant Garter Snake

Less than Significant with Mitigation Incorporated. The proposed project is expected to have an adverse effect on GGS. As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to GGS. Caltrans has concluded that the project may affect, is not likely to adversely affect GGS under FESA. Pursuant to CESA, Caltrans is anticipating potential take of GGS. Caltrans would initiate FESA Section 7 consultation with USFWS and CESA consultation with CDFW. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to GGS during construction. Permanent impacts to GGS habitat that could not be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location. Any additional avoidance and minimization measures developed during FESA Section 7 consultation with USFWS and CESA consultation with CDFW will be incorporated into the project.

Green Sturgeon/Steelhead/CVSR Chinook Salmon/SRWR Chinook Salmon

Less than Significant with Mitigation Incorporated. The proposed project is expected to have an adverse effect on green sturgeon, steelhead, CVSR Chinook Salmon, and SRWR Chinook Salmon. As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to green sturgeon, steelhead, CVSR Chinook Salmon, and SRWR Chinook Salmon. Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to minimize potential impacts to salmonids and their habitat. Due to potential construction-related direct and indirect effects, the project may affect, and is likely to adversely affect salmonids species. To account for potential impacts to salmonids species and designated critical habitat, Caltrans will initiatate FESA Section 7 consultation with NMFS and a Biological Opinion will be obtained. Caltrans will initiate CESA consultation with CDFW and will be acquiring an Incidental Take Permit (ITP) for potential "take" of CVSR Chinook salmon and SRWR Chinook salmon.

California Tiger Salamander

Less than Significant Impact. The Proposed project has the potential to have an adverse effect on California tiger salamander. As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to California tiger salamander. Pursuant to FESA, due to the potential construction-related direct and indirect effects, Caltrans has concluded that the project may affect, but is not likely to adversely affect California tiger salamander. Pursuant to CESA, Caltrans is not anticipating "take" of California tiger salamander. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to California tiger salamander. Caltrans would initiate FESA Section 7 consultation with USFWS where additional avoidance and minimization measures may be developed.

California Red-Legged Frog

Less than Significant Impact. The proposed project is not expected to have an adverse effect on California red-legged frog. As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to California red-legged frog. Pursuant to FESA, due to the potential construction-related direct and indirect effects, the project may affect, and is not likely to adversely affect California red-legged frog. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to California red-legged frog. Caltrans will initiate FESA Section 7

consultation with USFWS and include additional measures that may be developed for California red-legged frog.

Northwestern Pond Turtle

Less than Significant Impact. The proposed project is not expected to have an adverse effect on NWPT. As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to NWPT. Pursuant to FESA, due to the potential construction-related direct and indirect effects, Caltrans has concluded that the project may affect, and is likely to adversely affect NWPT. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to NWPT. Caltrans would initiate FESA Section 7 consultation with USFWS to further develop additional avoidance and minimization measures. Caltrans is not proposing any species-specific compensatory mitigation for NWPT but may be required depending on FESA Section 7 consultation with USFWS.

Foothill Yellow-Legged Frog

Less than Significant Impact. The proposed project is not expected to have an adverse effect on FYLF. As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to FYLF. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to FYLF during construction.

Tricolored Blackbird

Less than Significant Impact. The proposed project is not expected to have an adverse effect on tricolored blackbird. As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to potentially suitable tricolored blackbird habitat. Impacts to potentially suitable tricolored blackbird habitat would be avoided with incorporation of Standard Measures and BMPs outlined in Chapter 1, Section 1.5.

Greater Sandhill Crane

Less than Significant Impact. The proposed project is not expected to have an adverse effect on greater sandhill crane. As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to potentially suitable sandhill crane habitat. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to gretaer snadhill crane.

Vernal Pool Tadpole Shrimp

Less than Significant Impact. The proposed project is not expected to have an adverse effect on vernal pool tadpole shrimp. As discussed in Section 2.4 above, critical habitat was identified approximately 7 miles west of the Sutter Bypass ESL. Caltrans has determined that the project may affect, but is not likely to adversely affect vernal pool tadpole shrimp. An aquatic resource delineation is planned for spring 2025 to confirm habitat suitability. Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to avoid and minimize impacts to vernal pool tadpole shrimp during construction.

Western Spadefoot

Less than Significant Impact. The proposed project is not expected to have an adverse effect on Western spadefoot. As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to potentially suitable Western spadefoot habitat. Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to minimize potential impacts to western spadefoot and their habitat. Caltrans will initiate CESA consultation with CDFW and include additional measures that might be developed for western spadefoot.

Swainson's Hawk

Less than Significant Impact. The proposed project is not expected to have an adverse effect on Swainson's hawk. As discussed in Section 2.4 above, suitable foraging habitat was identified within the BSA. Standard Measures and BMPs outlined in Chapter 1, Section 1.5 would be implemented to minimize potential impacts to Swainson's hawk. Caltrans does not anticipate "take" of Swainson's hawk or their nests pursuant to CESA.

Valley Elderberry Longhorn Beetle

No Impact. The proposed project is not expected to have an adverse effect on VELB. A single elderberry shrub was found in a patch of riparian vegetation along the eastern bank of the west channel at the Sutter Bypass location. The ESL does not occur in VELB critical habitat. Construction activities will be at least 100 feet from the elderberry shrub and as a result, no indirect effect on valley elderberry longhorn beetle is expected. Caltrans has determined that the proposed project would have no effect on VELB.

Butte County Meadowfoam

Less than Significant Impact. The proposed project is not expected to have an adverse effect on Butte County meadowfoam. As discussed in Section 2.4 above, the proposed project would have temporary and permanent impacts to Butte County meadowfoam habitat. Although no individual Butte County meadowfoams were obsereved during botanical surveys, it was determined that the ESL for Dudley Creek is critical habitat. Caltrans has determined that the project may affect, but not likely to adversely affect Butte County meadowfoam. Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, section 1.5 would be incorporated to avoid and minimize impacts to Butte County meadowfoam habitat. Any additional avoidance and minimization measures developed during the FESA Section 7 consultation with USFWS will be incorporated into the project.

Plant Species

No Impact. The proposed project is not expected to have an adverse effect on special status plant species. Four individual woolly rose mallow were observed within the ESL of Sutter Bypass. Three of the four individuals are outside the immediate area where work is to occur. One individual is located near the east channel where work is to occur. To ensure that no incidental impacts were to occur to the four individual woolly rose mallow, temporary fencing will be placed around them. No other special status plant species were observed or anticipated to occur within the ESL; therefore, there would be no impact.

Animal Species

Bats

Less than Significant Impact. The project project is not expected to have an adverse effect on bats. The proposed project would cause temporary loss of night roost habitat on the bridge structures of the Sutter Bypass and Hunters Creek, due to planned construction activities. There would also be potential temporary and permanent loss of tree roosting habitat at all three locations. With the implementation of Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 5 and avoidance and minimization measures listed in Section 2.4, impacts to bats will be less than significant.

Marysville California Kangaroo Rat

No Impact. The proposed project is not expected to have an adverse effect on Marysville California kangaroo rat. Marysville California Kangaroo Rat is unlikely to be impacted by the proposed project as none were observed during surveys and only marginal grassland habitat exists within the Sutter Bypass location.

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?***

Less Than Significant with Mitigation Incorporated. Caltrans has determined the project would have a Less Than Significant Impact with mitigation incorporated for riparian habitat or other sensitive natural community based on the following:

Riparian Habitat

Less than Significant with Mitigation Incorporated. The proposed project would result in both temporary and permanent impacts to riparian habitat as discussed in Section 2.4 above. During construction, removal of riparian vegetation shall not exceed the minimum amount necessary for construction activities. ESA fencing will be placed for riparian areas to be avoided during construction. At the end of construction, revegetation planting would be implemented onsite to the greatest extent feasible. Caltrans Standard Measures and BMPs, outlined in Chapter 1, Section 1.5, would be implemented as part of the proposed project and would minimize impacts to riparian habitat. Permanent impacts to riparian habitat that could not be addressed onsite would be addressed through an agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

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?***

Less Than Significant with Mitigation Incorporated. Caltrans has determined the project would have a Less Than Significant Impact with mitigation incorporated for NHVP based on the following:

Northern Hardpan Vernal Pool

Less than Significant with Mitigation Incorporated. The proposed project would not result in any permanent impacts to Northern Hardpan Vernal Pool (NHVP) during construction. The proposed project would result in a preliminary estimate of 13.93 acres temporary impacts to wetlands (a portion of which includes NHVP) at Sutter Bypass from construction staging activities. A refined estimate would be provided following completion of an aquatic resource delineation report. To avoid and minimize potential impacts to NHVP, ground disturbing activities within 250 feet of suitable habitat will be avoided during the rainy season (approximately October 15 to May 15). In addition, Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, section 1.5 would be implemented to avoid and minimize temporary impacts to NHVP. Permanent impacts to NHVP that could not be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

Wetlands and Other Waters

Less than Significant Impact. The proposed project would result in a preliminary estimate of 13.93 acres of temporary impacts to wetlands due to staging and access activities during construction. A refined estimate would be provided following completion of an Aquatic Resources Delineation Report. To avoid and minimize temporary impacts to wetlands, Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, Section 1.5 would be implemented.

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?

Less Than Significant with Mitigation Incorporated. Caltrans has determined the project would have a Less Than Significant Impact with mitigation incorporated for essential fish habitat, migratory fish and wildlife species, and established native resident based on the following:

Sensitive Natural Communities

Essential Fish Habitat

Less than Significant Impact with Mitigation Incorporated. The proposed project would result in approximately 0.38 acres of permanent impacts to EFH due to the placement of Rock Slope Protection and erosion control measures during construction. Temporary impacts to EFH would be approximately 0.38 acres from access and staging activities during construction. Caltrans proposes to offset any permanent impacts to EFH through the purchase of agency-approved mitigation bank credits within the service area of the project location or through an agency-approved off-site mitigation project. Prior to the start of construction, an ESA fence will be installed along the construction limits to prevent encroachment into riparian areas adjacent to the construction site that are not targeted for clearing. Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, section 1.5 would be incorporated to minimize temporary and permanent impacts to EFH. In addition, Caltrans would initiate Section 7 consultation with NMFS. Any additional avoidance and minimization measures developed during FESA Section 7 consultation with USFWS would be incorporated into the project.

Threatened and Endangered Species

Giant Garter Snake

Less than Significant with Mitigation Incorporated. Please reference Section 2.4 “Discussion of Environmental Evaluation Checklist Questions 2.4a).” Based on the discussion for GGS in Section 2.4 above, a determination was made that the project would have a Less than Significant Impact with Mitigation Incorporated.

Green Sturgeon/Steelhead/CVSR Chinook Salmon/SRWR Chinook Salmon

Less than Significant Impact with Mitigation Incorporated. Please reference Section 2.4 “Discussion of Environmental Evaluation Checklist Questions 2.4a).” Based on the discussion for green sturgeon, steelhead, CVSR Chinook Salmon, and SRWR Chinook Salmon in Section 2.4 above, a determination was made that the project would have a Less than Significant Impact with Mitigation Incorporated.

California Tiger Salamander

Less than Significant Impact. Please reference Section 2.4 "Discussion of Environmental Evaluation Checklist Questions 2.4a)." Based on the discussion for California tiger salamander in Section 2.4 above, a determination was made that the project would have a Less than Significant Impact.

California Red-Legged Frog

Less than Significant Impact. Please reference Section 2.4 "Discussion of Environmental Evaluation Checklist Questions 2.4a)." Based on the discussion for California red-legged frog in Section 2.4 above, a determination was made that the project would have a Less than Significant Impact.

Northwestern Pond Turtle

Less than Significant Impact. Please reference Section 2.4 "Discussion of Environmental Evaluation Checklist Questions 2.4a)." Based on the discussion for NWPT in Section 2.4 above, a determination was made that the project would have a Less than Significant Impact.

Foothill Yellow-Legged Frog

Less than Significant Impact. Please reference Section 2.4 "Discussion of Environmental Evaluation Checklist Questions 2.4a)." Based on the discussion for FYLF in Section 2.4 above, a determination was made that the project would have a Less than Significant Impact.

Tricolored Blackbird

Less than Significant Impact. Please reference Section 2.4 "Discussion of Environmental Evaluation Checklist Questions 2.4a)." Based on the discussion for tricolored blackbird in Section 2.4 above, a determination was made that the project would have a Less than Significant Impact.

