MEEKS CREEK BRIDGE REPLACEMENT PROJECT

INITIAL STUDY

with Proposed Negative Declaration and Draft Section 4(f) Evaluation

EL DORADO COUNTY, CALIFORNIA

DISTRICT 3 – ED – 89 — Post Miles 24.4 to 25.3

EA 03-4J090 / EFIS 0323000082

Prepared by the
State of California Department of Transportation

Caltrans

November 2024

General Information About This Document

What is in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study with proposed Negative Declaration (IS/ND) which examines the potential environmental impacts of the Meeks Creek Bridge Replacement Project on State Route 89 in El Dorado County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). This document tells you why the project is being proposed, how the existing environment could be affected by the project, the potential impacts of the project, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read this document.
- Additional copies of this document and related technical studies are available upon request at:
    - Placer County Library, Tahoe City Branch – 740 North Lake Boulevard, Tahoe City, CA, 96145.
    - Caltrans District 3 Office – 703 B Street, Marysville, 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/d3-el-dorado-county.
- Attend the public meeting. The meeting will be held virtually December 4, 2024, from 6 p.m. to 7 p.m. at this link:

    Join the meeting now
    Meeting ID: 291 117 276 14
    Passcode: oYJAUX

- We'd like to hear what you think. If you have any comments about the proposed project, please attend the public meeting and/or send your written comments to Caltrans by the deadline.
- Please send comments via U.S. mail to:

    California Department of Transportation
    North Region Environmental–District 3
    Attention: Bibiana Rodriguez
    703 B Street
    Marysville, CA 95901

- Send comments via e-mail to:
    Meeks.Creeks.Bridge.Replacement@dot.ca.gov
- Be sure to send comments by the deadline: December 27, 2024

What happens after this?

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

Alternate Formats

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attention: John O'Connell, North Region Environmental-District 3, 703 B Street, Marysville, CA 95901; (530) 701-9459 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.

MEEKS CREEK BRIDGE REPLACEMENT PROJECT

Replacement of Meeks Creek Bridge, creek restoration, fish and wildlife connectivity improvements, enhancement of bicycle and pedestrian infrastructure, and Transportation Management System elements on State Route 89 in El Dorado County, from Post Miles 24.4 to 25.3

INITIAL STUDY

With Proposed Negative Declaration and Draft Section 4(f) Evaluation

Submitted Pursuant to:

State: Division 13, California Public Resources Code

Federal: 42 USC 4332(2)(C)

THE STATE OF CALIFORNIA

Department of Transportation

11/5/24

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:

North Region Environmental–District 3
Bibiana Rodriguez
703 B Street
Marysville, CA 95901
(530) 720-9957

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

PROPOSED NEGATIVE DECLARATION

Pursuant to: Division 13, California Public Resources Code

State Clearinghouse Number: Pending

Project Description

The California Department of Transportation (Caltrans) proposes a fish passage/terrestrial wildlife connectivity and bridge scour repair project on State Route (SR) 89 between Post Mile (PM) 24.4 and PM 25.3 in El Dorado County. The project proposes to remove Meeks Creek Bridge (Bridge No. 25-0019), construct a new bridge on SR 89 to provide fish and wildlife passage, repair scour damage, provide bicycle and pedestrian access, add Transportation Management Systems (TMS) elements with a Maintenance Vehicle Pullout (MVP), and restore Meeks Creek channel within Caltrans right of way.

Determination

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

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

The project would have *No Impact* on:

- Agriculture and Forest Resources
- Cultural Resources
- Geology and Soils
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Tribal Cultural Resources

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

- Aesthetics
- Air Quality
- Biological Resources
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Waste
- Hydrology and Water Quality
- Noise
- Transportation
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

_____ 11/5/24

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

Date

Table of Contents

List of Appendices

List of Figures

List of Tables

Acronyms and Abbreviated Terms

Acronym/Abbreviation	Description
AADT	Average Annual Daily Traffic
AB	Assembly Bill
ADL	Aerially Deposited Lead
ARB	California Air Resources Board
BC	Black Carbon
BMPs	Best Management Practices
BO	Biological Opinion
BSA	Biological Study Area
BTU	British Thermal Unit
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CAL-CET	Caltrans Construction Emissions Tool
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAPTI	Climate Action Plan for Transportation Infrastructure
CCR	California Code of Regulations
CCTV	Closed-Circuit Television
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CH	Critical Habitat
CH_4	Methane
CIA	Cumulative Impact Analysis
CIDH	Cast-In-Drilled-Hole
CMS	Changeable Message Sign
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COS	Certificate of Sufficiency
CRPR	California Rare Plant Ranks

Acronym/Abbreviation	Description
CSB	Contractor Supplied Biologist
CT-EMFAC	Caltrans Emission Factors
CTP	California Transportation Plan
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
dB	Decibels
dBA	A-weighted Decibels
DBH	Diameter-at-Breast-Height
DED	Draft Environmental Document
Department	Caltrans
DOT	Department of Transportation
DP	Director's Policy
DPR	Draft Project Report
ECL	Environmental Construction Liaison
EDCTC	El Dorado County Transportation Commission
EIR	Environmental Impact Report
EMFAC	Emission Factors
EO(s)	Executive Order(s)
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESA(s)	Environmentally Sensitive Area(s)
ESL	Environmental Study Limits
ºF	Degrees Fahrenheit
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FP	Fully Protected
FRA	Federal Responsibility Area
GHG	Greenhouse Gas
GWP	Global Warming Potential
H&SC	Health & Safety Code
HFCs	Hydrofluorocarbons
HFC-134a	Hydrofluorocarbon-134a
HMDD	Hazardous Materials Disclosure Document
IPaC	Information for Planning and Consultation
IS	Initial Study
ISA	Initial Site Assessment
IS/ND	Initial Study / Negative Declaration
kWh	Kilowatt-hour
Lahontan RWQCB	Lahontan Regional Water Quality Control Board
lbs	Pounds
LCP	Lead Compliance Plan

Acronym/Abbreviation	Description
LCT	Lahontan Cutthroat Trout
LMax	Maximum Sound Level
LSAA	Lake and Streambed Alteration Agreement (CDFW)
LTBMU	USDA Forest Service Lake Tahoe Basin Management Unit
MBGR	Metal Beam Guardrail
MBTA	Migratory Bird Treaty Act
MGS	Midwest Guardrail System
MLD	Most Likely Descendent
MMT	Million Metric Tons
MPO	Metropolitan Planning Organization
MSA	Magnuson-Stevens Fishery Conservation and Management Act
N_2O	Nitrous Oxide
NAGPRA	Native American Graves Protection and Repatriation Act of 1990
NAHC	Native American Heritage Commission
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHTSA	National Highway Traffic and Safety Administration
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
OHW	Ordinary High Water
OHWM	Ordinary High Water Mark
OPR	Governor's Office of Planning and Research
PDT	Project Development Team
$PM_{2.5}$	Fine Particulate Matter
PM_{10}	Particulate Matter
PM(s)	Post Mile(s)
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
Project	Meeks Creek Bridge Replacement Project
PRC	(California) Public Resources Code
RCEM	Road Construction Emissions Model
RCP	Representative Concentration Pathways
ROW	Right of Way
RSP	Rock Slope Protection
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	Sustainable Communities Strategy

Acronym/Abbreviation	Description
SF_6	Sulfur Hexafluoride
SHPO	State Historic Preservation Officer
SHS	State Highway System
SMAQMD	Sacramento Metropolitan Air Quality Management District
SNC(s)	Sensitive Natural Community(ies)
SNYLF	Sierra Nevada yellow-legged frog
SR	State Route
SRA	State Responsibility Area
SSC	Species of Special Concern
SSP	Standard Special Provision
SWPPP	Storm Water Pollution Prevention Plan
TCE	Temporary Construction Easements
THVF	Temporary High Visibility Fencing
TMP	Transportation Management Plan
TMPO	Tahoe Metropolitan Planning Organization
TMS	Transportation Management System
TRPA	Tahoe Regional Planning Agency
U.S. or US	United States
USACE	United States Army Corps of Engineers
USC	United States Code
U.S. DOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency
USDA Forest Service	United States Department of Agriculture Forest Service
USFWS	U.S. Fish and Wildlife Service
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled
VPD	Vehicles per day
VPH	Vehicles per hour
WPCP	Water Pollution Control Program