Greater Sandhill Crane

Less than Significant Impact. Please reference Section 2.4 "Discussion of Environmental Evaluation Checklist Questions 2.4a)." Based on the discussion for greater sandhill crane in Section 2.4 above, a determination was made that the project would have a Less than Significant Impact.

Western Spadefoot

Less than Significant Impact. Please reference Section 2.4 "Discussion of Environmental Evaluation Checklist Questions 2.4a)." Based on the discussion for western spadefoot in Section 2.4 above, a determination was made that the project would have a Less than Significant Impact.

Swainson's Hawk

Less than Significant Impact. Please reference Section 2.4 "Discussion of Environmental Evaluation Checklist Questions 2.4a)." Based on the discussion for Swainson's hawk in Section 2.4 above, a determination was made that the project would have a Less than Significant Impact.

Animal Species

Bats

Less than Significant Impact. Please reference Section 2.4 "Discussion of Environmental Evaluation Checklist Questions 2.4a)." Based on the discussion for bats in Section 2.4 above, a determination was made that the project would have a Less than Significant Impact.

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

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

No Impact. The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, as none were identified within the project limits.

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. The Sacramento National Wildlife Refuge Complex, which is just north of Hunters Creek in Colusa County has adopted a Comprehensive Conservation Plan (U.S. FWS 2020). The plan is a guide on management of Butte Sink, Willow Creek-Lurline, and North Central Valley Wildlife Management Areas for the next fifteen years. The proposed project would not conflict with the provisions of the conservation plan as all work would be completed within Caltrans right-of-way and outside of the areas designated as Wildlife Management Areas. The proposed project would not conflict with other adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan as none were identified.

2.5 Cultural Resources

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Historic Property Survey Report dated February 2, 2024 (Caltrans 2024b). Potential impacts are not anticipated due to previously identified built environmental resource within the APE that were previously determined not eligible for inclusion in the NRHP and the California Register of Historical Resources. Caltrans received a letter of concurrence from SHPO on April 18, 2024 that previous determinations remain valid (Appendix D. SHPO Concurrence Letter).

Discussion of CEQA Environmental Checklist Question 2.5—Cultural Resources

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

No Impact. The proposed project would not cause a substantial adverse change in the significance of a historical resource as those present were Assumed eligible for inclusion in the National Register of Historic Places with State Historic preservation Officer concurrence for the purpose of this project.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

No Impact. The proposed project would not cause a substantial adverse change in the significance of an archaeological resource as historic resources are not eligible for inclusion in the NRHP with SHPO concurrence.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

No Impact. No indication of human remains were observed within the project limits. If human remains are identified during construction activities, they would be treated in accordance with the requirements of California Health and Safety Code section 7050.5 and Public Resources Code section 5097.98. If, pursuant to §7050.5(c) of the California Health and Safety Code, the county coroner/medical examiner determines that the human remains are or may be of Native American origin, then the discovery shall be treated in accordance with the provisions of §5097.98 (a)-(d) of the California Public Resources Code.

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?				✓

Regulatory Setting

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

CEQA Guidelines Section 15126.2(b) and CEQA Guidelines Appendix F—Energy Conservation require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

Affected Environment

An Environmental Impact Evaluation-Air Quality, Noise Analysis, and Energy was completed on October 16, 2023 (Caltrans 2023b), which includes a review of the project scope, timeline, and proposed bill of materials to inform operation and construction energy consumption data. Energy in a resource context generally pertains to the use or conservation of fossil fuels, which are a finite resource.

Discussion of CEQA Environmental Checklist Question 2.6—Energy

a) Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

Less than Significant Impact. The proposed project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation as the construction-related energy consumption would be temporary and not a permanent new source of energy demand, and demand for fuel would have no noticeable effect on peak or baseline demands for energy. While construction would result in a short-term increase in energy use, energy-saving measures and construction design features would help conserve energy.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency as the purpose of this project is to conduct scour mitigation and countermeasures at several bridges.

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?				✓

Regulatory Setting—Geology and Soils

The primary laws governing geology and soils include:

- Historic Sites Act of 1935–16 USC 461 et seq.
- CEQA–California Public Resources Code (PRC) 21000

Affected Environment—Geology and Soils

The proposed project is located along I-5 in Colusa County, SR 20 in Sutter County, and SR 70 in Butte County. The proposed project is not located within or near known fault lines. Colusa and Sutter County comprise marine and nonmarine sedimentary rocks, while Butte County only comprises nonmarine sedimentary rocks (Department of Conservation 2024c).

Discussion of CEQA Environmental Checklist Questions 2.7a-e)—Geology and Soils

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. According to the Alquist-Priolo Earthquake Fault Zoning Maps (California Department of Conservation), the proposed project is not in a fault zone(DOC 2024b).

ii) Strong seismic ground shaking?

No Impact. The proposed project would not cause potential adverse effects, including the risk of loss, injury, or death due to strong seismic ground shaking as the project is not in a known earthquake fault zone.

iii) Seismic-related ground failure, including liquefaction?

No Impact. The proposed project would not cause adverse effects, including the risk of loss, injury, or death due to seismic-related ground failure, including liquefaction. The project area is not in a liquefaction zone.

iv) Landslides?

No Impact. The proposed project would not cause substantial adverse effects, including the risk of loss, injury, or death due to landslides. The project area is not susceptible to landslides, nor has a landslide occurred where the proposed project is located.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. The purpose of the project is to perform scour mitigation and countermeasures for four bridge structures along I-5 in Colusa County, SR 20 in Sutter County, and SR 70 in Butte County due to embankment and channel degradation. Construction activities would be placing rock slope protection within the embankment at three locations to prevent further embankment and channel degradation. In addition to scour mitigation and countermeasure, erosion control measures would be implemented during construction to minimize any potential soil erosion or loss of topsoil.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact. The proposed project is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Impact. The proposed project is not located on expansive soil, creating substantial risks to life or property. The proposed project would not be constructing a new structure.

e) Would the project 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?

No Impact. The proposed project would not construct septic tanks or alternative wastewater disposal systems. The project purpose is to preserve the safety, functional service, and structural integrity of serval bridges. The project does not require a septic tank or disposal system.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. The proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature as none were identified.

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 CO2 that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO2.

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

Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce greenhouse gas emissions from transportation sources.

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.

Environmental Setting

The proposed project are primarily in rural areas, with a primarily natural resources based agricultural. SR 20 in Sutter County, SR 70 in Butte County, and I-5 in Colusa County are the main transportation routes to and through the area for both passenger and commercial vehicles. Butte County Associate of Governments, Colusa County Transit Authority, and Sacramento Area Council of Governments for Sutter County guides transportation development for their respective counties.

The Butte County 2040 General Plan, Sutter County 2030 General Plan, and Colusa County 2030 General Plan guides transportation developments for the project area. The Butte County General Plan (Butte 2023a) and Butte County Climate Action Plan addresses GHGs for Butte County (Butte 2021b). The Sutter County General Plan address GHGs for Sutter County (Sutter 2011). The Colusa County Regional Transportation Plan address GHGs for Colusa County (Colusa 2018b).

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).

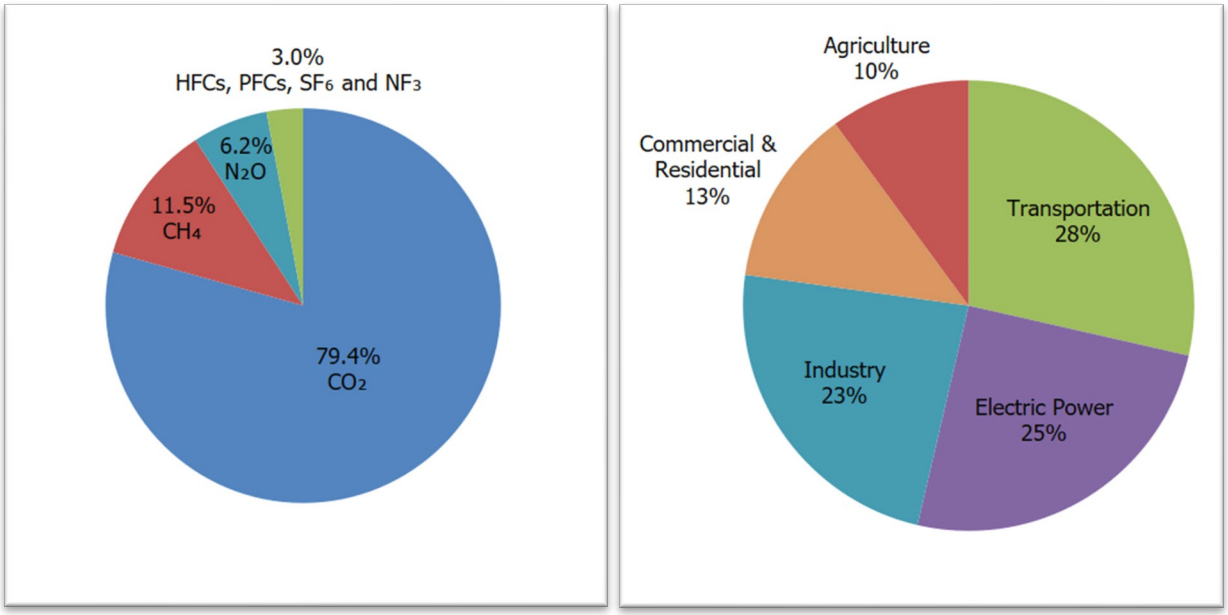


Figure 2. U.S. 2021 Greenhouse Gas Emissions

(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 (Figure 3) (CARB 2022a).

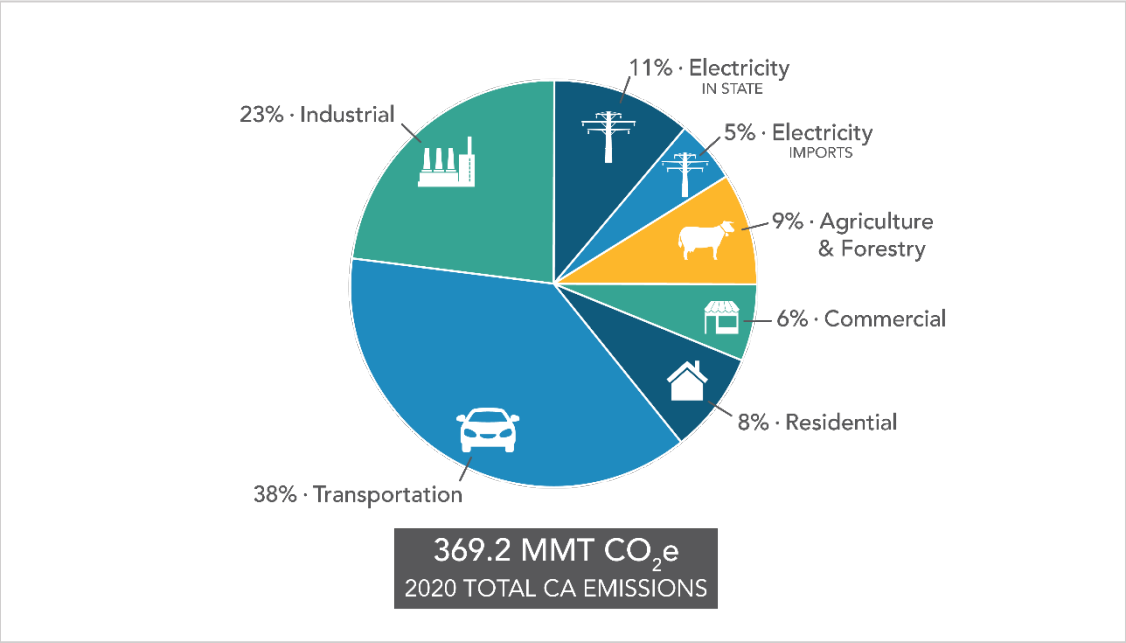


Figure 3. California 2020 Greenhouse Gas Emissions by Scoping Plan Category

(Source: CARB 2022a)