Chapter 1. Proposed Project

1.1 Introduction/Project History

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

Caltrans proposes the Meeks Creeks Bridge Replacement Project on State Route (SR) 89 in El Dorado County, between PM 24.4 and PM 25.3. The total length of the project is 0.9 miles.

Through various partnerships, US Department of Agriculture (USDA) Forest Service, Lake Tahoe Basin Management Unit (LTBMU or USDA Forest Service) is developing plans for the restoration of the former Meeks Bay Marina and surrounding area known as their Meeks Bay Restoration Project. While Caltrans would eventually need to replace the bridge, the USDA Forest Service has identified its immediate replacement as critical for full restoration benefits to be achieved. The existing bridge is causing erosion in the creek downstream and acts as a fish passage barrier. Caltrans is partnering with the USDA Forest Service to review and approve designs which meet both the USDA Forest Service's Meeks Bay Restoration Project objectives as well as Caltrans highway standards.

1.2 Purpose and Need

Purpose

The purpose of this project is to address existing fish passage barrier, improve terrestrial wildlife connectivity, reduce potential for channel clogging at the upstream side, repair scour downstream of the bridge within the right of way, and improve safety by replacing Meeks Creek Bridge (Bridge No. 25-0019). This project also improves pedestrian and bike facilities by adding Class II bicycle lanes and sidewalks on the replaced bridge.

Need

The existing Meeks Creek channel below the existing bridge is currently experiencing a barrier to fish passage due to a vertical drop caused by a channel incision. The existing bridge creates a hydraulic bottleneck that causes backwater in the meadow and accelerated erosive flows downstream. In addition, the current

width and length of the bridge catches debris that contribute to the bottleneck effect. The existing bridge railings are in poor conditions and the bridge requires scour damage repair. The roadway lacks pedestrian/bicycle facilities connecting trails/campgrounds in the vicinity of the project.

1.3 Project Description

The proposed fish passage/terrestrial wildlife connectivity and bridge scour repair project is located on SR 89 in El Dorado County between PM 24.4 and PM 25.3 (Figure 1). The project proposes to remove Meeks Creek Bridge (Bridge No. 25-0019), construct a new bridge on SR 89 to provide fish and wildlife passage, repair scour damage, provide bicycle and pedestrian access, add Transportation Management Systems (TMS) elements with a Maintenance Vehicle Pullout (MVP), and restore Meeks Creek channel within Caltrans right of way.