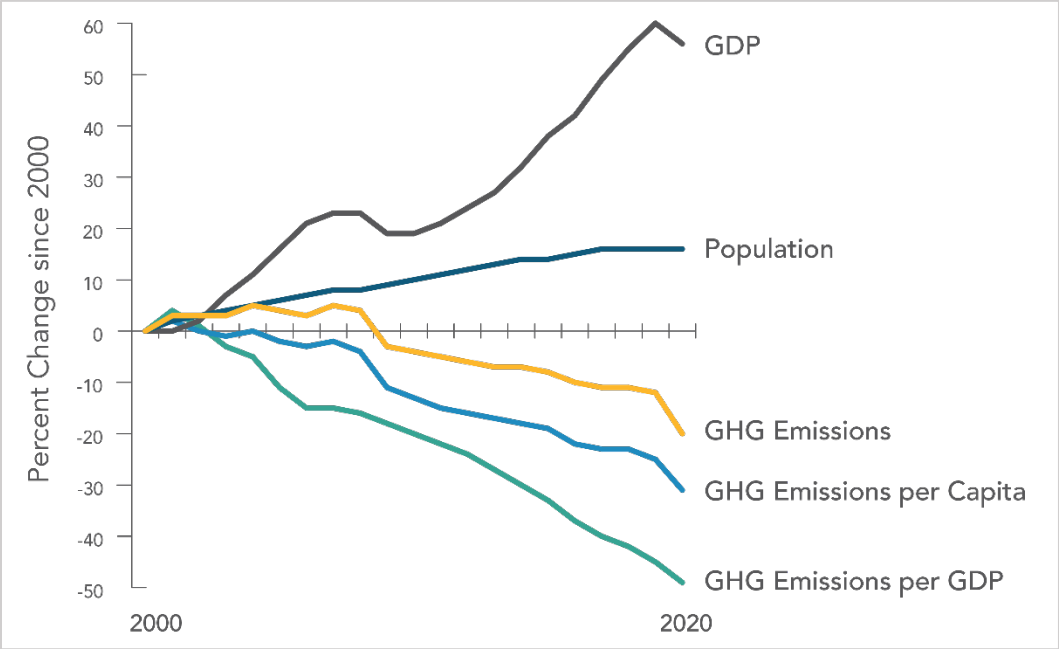


Figure 4. Change in California GDP, Population, and GHG Emissions since 2000

(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. 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

The CARB sets regional GHG reduction targets for California's 18 Metropolitan Planning Organizations (MPOs) to achieve through planning future projects that will cumulatively achieve those goals, and reporting how they will be met in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the RTP/SCS for Butte County, Colusa County, and Sutter County.

The regional reduction target for Butte County Association of Governments is 7 percent by 2035 (BCAG 2023). Sacramento Area Council of Governments overlooks Sutter County. The regional reduction target for Sutter County is 19 percent by 2035 (CARB 2018). The 2018 Colusa County Regional Transportation Plan includes goals on climate change and the environment. The RTP offers a comprehensive transportation strategy to reduce GHG by reducing vehicle miles traveled (Colusa 2018b).

Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation and use of the State Highway System (SHS) (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH_4 and N_2O. A small amount of HFC emissions related to refrigeration is also included in the transportation sector. (GHGs differ in how much heat each traps in the atmosphere, called global warming potential, or GWP. CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent", or CO_2e. The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.)

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

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

Operational Emissions

The purpose of the proposed project is to perform scour mitigation and countermeasures on bridges at various locations and 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 routes 5, 20, and 70 no increase in vehicle miles traveled (VMT) would occur. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

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

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

CEQA Conclusion

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

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

Greenhouse Gas Reduction Strategies

STATEWIDE EFFORTS

In response to Assembly Bill 32, the Global Warming Solutions Act, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors to take California into a sustainable, cleaner, low-carbon future, while maintaining a robust economy (CARB 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 (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 in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency released *Natural and Working Lands Climate Smart Strategy* (California Natural Resources Agency 2022).

CALTRANS ACTIVITIES

Caltrans continues to be involved on the Governor's Climate Action Team as the CARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016) set an interim target to cut GHG emissions to 40% 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 during construction.

- The construction contractor must comply with the 2022 Caltrans Standard Specification Section 14-9. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.
- Caltrans Standard Specification 7-1.02C "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California ARB.
- Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of construction vehicles and equipment to no more than 5 minutes.
- Design features and additional methods to adjust the posted speed limit to the optimum speed for less GHG emissions. GHG reductions may be achieved by enforcing the speed limit on highways.
- Schedule truck trips outside of peak morning and evening commute hours.
- For improved fuel efficiency from construction equipment:
    - Maintain equipment in proper tune and working condition.
    - Use right sized equipment for the job.
    - Use equipment with new technologies.
- Use alternative fuels such as renewable diesel for construction equipment.
- Supplement existing construction environmental training with information on methods to reduce GHG emissions related to construction.

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 that a facility be relocated or redesigned. Furthermore, the combined effects of transportation projects and climate stressors can exacerbate the impacts of both on vulnerable communities in a project area. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

FEDERAL EFFORTS

Under NEPA Assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance. 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. A number of state policies and tools have been developed to guide adaptation efforts.

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

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

To help actors throughout the state address the findings of California's Fourth Climate Change Assessment, AB 2800's multidisciplinary Climate-Safe Infrastructure Working Group published *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. This report provides guidance on assessing risk in the face of inherent

uncertainties still posed by the best available climate change science. It also examines how state agencies can use infrastructure planning, design, and implementation processes to respond to the observed and anticipated climate change impacts (Climate-Safe Infrastructure Working Group 2018).

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

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

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

CALTRANS ADAPTATION EFFORTS

Caltrans Vulnerability Assessments

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

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

Caltrans Sustainability Programs

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

Project Adaptation Efforts

The project would not exacerbate the effects of climate change related to CEQA topics. However, the proposed project would include certain 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. The project is to perform scour mitigation and countermeasures on bridges in Sutter, Colusa, and Butte in an event of a 100-year storm

event were to occur. Scour mitigation and countermeasures include placing and replacing RSP along the channels of each bridge.

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.

Precipitation and Flooding

According to the Federal Emergency Management Agency (FEMA) floodplain maps, the proposed project falls within two flood zones, X and A. Locations that are within flood zones categorized as X include Dudley Creek in Butte County, and Hunters Creek in Colusa County. The locations within Zone X are in areas of minimal flood hazard and are typically outside the 500-year flood and protected by levee from 100-year flood. The locations within Zone A are Sutter Bypass in Sutter County. The locations within Zone A are within flood zones with no determined Base Flood Elevation (BFE) or depth (FEMA 2008).

The Caltrans District 3 Climate Change Vulnerability Assessment (Caltrans 2023f) anticipates the project areas will receive less precipitation overall in the future but arriving in heavier individual events. Mapping of future potential precipitation changes under various climate change scenarios shows that the project locations could experience an increase in 100-year storm precipitation of between 9 percent and 12 percent through 2085 under a conservative GHG emissions scenario.

Wildfire

The project locations in Sutter, and Colusa County are in Local Responsibility Area with no fire severity. Butte County is in an area with moderate fire severity based on CalFire's Fire Hazard Severity Zone maps. The proposed scope of work would not introduce new structures or features that would be more vulnerable to wildfire than the current infrastructure. The project is not anticipated to exacerbate the impacts of wildfires intensified by climate change (CAL FIRE 2023).

Temperature

The District 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 (District 3 Climate Change Vulnerability Assessment 2019).

2.9 Hazards and Hazardous Materials

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
Would the project: b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
Would the project: c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
Would the project: d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
Would the project: e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				✓

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

Regulatory Setting

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

The primary laws governing hazardous materials, waste and substances include:

- California Health and Safety Code–Chapter 6.5
- Porter-Cologne Water Quality Control Act–§ 13000 et seq.
- CFR Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection

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

Affected Environment

An Initial Site Assessment was prepared on January 18, 2024 (Caltrans 2024d). It was determined that the Office of Environmental Engineering Services (OEES) did not identify any significant hazardous waste or materials within the project limits. The proposed project is not considered a “Cortese” listed project, nor does it impact one.

Environmental Consequences

Although OEES did not identify any significant hazardous waste or materials within or near the project sites, the proposed project may have elevated lead concentrations in the soils along the roadways as a result of aerially deposited lead from the historic use of leaded gasoline. To avoid and minimize the disturbance of ground soil, Caltrans will have a Lead Compliance Plan in place.

Avoidance, Minimization and Mitigation Measures

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

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

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

Less than Significant Impact. The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. If soil are to be removed from the site, an Aerially Deposited Lead (ADL) survey would be conducted. Through the implementations of Caltrans Standard Measures and Best Management Practices and Caltrans Standard Specifications, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

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

Less than Significant Impact. The proposed project would not 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. Caltrans Standard Specifications for removal and handling of known hazardous materials such as treated wood waste, aerially deposited lead, and yellow traffic striping would minimize the chances of accidental release into the environment.

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

No Impact. The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school as none are present.

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

No Impact. The proposed project is not on the Cortese list.

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

No Impact. The proposed project is not located within an airport land use plan, or within two miles of a public airport or public use airport.

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

No Impact. The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Construction activities would be occurring on the shoulder or underneath the bridge structure.

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

No Impact. The proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injuring or death involving wildland fires. Routes 20, 70, and 5 will remain open during construction and in the event of a wildfire, emergency services and traveling public will be able to drive during construction.

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 ground water 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.

Environmental Setting

The following waterbodies were identified and are associated with the project: Butte Slough, Sutter Bypass, Cottonwood Creek (i.e., Dudley Creek), and Hunter's Creek (Caltrans 2023a). Sutter Bypass is impaired for Mercury and Dissolved Oxygen and a Total Maximum Daily Load (TMDL) is required but has not been adopted. Other waterways, previously mentioned, are not associated with any impairments and/or approved TMDLs.

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

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

Less than Significant Impact. Construction-related activities would result in surface disturbances, that have the potential to violate water quality standards and Waste Discharge Requirements (WDRs), if sediment or contaminant-laden runoff (from work areas) enters storm drains or other pathways leading to receiving waters. Preliminary analyses indicates that the proposed project will likely not generate 1 acre or more of soil disturbance. In which case, the project will be required to follow a Contractor prepared and Department approved Water Pollution Control Program (WPCP) that lists and details minimization and avoidance measures and appropriate temporary Construction Site Best Management Practices (BMP) (Caltrans 2023a). The proposed project will also adhere to the laws and regulations that protect surface water quality, hydrology, and the WDRs promulgated in Caltrans Statewide National Pollution Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit. This includes temporary and permanent BMP usage and placement, along with BMP field implementation and effectiveness that will be monitored, adjusted, and modified (accordingly) for the duration of the project. Compliance with all applicable NPDES Permits, in addition to coordination with the Regional Water Quality Board, is also expected to ensure the protection of water resources in the area. With the implementation of these measures, potential impacts are anticipated to be less than significant.

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

No Impact. The intended use of the facility and potential pollutants that will be encountered in stormwater runoff after the project is constructed are not anticipated to change from its current condition. The groundwater elevation within this corridor historically fluctuates but is not anticipated to permanently impact proposed drainage appurtenances, stormwater treatment, or other design features. Additionally, due to excavation occurring on a temporary and short-term basis during the construction period, groundwater resources should not be affected and it is not anticipated that work being performed would negatively impact regional sustainable groundwater management within the project vicinity.

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?

No Impact. Compliance with Caltrans Statewide NPDES MS4 Permit is anticipated to address the implementation of minimization and avoidance measures during construction. It is expected that standard construction erosion control measures will be utilized to avoid erosion and siltation for the duration of project activities. BMP measures and field implementation strategies will be outlined in the Contractor prepared and Caltrans approved WPCP and will likely include temporary soil stabilization measures, linear sediment barriers (i.e., silt fence, gravel bag berms, fiber rolls), and construction site waste management (i.e., concrete washout, construction materials storage, litter/ waste management) among other approved controls.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

No Impact. The anticipated work involved, for the proposed project, is not anticipated to 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?

No Impacts. It is anticipated that any drainage systems, modified or designed for the project, will focus on perpetuating existing highway drainage conditions to the greatest extent feasible. New drainage features, if implemented, will be designed to perpetuate flow in the existing direction and will have similar or greater capacity than what currently exists in support of current design standards and the proposed design features for the project.

(iv) impede or redirect flood flows?

Less than Significant Impact. The purpose of the project is to perform scour mitigation and countermeasures on bridge structures within Sutter Bypass on SR 20, Dudley Creek on SR 70, and Hunters Creek on I-5. Water diversion would be required during construction at all three channels, but current flow intensity would not be impacted and post construction flow characteristics would be the same as at pre-construction levels. It's likely that potential

temporary impacts would be either eliminated or minimized with implementation of standard minimization and avoidance measures and the use of temporary BMP's.

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

No Impact. The proposed project would not risk release of pollutants in an event of flood hazard, tsunami, or seiche zones as the project is not within a 100-year floodplain, nor near the cost.

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

No Impact. It is expected that temporary impacts to localized water quality and groundwater that may occur will be minimized and/or avoided through the use of Caltrans standard measures (i.e., WQ-1, WQ-2 etc.) and an approved WPCP that will outline an appropriate field strategy to protect water resources within the project limits. Water quality measures, meant to promote stormwater infiltration practices and low impact development, would also be implemented where appropriate and feasible. Additionally, it is expected that project operations will be temporary and on a short-term basis during the construction period. As such, groundwater resources should not be affected.

Avoidance, Minimization, and Mitigation Measures

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

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 Butte County General Plan 2040 (Butte County 2023a), Colusa County General Plan 2030 (Colusa County 2012), and Sutter County General Plan (Sutter County 2011). The proposed project would not divide an established community, or conflict with any applicable land use plan, policy, or regulation.

Discussion of CEQA Environmental Checklist Question 2.11—Land Use and Planning

a) Would the project physically divide an established community?

No Impact. The Proposed project would not physically divide an established community as the purpose of the project is to improve safety and reliability of several bridges for the traveling public.

b) Would the project 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. The proposed project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The project would comply with goals of the Sutter County General Plan, Butte County General Plan, and Colusa County General Plan.

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, and the Mineral Resource Maps from the California Department of Conservation (DOC 2024a). No mineral resources were identified within the project limits.

Discussion of CEQA Environmental Checklist Question 2.12—Mineral Resources

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. There are no known mineral resources that would be of value to the region and the residents of the state. The proposed project would not be involved in the removal or extraction of mineral resources.

c) ***Would the project 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. There are no locally-important mineral resources within the project limits that would be affected by the proposed project.

2.13 Noise

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

Regulatory Setting

The primary laws governing noise are NEPA and CEQA.

Affected Environment

A Noise Technical Memorandum was prepared on January 18, 2024 (Caltrans 2024a). The surrounding land use at all three locations is primarily agriculture.

Environmental Consequences

The proposed project is not a Type 1 project and is considered a Type III project. Farmers and travelling public may be temporarily exposed to elevated noise levels during construction operations.

Avoidance, Minimization and Mitigation Measures

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

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?

Less than Significant Impact. The proposed project is not expected to result in substantial increase in noise. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies is not anticipated. Based on the scope of work, this project is not a Type I project, which are federal or federal-aid highway projects or the construction of a highway on a new location or addition of a through-traffic lane, the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment of the highway.

During construction, noise may be generated from the contractors' equipment and vehicles. Caltrans requires the Contractor to conform to the provisions of 2018 Caltrans' Standard Specification, Section 14-8.02 "Noise Control" which states, "Control and monitor noise from work activities." And "Do not exceed 86 dBA Lmax at 50 feet from the job site activities from 9 p.m. to 6 a.m."

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

Less than Significant Impact. During construction, noise may be generated from the contractors' equipment and vehicles. Construction noise would be short-term and is not anticipated to have adverse noise impacts from construction, as construction would conform with Caltrans Standard Specifications. Given that construction noise would be short-term, and the proposed project would follow standard measures regarding noise during construction, a less than significant impact is anticipated.

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. The proposed project is not located within the vicinity of a private, public, or public use airport.

2.14 Population and Housing

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. The proposed project would not induce substantial unplanned population growth as it would not increase capacity or access. The proposed project would not add new homes or businesses and would not extend any roads or other infrastructure. There are no residences within the project area, and no replacement housing would be necessary.

Discussion of CEQA Environmental Checklist Question 2.14—Population and Housing

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The proposed project would not increase capacity or access; therefore, the proposed project would not directly or indirectly induce population growth. The project would not add new homes or businesses and would not extend any roads or other infrastructure.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would not displace substantial numbers of existing people or housing as work would occur along Caltrans right-of-way. Also, it would not necessitate the construction of replacement housing elsewhere.

2.15 Public Services

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to service ratios and emergency response times are not anticipated, as no lane closures are anticipated during construction. Any work will be conducted either on the shoulder of the road or completely off the roadway.

Discussion of CEQA Environmental Checklist Question 2.15—Public Services

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, or other public facilities.

No Impact. I-5 in Colusa County, SR 20 in Sutter County, and SR 70 in Butte County will remain open during construction and would not impede emergency services or other public facilities. If the proposed project requires road closures, Caltrans will coordinate with emergency service providers so that response times will not be affected.

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. The proposes project would not increase the use of existing neighborhood parks, regional parks, or other recreational facilities or require the construction or expansion of these recreational facilities.

Discussion of CEQA Environmental Checklist Question 2.16—Recreation

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

No Impact. At Hunters Creek on I-5, the Sacramento National Wildlife Refuge is located approximately 4 miles north of the project area. The proposed project would not increase the use of existing neighborhood parks, regional parks, or other recreational facilities, or require the construction or expansion of these recreational facilities.

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. The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities. No neighborhood parks, regional parks, or other recreational facilities are present within the project limits.

2.17 Transportation

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

Regulatory Setting

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

Affected Environment

This project proposes to perform scour mitigation and countermeasures on four bridges: along Interstate 5 (I-5) in Colusa County, State Route 20 (SR 20) in Sutter County, and SR 70 in Butte County at various locations. Hunters Creek Bridge, located in Colusa County, is a two bridge structure that separates the northbound and southbound traffic along I-5. Sutter Bypass Bridge, which is in Sutter County, is a two-lane highway. Dudley Creek Bridge in Butte County is a four-lane highway that runs north-south.

Environmental Consequences

The project proposes to perform scour mitigation and countermeasures on four bridges where construction will be completed off the roadway. The proposed project does not anticipate lane closures during construction.

Avoidance, Minimization and Mitigation Measures

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

Discussion of CEQA Environmental Checklist Question 2.17—Transportation and Traffic

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

No Impact. The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. The proposed project is consistent with the Environmental Impact Evaluation-Air Quality, Traffic Noise, and GHG dated January 18, 2024 (Caltrans 2024a), Transportation Asset Management Plan, and 10-year SHOPP Plan. There are no pedestrian facilities within the project limits and the project would not impact existing bus routes along SR 20 in Sutter County, SR 70 in Butte County, or I-5 in Colusa County.

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

Less than Significant Impact. The proposed project would conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b). Based on criteria for analyzing transportation impacts, the proposed project would reduce, or have no impact on, vehicle miles traveled. The purpose of this project is to perform scour mitigation and countermeasures at four bridge structures along I-5 in Colusa County, SR 20 in Sutter County, and SR 70 in Butte County. The proposed project is not capacity increasing and would not lead to an increase in vehicle travel. Impact for Transportation will be less than significant based on criteria for CEQA Guidelines § 15064.3, subdivision (b).

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

No Impact. The proposed project would not contain concentrations or patterns of hazardous geometrical design elements and does not require geometrical improvements; there are no existing or proposed curves, driveways, intersections, or traffic signals within the project limits.

d) Would the project result in inadequate emergency access?

No Impact. The proposed project would not result in inadequate emergency process. All emergency response agencies in the project area would be notified of the project construction schedule and all emergency vehicles would be accommodated through the work area.

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 Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Historic Property Survey Report dated February 2, 2024 (Caltrans 2024b). The Native American Heritage Commission (NAHC) was contacted on October 5, 2022, requesting a Sacred Lands file search and list of potential contacts for the proposed project. Letters dated October 4, 2022, and December 7, 2023, were sent to interested tribes including:

- United Dehe Wintun Nation
- Berry Creek Rancheria of Maidu Indians
- Cachil Dehe Band of Wintun Indians of the Colusa Indian Community of the Colusa Rancheria
- Wilton Rancheria
- Kletsel Dehe of Wintun Indians (Cortina Indian Reservation)
- Eastom Yumeka Maidu Tribe of the Enterprise Rancheria
- KonKow Valley Band of Maidu
- Mechoopda Indian Tribe of Chico Rancheria
- Mooretown Rancheria of Maidu Indians
- Greenville Rancheria
- Nevada City Rancheria Nisenan Tribe
- T'si Akim Maidu
- Grindstone Indian Rancheria of Wintun-Wailaki Indians of California
- Peskenta Band of Nomlaki Indians
- Shingle Springs Band of Miwok Indians
- Pakan'yani Maidu of Strawberry Valley Rancheria.

Initial consultation with the Yocha Dehe Wintun Nation included concerns for work at the Taylor Creek location on SR 16. This location was removed from the project on June 30, 2023, and the Yocha Dehe had no further concern for other locations. On October 26, 2023, the United Auburn Indian Community requested further details of project-related activities and no further comments have been received.

On January 24, 2024, the Shingle Springs Band of Miwok Indians responded with no known concerns for the project locations, but would like to receive ongoing updates on the project as well as copies of deliverables.

Discussion of CEQA Environmental Checklist Question 2.18—Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in the 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).

No Impact. The project would not cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

b) 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 Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

No Impact. Caltrans has not identified any resources in the project area that would be significant to a California Native American tribe within the project limit. Therefore, the project does not have the potential to cause a substantial adverse change in the significance of a tribal cultural resource.

2.19 Utilities and Service Systems

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts are not anticipated because the proposed project would not require the relocation of existing utilities or newly constructed utilities.

Discussion of CEQA Environmental Checklist Question 2.19—Utilities and Service Systems

a) Would the project 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?

No Impact. The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities. There is a buried AT&T line at Sutter Bypass, but it will not need to be relocated. The AT&T line will be protected during construction.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

No Impact. The project will preserve ride quality, safety characteristic, functional serviceability, and structural integrity of several bridges throughout the project limits. The project does not require a water supply.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The project primarily comprises of placing RSP within the channels of several bridges. The proposed project would not have a demand for wastewater treatment.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact. The proposed project would not be generating solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure as the purpose of the project is scour mitigation and countermeasures of bridge structures.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. The proposed project would comply with all statutes and regulations related to the disposal of solid waste generated during construction.

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?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the CAL FIRE Fire Hazard Severity Zone Map dated June 15, 2023 (CAL FIRE 2023). The project locations for Colusa County is in a State Responsible Area (SRA) designated "Very High". Fire severity in Butte County is split along SR 99 where east of the project area is designated "High" and west is "Moderate". Proposed work in Sutter County is in a non-Local Responsible Area (LRA) and has no fire severity.

The proposed project would not impair emergency response plans or emergency evacuation plans as all work would be completed on the shoulder of the roadway or off it. The project is not located in an area of high landslide risk, so no impact is anticipated from fire-related landslides. The project would comply with all regulations and not expose people or structures to fire related flooding.

Discussion of CEQA Environmental Checklist Question 2.20—Wildfire

If located in or near State Responsibility Areas 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?

No Impact. The proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Project areas along I-5 in Colusa County, SR 20 in Sutter County, and SR 70 in Butte County will remain open during construction and will not impair 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?

No Impact. The proposed project would incorporate design features to prevent the uncontrolled spread of a wildfire within the project area. Project activities are limited to Rock Slope Protection and repairing columns underneath the bridge structures. The proposed project would not expose 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?

No Impact. The proposed project is an infrastructure project, and the project would not require the installation or maintenance of additional infrastructure that would 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?

No Impact. The proposed project is not located in an area that has a high landslide risk, so no impact is anticipated from fire-related landslides. Although the project would place fill in a 100-year floodplain, the project would comply with all pertinent regulations, and the project would not expose people or structures to fire-related flooding.

2.21 Mandatory Findings of Significance

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

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

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

Less than Significant with Mitigation Incorporated. Caltrans has determined the proposed project would have a less than significant impact with mitigation incorporated to biological resources as referenced in Section 2.4 above.

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

No Impact. There are two projects along I-5 in Colusa County, two projects along SR 20 in Sutter County, and two projects along SR 70 in Butte County currently in construction. The past, present, and foreseeable future actions of these proposed projects would not have cumulatively considerable impacts leading to the degradation of habitat and species diversity, populations, disruption of migration corridors, water quality or other natural resources. The proposed project would not result in any adverse effects that, when considered in connection with other projects, would be considered cumulatively considerable.

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

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

2.22 Cumulative Impacts

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

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

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

Chapter 3. Agency and Public Coordination

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

The NAHC was contact on October 5, 2022, requesting a Sacred Lands file search and list of potential contacts for the proposed project.

Caltrans received a letter of concurrence from SHPO on April 18, 2024, that the previous determinations remain valid (Appendix D. SHPO Concurrence Letter).

Consultation packages were sent to representatives of the following tribes:

- A request for information letter was sent to the NAHC on October 5, 2022.
- Consultation letters were sent on October 4, 2022 and December 7, 2023 to representatives of the United Auburn Indian Community of the Auburn Rancheria, Yocha Dehe Wintun Nation, Berry Creek Rancheria of Maidu Indians, Cachil Dehe band of Wintun Indians of the Colusa Indian Community of the Colusa Rancheria, Wilton Rancheria, Kletsel Dehe of Wintun Indians (Cortina Indian Reservation), Estom Yumeka Maidu Tribe of the Enterprise Rancheria, KonKow Valley Band of Maidu, Mechoopda Indian Tribe of Chico Rancheria, Mooretown Rancheria of Maidu Indians, Greenville Rancheria, Nevada City Rancheria Nisenan Tribe, T'si Akim Maidu, Grindstone Indian Rancheria of Wintun-Wailaki Indians of California, Paskenta Band of Nomlaki Indians, Shingle Springs Band of Miwok Indians, and Pakan'Yani Maidu of Strawberry Valley Rancheria.

- Initial consultation with the Yocha Dehe Wintun Nation included concerns for the work at the Taylor Creek location on SR 16. This location was removed from the project and the Yoche Dehe had no further concern for other locations included in this project.
- On October 26, 2023, the United Auburn Indian Community requested further details of project related activities. No further comments have been received.
- On January 24, 2024, Shingles Springs Band of Miwok Indians responded with no known concerns for the project locations but would like to receive ongoing updates on the project as well as copies of deliverables.

Circulation

The Initial Study/Negative Declaration will be made available for public and agency review and comment for 30 days from September 26 through October 26. Caltrans ensured the document was made available to all appropriate parties and agencies, including:

1) Responsible agencies
2) Trustee agencies that have resources affected by the project
3) Other state, federal and local agencies which have regulatory jurisdiction, or that exercise authority over resources which may be affected by the project
4) Public. The document is available online at https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental/d3-environmental-docs. Additional copies of the document are available at:
    - Caltrans District 3 Office: 703 B Street, Marysville, CA 95901

Chapter 4. List of Preparers

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

California Department of Transportation, District 3

David Gould	Environmental Scientist-Coordinator
Katherine Jorgensen	Environmental Scientist -Archaeologist
Danielle Claus	Environmental Planner-Archaeologist
Katie Gilroy	Associate Environmental Planner-Architectural Historian
Sean Cross	NPDES Coordinator – Water Quality
Nicholas Barton	Environmental Scientist-Biologist
Alamjit Mangat	Hazardous Waste Specialist
Jeffrey Juarez	Landscape Architect
Jason Lee	Transportation Engineer-Air and Noise
Mundeep Purewal	Senior Environmental Scientist-Environmental Branch Chief
Dan Stiles	Project Engineer
Najed Dakak	Project Manager

Chapter 5. Distribution List

Federal and State Agencies

California Department of Fish and Wildlife
1416 9th Street, 12th Floor
Sacramento, CA 95814

Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

Office of Historic Preservation
1725 23rd Street
Sacramento, CA 95816

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

Regional/County/Local Agencies

Ivan Garcia
Butte County Association of Governments
326 Huss Drive, Suite 150
Chico, CA 95928

Dan Breedon
Butte County Planning Division
7 County Center Drive
Oroville, CA 95965

Butte County Library Oroville Branch
1820 Mitchell Avenue
Oroville, CA 95966

Butte County Fire Station 37
3595 Shuman Lane
Oroville, CA 95965

Steve Geiger
Colusa County Planning Division
547 Market Street
Colusa, CA 95932

Colusa County Free Library
738 Market Street
Colusa, CA 95932

Arwen Wacht
Sutter County Planning Division
1130 Civic Center Blvd
Yuba City, CA 95993

Sutter County Library (Main Branch)
750 Forbes Avenue
Yuba City, CA 95991

SACOG
1415 L Street, Suite 300
Sacramento, CA 95814

Local Elected Officials

California Highway Patrol
2072 3rd Street
Oroville, CA 95966

Chapter 6. References

Butte County Association of Governments (BCAG). July 2023. Transportation Investment. Available: https://www.bcag.org/Planning/RTP--SCS/index.html. Accessed: December 12, 2023.

California Air Resources Board (CARB). 2018. Sacramento Area Council of Governments SB 375 Regional Plan Climate Targets. Available: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed: December 12, 2023.

_____. 2022a. *Greenhouse Gas Emissions and Trends for 2000 to 2020.* Available: https://ww2.arb.ca.gov/our-work/programs/ghg-inventory-program. Accessed: January 18, 2024.

_____. 2022b. *AB 32 Climate Change Scoping Plan.* Available: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan. Accessed: January 18, 2024.

_____. 2022c. *SB 375 Regional Plan Climate Targets*. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed: January 18, 2024.

_____. 2022d. *Climate Change*. https://ww2.arb.ca.gov/our-work/topics/climate-change. Accessed: January 18, 2024.

California Department of Conservation (DOC). 2024a. Mineral Resource Maps. https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc

Accessed: January 18, 2024.

_____. 2024b California Department of Conservation. CGS Seismic Hazards Program: Alquist-Priolo Fault Hazard Zones. https://gis.data.ca.gov/maps/ee92a5f9f4ee4ec5aa731d3245ed9f53/explore.Accessed January 17, 2024.

_____. 2024c California Department of Conservation. California Geologic Survey. Geologic Map of California. https://maps.conservation.ca.gov/cgs/gmc/. Accessed September 14, 2023.

California Department of Fish and Wildlife. 2016. *Northern Region California Department of Fish and Wildlife Aquatic Invasive Species Decontamination Protocol*. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=92821&inline. February 2016.

California Department of Forestry and Fire Protection (CAL FIRE). Fire Hazard Severity Zones Maps. June 15, 2023. Available: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-maps-2022. Accessed: December 13, 2023.

California Department of Transportation (Caltrans). 2020. *Caltrans Greenhouse Gas Emissions and Mitigation Report*. Final. August. Prepared by ICF, Sacramento, CA. https://dot.ca.gov/programs/public-affairs/mile-marker/summer-2021/ghg. Accessed: January 19, 2024.

_____. 2021a. *California Transportation Plan 2050*. February 2021. https://dot.ca.gov/programs/transportation-planning/state-planning/california-transportation-plan. Accessed: January 19, 2024.

_____. 2021b. *Caltrans 2020-2024 Strategic Plan*. https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/sp-2020-16p-web-a11y.pdf. Accessed: January 19, 2024.

_____. 2023a. Water Quality Assessment. Dated September 5, 2023. Accessed: December 5, 2023.

_____. 2023b. Environmental Impact Evaluation – Energy. Dated October 16, 2023. Accessed: October 17, 2023.

_____. 2024a. Environmental Impact Evaluation – Air Quality, Traffic Noise, and GHG. Dated January 18, 2024. Accessed: January 18, 2024.

_____. 2024b. Historic Property Survey Report. Dated February 2, 2024. Accessed: February 5, 2024.

_____. 2024c. Visual Impact Assessment. Dated January 22, 2024. Accessed: January 23, 2024.

_____. 2024d. Initial Site Assessment. Dated January 18, 2024. Accessed: January 18, 2024.

_____. 2024e. Natural Environment Study. Dated September 2024.

_____. 2024f. *Caltrans Climate Change Vulnerability Assessments. District 3 Technical Report*. January 16, 2024. Prepared by WSP. https://dot.ca.gov/programs/transportation-planning/division-of-transportation-planning/air-quality-and-climate-change/2019-climate-change-vulnerability-assessments.

California Environmental Protection Agency. 2015. *California Climate Strategy*. https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/Climate-Documents-2015yr-CAStrategy.pdf. Accessed: January 19, 2024.

California Governor's Office of Planning and Research (OPR). 2015. *A Strategy for California @ 50 Million.* November. https://opr.ca.gov/docs/EGPR_Nov_2015.pdf. Accessed: January 19, 2024.

_____.2022. *Carbon Neutrality by 2045.* https://opr.ca.gov/climate/carbon-neutrality.html. Accessed: January 19, 2024.

California Natural Resources Agency. 2022a. *Natural and Working Lands Climate Smart Strategy*. https://resources.ca.gov/Initiatives/Expanding-Nature-Based-Solutions. Accessed: January 19, 2024.

_____. 2022b. *California Climate Adaptation Strategy*. https://climateresilience.ca.gov/. Accessed: January 19, 2024.

California State Transportation Agency. 2021. *Climate Action Plan for Transportation Infrastructure (CAPTI)*. Adopted July 2021. https://calsta.ca.gov/subject-areas/climate-action-plan. Accessed: January 19, 2024.

Climate Change Infrastructure Working Group. 2018. *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. September. https://files.resources.ca.gov/climate/climate-safe-infrastructure-working-group/. Accessed: January 18, 2024.

County of Butte. Butte County Climate Action Plan. December 14, 2021. Available: https://www.buttecounty.net/DocumentCenter/View/2255/2021-Butte-County-Climate-Action-Plan-CAP-PDF?bidId=. Accessed: December 12, 2023.

_____. 2023. Butte County General Plan 2040. March 28, 2023. Available: https://www.buttecounty.net/367/Butte-County-General-Plan-2040. Accessed: December 5, 2023.

County of Colusa (Colusa). Colusa County 2030 General Plan. July 31, 2012. Available: https://www.countyofcolusa.org/137/General-Plan. Accessed: December 5, 2023.

County of Colusa (Colusa). Regional Transportation Plan. 2018b. Available: https://www.countyofcolusa.org/DocumentCenter/View/11093/Adopted-2018-Colusa-County-RTP?bidId=. Accessed: December 12, 2023.

County of Sutter (Sutter). Sutter County 2030 General Plan. April 28, 2011. Available: https://www.suttercounty.org/government/county-departments/development-services/planning-services/general-plan. Accessed: December 5, 2023.

Federal Emergency Management Agency (FEMA). FEMA Flood Maps Service Center, 12/08/2008. Available: https://msc.fema.gov/portal/home. Accessed: January 2, 2024.

Federal Highway Administration (FHWA). 2022. *Sustainability*. https://www.fhwa.dot.gov/environment/sustainability/resilience/. Last updated July 29, 2022. Accessed: January 19, 2024.

_____.No date. *Sustainable Highways Initiative*. https://www.sustainablehighways.dot.gov/overview.aspx. Accessed: January 19, 2024.

National Highway Traffic Safety Administration (NHTSA). 2022. *USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024–2026*. Press release. April 21. https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026. Accessed: January 19, 2024.

Natural Resources Conservation Service (NRCS). 2024. U.S. Department of Agriculture Farmland Conversion Impact Rating. Dated January 29, 2024. Accessed January 30, 2024.

State of California. 2018. *California's Fourth Climate Change Assessment*. https://climateassessment.ca.gov/. Accessed: January 19, 2024.

U.S. Department of Transportation (U.S. DOT). 2011. *Policy Statement on Climate Change Adaptation*. https://www.transportation.gov/sites/dot.dev/files/docs/Policy_on_Aaptation2011.pdf. Accessed: January 19, 2024.

_____.2014. *Corporate Average Fuel Economy (CAFE) Standards*. https://www.transportation.gov/mission/sustainability/corporate-average-fuel-economy-cafe-standards. Accessed: January 19, 2024.

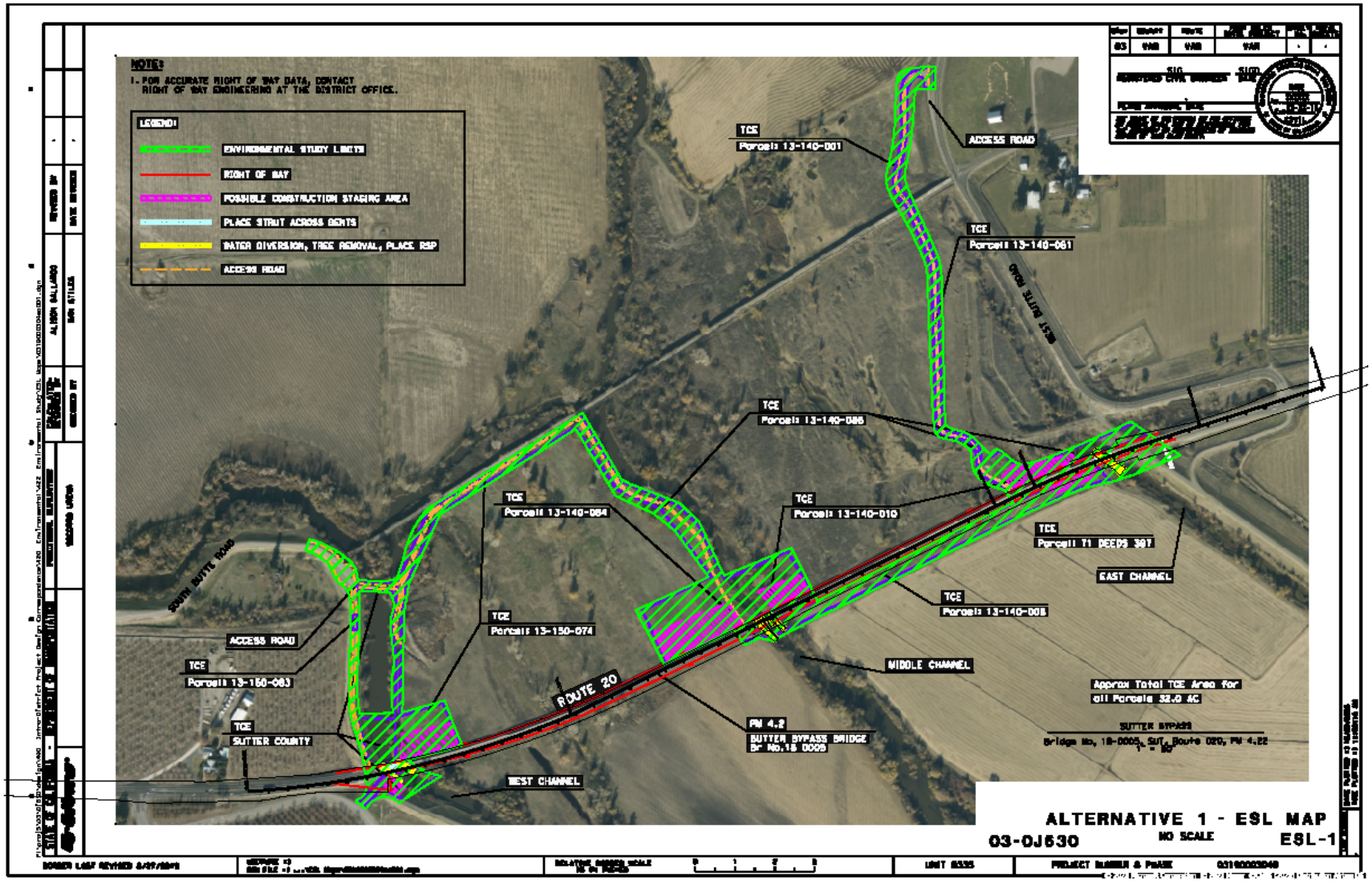
_____.2021. *Climate Action Plan: Ensuring Transportation Infrastructure and System Resilience*. https://www.transportation.gov/sites/dot.gov/files/docs/DOT%20Adaptation%20Plan.pdf. Accessed: January 19, 2024.

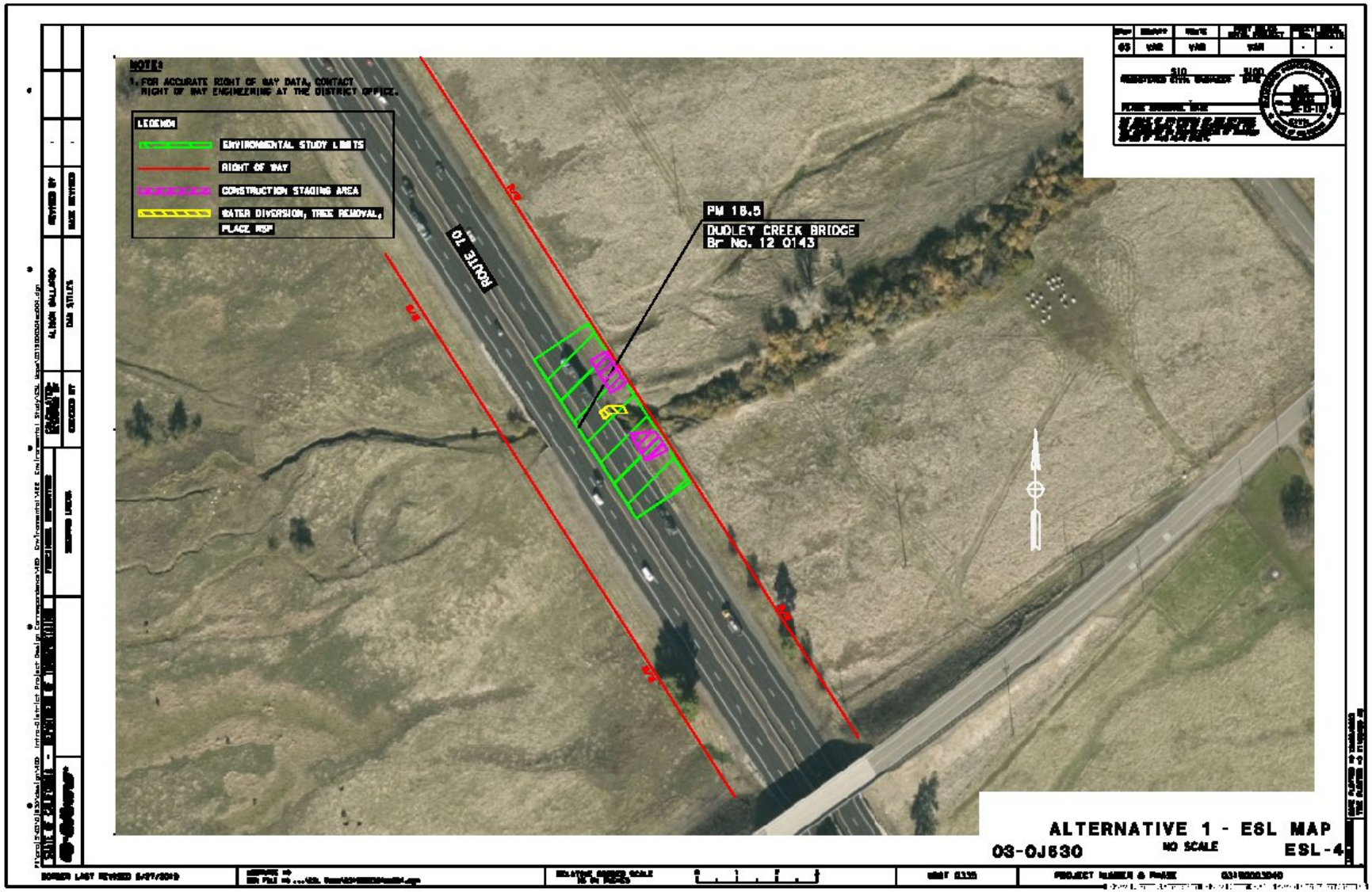
U.S. Environmental Protection Agency (U.S. EPA). 2022a. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. December. https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed: January 18, 2024.

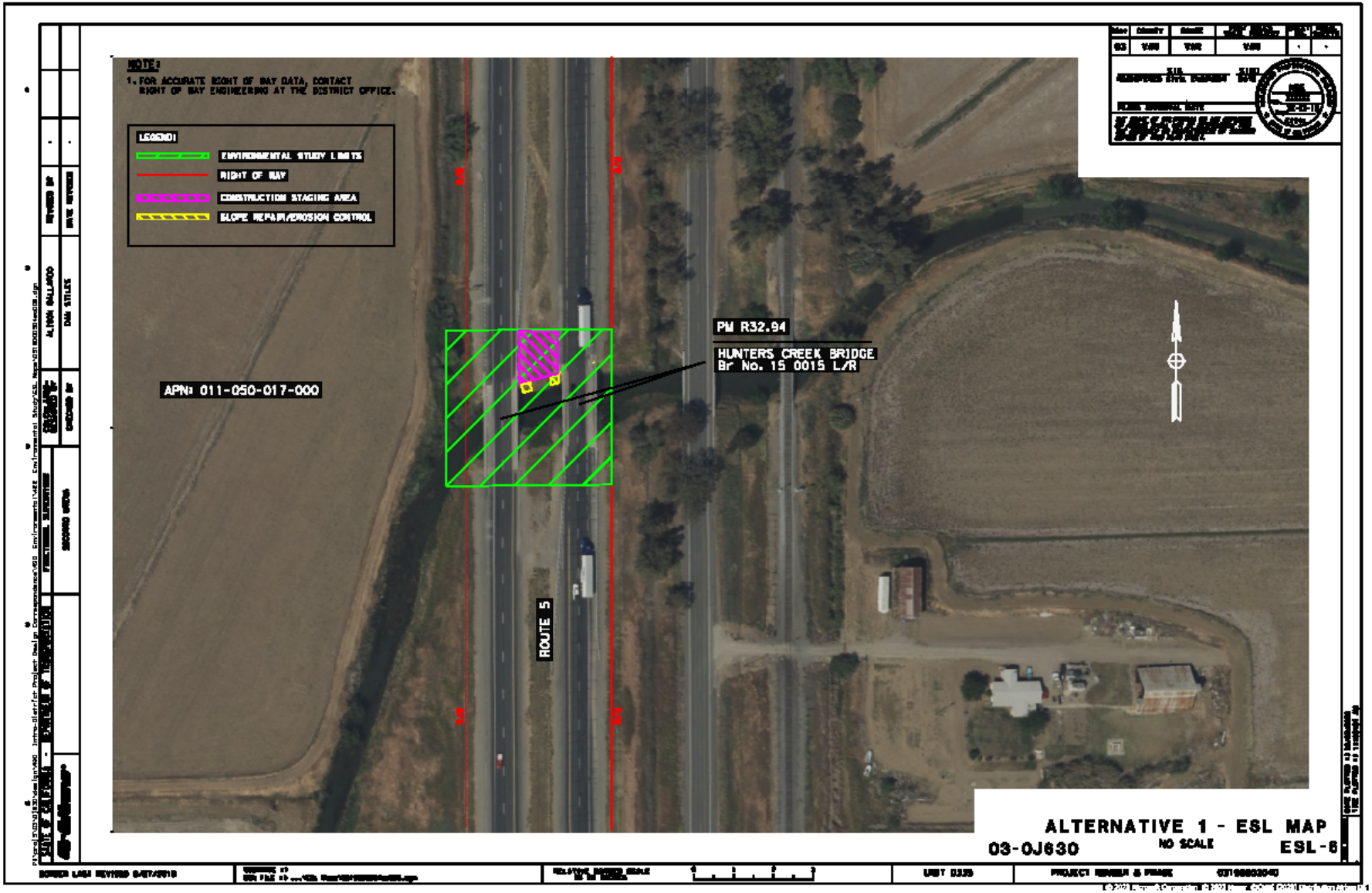
_____.2022b. *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2020*. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed: January 18, 2024.

U.S. Fish & Wildlife Service (U.S. FWS). 2020. Final Comprehensive Conservation Plan for the Butte Sink, Willow Creek-Lurline, and North Central Valley Wildlife Management Areas. https://ecos.fws.gov/ServCat/DownloadFile/170351. Accessed on May 2, 2024.

Appendix A. Project Layouts


NOTES:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
LEGEND:
ENVIRONMENTAL STUDY LIMITS
RIGHT OF WAY
POSSIBLE CONSTRUCTION STAGING AREA
PLACE STRUT ACROSS BENTS
WATER DIVERSION, TREE REMOVAL, PLACE RSP
ACCESS ROAD
TCE
Parcel: 13-140-001
ACCESS ROAD
TCE
Parcel: 13-140-061
WEST BUTTE ROAD
TCE
Parcel: 13-140-088
TCE
Parcel: 13-140-084
TCE
Parcel: 13-140-010
TCE
Parcel: T1 DEED: 387
EAST CHANNEL
TCE
Parcel: 13-140-008
SOUTH BUTTE ROAD
TCE
Parcel: 13-150-074
ACCESS ROAD
TCE
Parcel: 13-150-083
MIDDLE CHANNEL
ROUTE 20
Approx Total TCE Area for all Parcels 32.0 AC
PM 4.2
BUTTER BYPASS BRIDGE
Br No.18 0005
TCE
SUTTER COUNTY
WEST CHANNEL
SUTTER BYPASS
Bridge No. 18-0005, Sut. Route 020, PM 4.22
ALTERNATIVE 1 - ESL MAP
03-0J630
NO SCALE
ESL-1


NOTES:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
LEGEND
ENVIRONMENTAL STUDY LIMITS
RIGHT OF WAY
CONSTRUCTION STAGING AREA
WATER DIVERSION, TREE REMOVAL, PLACE RSP
ROUTE 70
PM 18.5
DUDLEY CREEK BRIDGE
Br No. 12 0143
ALTERNATIVE 1 - ESL MAP
03-0J630
NO SCALE
ESL-4


NOTE:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
LEGEND:
ENVIRONMENTAL STUDY LIMITS
RIGHT OF WAY
CONSTRUCTION STAGING AREA
SLOPE REPAIR/EROSION CONTROL
APN: 011-050-017-000
PM R32.94
HUNTERS CREEK BRIDGE
Br No. 15 0015 L/R
ROUTE 5
ALTERNATIVE 1 - ESL MAP
03-0J630
NO SCALE
ESL-6

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 2023

NON-DISCRIMINATION POLICY STATEMENT

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

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

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

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

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

TONY TAVARES
Director

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

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

United States Department of the Interior

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

In Reply Refer To: 08/16/2024 21:34:45 UTC
Project Code: 2023-0073082
Project Name: 03-0J630 Bridge Scour SUT20 PM4.2-5

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 IPaC 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 Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

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

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

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

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

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

This species list is provided by:

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

PROJECT SUMMARY

Project Code: 2023-0073082
Project Name: 03-0J630 Bridge Scour SUT20 PM4.2-5
Project Type: Bridge - Maintenance
Project Description: Bio survey for bridge maintenance
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.1875005,-121.8125036,14z

Counties: Sutter County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 10 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.

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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
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
Giant Garter Snake *Thamnophis gigas* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot *Spea hammondii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	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
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

NAME	STATUS
Vernal Pool Tadpole Shrimp *Lepidurus packardi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

FLOWERING PLANTS

NAME	STATUS
Hartweg's Golden Sunburst *Pseudobahia bahiifolia* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1704	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.

IPAC USER CONTACT INFORMATION

Agency: California Department of Transportation
Name: Nicholas Barton
Address: 703 B Street
City: Marysville
State: CA
Zip: 95901
Email nicholas.barton@dot.ca.gov
Phone: 5307202778

Quad Name **Sutter Buttes**

Quad Number **39121-B7**

ESA Anadromous Fish

SONCC Coho ESU (T) -	
CCC Coho ESU (E) -	
CC Chinook Salmon ESU (T) -	
CVSR Chinook Salmon ESU (T) -	X
SRWR Chinook Salmon ESU (E) -	X
NC Steelhead DPS (T) -	
CCC Steelhead DPS (T) -	
SCCC Steelhead DPS (T) -	
SC Steelhead DPS (E) -	
CCV Steelhead DPS (T) -	X
Eulachon (T) -	
sDPS Green Sturgeon (T) -	X

ESA Anadromous Fish Critical Habitat

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

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

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

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Essential Fish Habitat

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

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult Monica DeAngelis monica.deangelis@noaa.gov 562-980-3232

MMPA Cetaceans -
MMPA Pinnipeds -

Quad Name **Oroville**

Quad Number **39121-E5**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) - X
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) - X
Eulachon (T) -
sDPS Green Sturgeon (T) - X

ESA Anadromous Fish Critical Habitat

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

ESA Marine Invertebrates

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

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

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

Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

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

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Essential Fish Habitat

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

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult Monica DeAngelis monica.deangelis@noaa.gov 562-980-3232

MMPA Cetaceans -
MMPA Pinnipeds -

Quad Name **Maxwell**

Quad Number **39122-C2**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) - X
SRWR Chinook Salmon ESU (E) - X
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) - X
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
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) -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH - 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 Monica DeAngelis monica.deangelis@noaa.gov 562-980-3232

MMPA Cetaceans -
MMPA Pinnipeds -

CALIFORNIA DEPARTMENT OF
FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Maxwell (3912232))

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
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
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2577	10	None	Threatened	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
Egretta thula	snowy egret	Birds	ABNGA06030	20	1	None	None	G5	S4	null	IUCN_LC-Least Concern	Marsh & swamp, Meadow & seep, Riparian forest, Riparian woodland, Wetland
Extriplex joaquinana	San Joaquin spearscale	Dicots	PDCHE041F3	127	1	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Alkali playa, Chenopod scrub, Meadow & seep, Valley & foothill grassland
Nycticorax nycticorax	black-crowned night heron	Birds	ABNGA11010	37	1	None	None	G5	S4	null	IUCN_LC-Least Concern	Marsh & swamp, Riparian forest, Riparian woodland, Wetland
Plegadis chihi	white-faced ibis	Birds	ABNGE02020	20	1	None	None	G5	S3S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Marsh & swamp, Wetland
Thamnophis gigas	giant gartersnake	Reptiles	ARADB36150	381	7	Threatened	Threatened	G2	S2	null	IUCN_VU-Vulnerable	Marsh & swamp, Riparian scrub, Wetland

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Oroville (3912155))

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
Acipenser medirostris pop. 1	green sturgeon - southern DPS	Fish	AFCAA01031	14	1	Threatened	None	G2T1	S1	null	AFS_VU-Vulnerable, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered	Aquatic, Estuary, Marine bay, Sacramento/San Joaquin flowing waters
Actinemys marmorata	northwestern pond turtle	Reptiles	ARAAD02031	1082	2	Proposed Threatened	None	G2	SNR	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	null
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	960	2	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
Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	ICBRA03030	804	3	Threatened	None	G3	S3	null	IUCN_VU-Vulnerable	Valley & foothill grassland, Vernal pool, Wetland
Calycadenia spicata	spicate calycadenia	Dicots	PDAST1P090	41	2	None	None	G3?	S3	1B.3	null	Cismontane woodland, Valley & foothill grassland
Castilleja rubicundula var. rubicundula	pink creamsacs	Dicots	PDSCR0D482	42	1	None	None	G5T2	S2	1B.2	BLM_S-Sensitive, SB_UCSC-UC Santa Cruz	Chaparral, Cismontane woodland, Meadow & seep, Ultramafic, Valley & foothill grassland
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Dicots	PDONA05053	89	2	None	None	G4G5T4	S4	4.2	SB_UCSC-UC Santa Cruz	Chaparral, Cismontane woodland, Lower montane coniferous forest
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	635	1	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
Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	296	3	None	None	G4G5T4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland
Fritillaria eastwoodiae	Butte County fritillary	Monocots	PMLIL0V060	235	1	None	None	G3Q	S3	3.2	USFS_S-Sensitive	Chaparral, Cismontane woodland, Lower montane coniferous forest, Ultramafic
Gonidea angulata	western ridged mussel	Mollusks	IMBIV19010	158	1	None	None	G3	S2	null	IUCN_VU-Vulnerable	Aquatic
Great Valley Cottonwood Riparian Forest	Great Valley Cottonwood Riparian Forest	Riparian	CTT61410CA	56	1	None	None	G2	S2.1	null	null	Riparian forest
Great Valley Willow Scrub	Great Valley Willow Scrub	Riparian	CTT63410CA	18	1	None	None	G3	S3.2	null	null	Riparian scrub
Hibiscus lasiocarpos var. occidentalis	woolly rose-mallow	Dicots	PDMAL0H0R3	173	1	None	None	G5T3	S3	1B.2	SB_CalBG/RSABG-California /Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Freshwater marsh, Marsh & swamp, Wetland

Juncus leiospermus var. leiospermus	Red Bluff dwarf rush	Monocots	PMJUN011L2	62	15	None	None	G2T2	S2	1B.1	BLM_S-Sensitive, USFS_S-Sensitive	Chaparral, Cismontane woodland, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	139	2	None	None	G3G4	S3S4	null	IUCN_LC-Least Concern	Lower montane coniferous forest, Oldgrowth, Riparian forest
Laterallus jamaicensis coturniculus	California black rail	Birds	ABNME03041	304	1	None	Threatened	G3T1	S2	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_EN-Endangered	Brackish marsh, Freshwater marsh, Marsh & swamp, Salt marsh, Wetland
Lepidurus packardi	vernal pool tadpole shrimp	Crustaceans	ICBRA10010	336	3	Endangered	None	G3	S3	null	IUCN_EN-Endangered	Valley & foothill grassland, Vernal pool, Wetland
Limnanthes floccosa ssp. californica	Butte County meadowfoam	Dicots	PDLIM02042	20	2	Endangered	Endangered	G4T1	S1	1B.1	SB_CalBG/RSABG-California /Rancho Santa Ana Botanic Garden	Valley & foothill grassland, Vernal pool, Wetland
Linderiella occidentalis	California linderiella	Crustaceans	ICBRA06010	508	1	None	None	G2G3	S2S3	null	IUCN_NT-Near Threatened	Vernal pool
Northern Basalt Flow Vernal Pool	Northern Basalt Flow Vernal Pool	Herbaceous	CTT44131CA	28	4	None	None	G3	S2.2	null	null	Vernal pool, Wetland
Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	Fish	AFCHA0209K	31	1	Threatened	None	G5T2Q	S2	null	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern	Aquatic, Sacramento/San Joaquin flowing waters
Oncorhynchus tshawytscha pop. 11	chinook salmon - Central Valley spring-run ESU	Fish	AFCHA0205L	13	1	Threatened	Threatened	G5T2Q	S2	null	AFS_TH-Threatened	Aquatic, Sacramento/San Joaquin flowing waters
Pandion haliaetus	osprey	Birds	ABNKC01010	504	1	None	None	G5	S4	null	CDF_S-Sensitive, CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest
Paronychia ahartii	Ahart's paronychia	Dicots	PDCAR0L0V0	59	1	None	None	G3	S3	1B.1	BLM_S-Sensitive	Cismontane woodland, Valley & foothill grassland, Vernal pool, Wetland
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	841	1	None	None	G4	S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub, Desert wash, Pinon & juniper woodlands, Riparian scrub, Riparian woodland, Valley & foothill grassland
Rana boylii pop. 2	foothill yellow-legged frog - Feather River DPS	Amphibians	AAABH01052	117	2	Threatened	Threatened	G3T2	S2	null	BLM_S-Sensitive, USFS_S-Sensitive	Aquatic, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters
Spea hammondii	western spadefoot	Amphibians	AAABF02020	1443	2	Proposed Threatened	None	G2G3	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
Trifolium jokerstii	Butte County golden clover	Dicots	PDFAB40310	11	7	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_UCSC-UC Santa Cruz, SB_USDA-US Dept of Agriculture	Valley & foothill grassland, Vernal pool, Wetland

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Sutter Buttes (3912127))

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
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	960	1	None	Threatened	G1G2	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Marsh & swamp, Swamp, Wetland
Antigone canadensis tabida	greater sandhill crane	Birds	ABNMK01014	605	1	None	Threatened	G5T5	S2	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, USFS_S-Sensitive	Marsh & swamp, Meadow & seep, Wetland
Antrozous pallidus	pallid bat	Mammals	AMACC10010	420	1	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Chaparral, Coastal scrub, Desertwash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Dipodomys californicus eximius	Marysville California kangaroo rat	Mammals	AMAFD03071	2	2	None	None	G4T1	S1	null	CDFW_SSC-Species of Special Concern	Chaparral, Valley & foothill grassland
Erethizon dorsatum	North American porcupine	Mammals	AMAFJ01010	523	1	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
Hibiscus lasiocarpos var. occidentalis	woolly rose-mallow	Dicots	PDMALDH0R3	173	1	None	None	G5T3	S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Freshwater marsh, Marsh & swamp, Wetland
Layia septentrionalis	Colusa layia	Dicots	PDAST5N0F0	69	1	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_UCBG-UC Botanical Garden at Berkeley	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Navarretia leucocephala ssp. bakeri	Baker's navarretia	Dicots	PDPLM0C0E1	64	1	None	None	G4T2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Cismontane woodland, Lower montane coniferous forest, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	Herbaceous	CTT44110CA	126	1	None	None	G3	S3.1	null	null	Vernal pool, Wetland
Rana boylii pop. 3	foothill yellow-legged frog - north Sierra DPS	Amphibians	AAABH01053	237	1	None	Threatened	G3T2	S2	null	BLM_S-Sensitive, USFS_S-Sensitive	Aquatic, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters
Spinus lawrencei	Lawrence's goldfinch	Birds	ABPBY06100	4	2	None	None	G3G4	S4	null	IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest, Chaparral, Pinon & juniper woodlands, Riparian woodland

CNPS Rare Plant Inventory

CALIFORNIA NATIVE PLANT SOCIETY

Search Results

4 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3912232]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	OTHER STATUS	GENERAL HABITATS	MICROHABITATS	LOWEST ELEVATION (FT)	HIGHEST ELEVATION (FT)	CA ENDEMIC	DATE ADDED	PHOTO
Centromadia parryi ssp. rudis	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	None	None	G3T3	S3	4.2		Valley and foothill grassland, Vernal pools	Alkaline, Roadsides (sometimes), Seeps, Vernally Mesic	0	330	Yes	2007-05-22	© 2019 John Doyen
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	BLM_S; SB_CalBG/RSABG	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland	Alkaline	5	2740	Yes	1988-01-01	No Photo Available
Lasthenia ferrisiae	Ferris' goldfields	Asteraceae	annual herb	Feb-May	None	None	G3	S3	4.2		Vernal pools (alkaline, clay)		65	2295	Yes	2001-01-01	© 2009 Zoya Akulova
Myosurus minimus ssp. apus	little mousetail	Ranunculaceae	annual herb	Mar-Jun	None	None	G5T2Q	S2	3.1	SB_CRES	Valley and foothill grassland, Vernal pools (alkaline)		65	2100		1980-01-01	No Photo Available

Showing 1 to 4 of 4 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2024. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 16 August 2024].

Appendix D. SHPO Concurrence Letter

State of California • Natural Resources Agency
Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Armando Quintero, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

April 18, 2024

VIA EMAIL

In reply refer to: FHWA-CATRA_2024_0329_001

Ms. Julia Prince-Buitenhuys, Acting Section 106 Coordinator
Cultural Studies Office
Division of Environmental Analysis
1120 N Street, PO Box 942873, MS-27
Sacramento, CA 94273-0001

Subject: Finding of No Adverse Effect for the Proposed Bridge Scour Project (EA 03-0J630) in Butte, Colusa and Sutter Counties, California

Dear Ms. Prince-Buitenhuys:

Caltrans is initiating consultation regarding the above project in accordance with the 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer* (SHPO)*, and California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (106 PA). Caltrans is concurrently complying with PRC 5024 pursuant to Stipulation III of the *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92* (PRC 5024 MOU). As part of your documentation, Caltrans submitted a Historic Property Survey Report, Archaeological Survey Report and Finding of No Adverse Effect Report for the project.

Caltrans proposes to perform bridge scour maintenance on three (3) Category 5 Bridges at various locations in Butte, Colusa, and Sutter Counties. Activities include tree and brush removal, diversion or de-watering as necessary, and the placement of Rock Slope Protection.

Identification and consultation efforts for the Undertaking resulted in the identification of the Sutter Bypass Levee which was assumed eligible for the National Register of Historic Places per Stipulation VIII.C.4 of the 106 PA.

Caltrans applied the criteria of adverse effect and proposes that a finding of no adverse effect is appropriate for this undertaking.

Based on my review of the submitted documentation, I do not object to Caltrans' finding that no historic properties will be adversely affected by this undertaking.

If you have any questions, please contact Natalie Lindquist at natalie.lindquist@parks.ca.gov .

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Appendix E. Mitigation and Monitoring Reporting Program

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to Public Resources Code (PRC) Section 21081.6 and CEQA Guidelines Section 15097, which requires a Lead Agency to adopt a program for monitoring or reporting on the revisions it has required for a project and the measures it has imposed to mitigate or avoid significant environmental effects. The public agency may choose whether its program will monitor mitigation, report on mitigation, or both. "Reporting" generally consists of a written compliance review that is presented to the decision-making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. "Monitoring" is generally an ongoing or periodic process of project oversight. There is often no clear distinction between monitoring and reporting and the program best suited to ensuring compliance in any given instance will usually involve elements of both.

During project design, avoidance, minimization, and/or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure the commitments contained in this MMRP are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following MMRP is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented. Some measures may apply to more than one resource area, and these duplicative or redundant measures have not been included in the MMRP.

The following draft mitigation measures are proposed to be included as part of the project:

Measure 1: Wetlands and Other Waters

Onsite restoration of Other Waters is being proposed to mitigate impacts during construction. However, some permanent impacts will be unavoidable due to construction activities. Permanent impacts to Other Waters that would not be able to be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

The following avoidance and minimization measures will be implemented for Other Waters during construction:

- Work in the channel would likely be limited to the driest/low flow season (approximate dates of June 15 - October 15).

- Upon completion of project, areas of disturbance on streambanks shall be stabilized with a hydroseed mixture of native species.
- Hay and/or straw used in erosion control application shall be certified weed-free or weed seed free.
- A contractor supplied biologist would relocate aquatic species if necessary, during dewatering or water diversions.
- Storm Water Pollution Prevention Plan (SWPPP): The Storm Water Pollution Prevention Plan (SWPPP) is a document that addresses water pollution control for a construction project. The contractor would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) that includes erosion control BMPs and construction waste containment measures to ensure that waters of the U.S. and state are protected during and after project construction. The SWPPP would include sedimentation, siltation, turbidity, and non-visual pollutant monitoring, and outline a sampling and analysis strategy, monitoring and reporting schedule, and inspection schedule (Caltrans 2016).
- Spill Prevention Control and Countermeasure plan (SPCCP): To minimize the potential for accidental spills of materials hazardous to the aquatic environment, a SPCCP would be prepared.
- Water diversion structures: If water diversion structures are necessary, the contractor would submit a water diversion plan to Caltrans to send to appropriate regulatory agencies prior to construction.

Measure 2: Riparian Habitat

Onsite restoration of riparian habitat is being proposed to mitigate impacts during construction. However, some permanent impacts will be unavoidable due to construction activities. Permanent impacts to riparian habitat that could not be able to be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

In addition, the following avoidance and minimization measures would be incorporated during construction:

- Removal of riparian vegetation shall not exceed the minimum amount necessary for construction activities. Riparian areas to be avoided will be marked as ESAs with high visibility fencing.

- Upon completion of the project, areas of disturbance on streambanks shall be stabilized with a hydroseed mixture of native species.
- Hay and/or straw used in erosion control application shall be certified weed-free or weed seed free.
- Revegetation planting would be implemented onsite to the greatest extent feasible to riparian areas under the jurisdiction of natural resource permitting agencies, and all other areas will be addressed through landscape architecture using only native species from regionally appropriate seed.

Measure 3: Northern Hardpan Vernal Pool

Onsite restoration of NHVP is being proposed to mitigate impacts during construction. However, some permanent impacts will be unavoidable due to construction activities. Permanent impacts to NHVP that could not be able to be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

The following avoidance and minimization measure will be implemented for NHVP during construction:

- Ground disturbance within 250 feet of suitable habitat will be avoided during the rainy season (approximately October 15 through May 15).

Measure 4: Essential Fish Habitat

Onsite restoration of EFJ is being proposed to mitigate impacts during construction. However, some permanent impacts will be unavoidable due to construction activities. Permanent impacts to EFH that could not be able to be addressed onsite would need to be addressed through purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

The following avoidance and minimization measures will be implemented for EFH pool during construction:

- Prior to initiating construction, an ESA fence will be installed along the construction limits to prevent encroachment into riparian areas adjacent to the construction site that are not targeted for clearing.

- BMPs will be implemented to guarantee the smallest practicable footprint to minimize temporary, indirect, and permanent impacts to jurisdictional wetlands and waters of the United States.
- Work in the channel would likely be limited to the driest/low flow season (approximate dates of June 15–October 15).

Measure 5: Northwestern Pond Turtle

Installing RSP in all locations may positively impact NWPT by increasing suitable basking habitat along stream banks. Caltrans is not proposing any species-specific compensatory mitigation for NWPT. However, this may change during FESA Section 7 consultation with USFWS, and any required compensatory mitigation would be incorporated into the project.

The following avoidance and minimization measures will be implemented for NWPT during construction:

- Pre-construction surveys would be conducted, and any individual northwestern pond turtles discovered would be protected under an Aquatic Species Relocation Plan for the duration of construction.
- Any additional avoidance and minimization measures developed during the FESA Section 7 consultation with USFWS will be incorporated into the project.

Measure 6: Giant Garter Snake

Permanent impacts to GGS habitat that could not be addressed onsite would need to be addressed through agency-approved mitigation bank credits or mitigating off-site at an agency approved location.

The following avoidance and minimization measures will be implemented for GGS during construction:

- Construction activity will be conducted between May 1 and October 1, which is the active season for GGS in order to minimize impacts to the species.
- A Worker Environmental Awareness Training Program for construction personnel will be conducted by USFWS-approved biologist for all construction workers including contractors, prior to the start of construction activities. This training instructs workers to recognize GGS and their habitats.
- Twenty-four hours prior to construction activities, the project area shall be surveyed for GGS by USFWS-approved biologist. Surveys of the project area should be

repeated if a two-week or greater lapse in construction activity occurs. If GGS is encountered during construction, activities will cease until appropriate corrective measures have been completed or it has been determined that the GGS will not be harmed. Any sightings and any incidental take will be reported to the USFWS immediately.

- The dewatered areas will remain dry (no standing water) for at least 15 consecutive days prior to doing the construction activities in the channels.
- Dewatered areas will then be surveyed by USFWS-approved biologist before construction activity commences following the 15 day dry period.
- Disturbed areas within the action area will be replanted using native plant species.
- Any additional avoidance and minimization measures developed during the FESA Section 7 consultation with USFWS and CESA consultation with CDFW will be incorporated into the project.

Measure 7: Green Sturgeon, Steelhead, CVSR Chinook Salmon, SRWR Chinook Salmon

Purchasing agency-approved mitigation bank credits or mitigating off-site at an agency approved location is being proposed for green sturgeon, steelhead, CVSR Chinook salmon, and SRWR Chinook salmon.

In addition, the following avoidance and minimization measures would be implemented during construction.

- All construction work that will take place in the live channel will occur between June 1 and October 15 during the summer low flow period to minimize potential exposure of juveniles and to minimize fish entrapment within cofferdams.
- In-channel work will not be conducted at night to afford fish quiet, unobstructed passage during nighttime migratory hours.
- A qualified biologist will prepare and implement a Fish Salvage Plan to recover any individuals entrapped in cofferdams. The Fish Salvage Plan will receive approval from NMFS prior to initiating any in-channel work. At a minimum, the plan will:
    - Provide for the collection, transfer, and release of all entrapped sensitive fish by a qualified biologist to a designated location downstream of project activities.
    - Record the electrical conductivity, temperature (water and air), and pH within both the cofferdam and the free-flowing river.

    - Ensure all rescued sensitive fish are kept in aerated water and at appropriate temperatures at all times prior to release.

- To minimize the potential for accidental spills of materials hazardous to the aquatic environment, a Spill Prevention Control and Countermeasure Plan (SPCCP) will be prepared.
- Prior to initiating construction, an ESA fence shall be installed along the construction limits to prevent encroachment into the riparian areas adjacent to the construction site.
- Project activities that may affect the flow of the river through placement of fill and pier construction shall comply with the 2001 NMFS Guidelines for Salmonid Passage at Stream Crossings, where applicable. The guidelines include, but are not limited to:
    - a minimum water depth (12 inches for adults and 6 inches for juveniles) at the low fish passage
    - a maximum hydraulic drop of 1 foot for adults and 6 inches for juveniles
    - avoidance of abrupt changes in water surface and velocities, and
    - structures aligned with the stream, with no abrupt changes to inflow direction upstream or downstream of the crossing.
- All water pumping or withdrawal from the river shall comply with 1997 NMFS Fish Screening Criteria for Anadromous Salmonids, where applicable, to avoid entrainment of fish. The criteria include, but are not limited to:
    - The screen design must provide for uniform flow distribution over the surface of the screen.
    - Screen material openings shall not exceed 3/32 inch for fry-sized sturgeon and shall not exceed 1/4 inch for fingerling-sized sturgeon.
    - Where physically practical, the screen shall be constructed at the diversion entrance. The screen face should be generally parallel to river flow and aligned with the adjacent bank line.
    - The design approach velocity shall not exceed 0.33 feet per second for fry sized sturgeon or 0.8 feet per second for fingerling sized sturgeon.
    - The screen design must provide for uniform flow distribution over the surface of the screen.