Figure 1. **Project Vicinity**

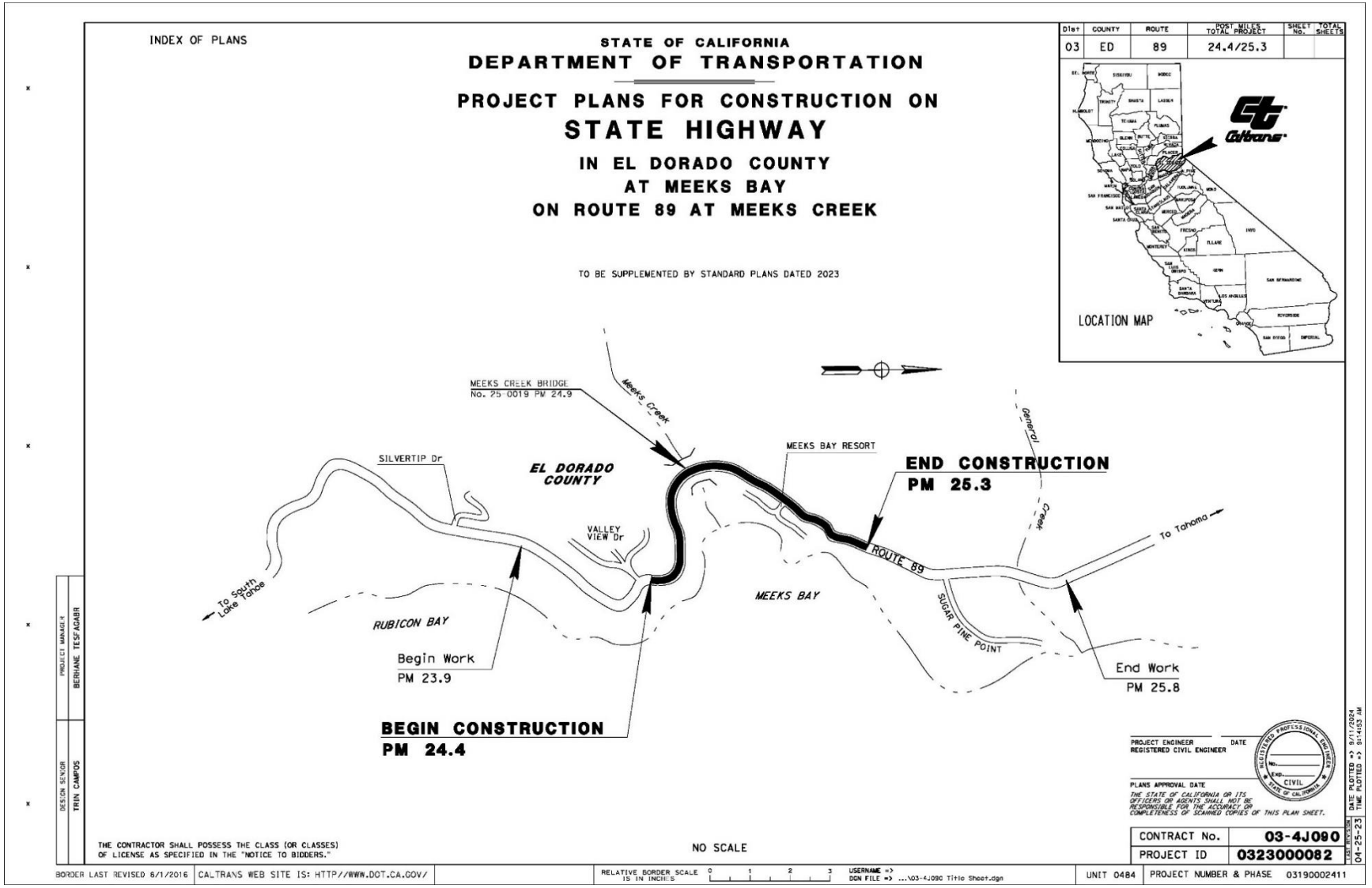

Figure 2. Project Location Map

1.4 Proposed Alternatives

There is one Build alternative and one No-Build alternative for this project.

Build Alternative

The scope of work for the Build Alternative includes the following:

Vehicular Bridge

- Replacement of Meeks Creek bridge No. 25-0019 with a single span 90.5 foot length bridge to accommodate two 12-foot lanes, two 8-foot standard shoulders, 6-foot concrete sidewalks on each side and concrete bridge railing with painted formliner that closely resembles the existing stone railings. Temporarily diverting Meeks Creek flow for the bridge construction and channel restoration would be required.
- Restoration of Meeks Creek channel within Caltrans right of way.
- Full closure of SR 89 from PM 24.9 to PM 25.3 during bridge replacement for up to seven days. Detours would be required during the closure period.
- Placement of embankment along roadway approaches to the bridge as needed.
- Restriping of lanes and shoulders with new 6-inch traffic stripes.
- Placement of class II bicycle markings.
- Relocation of overhead and underground utilities that conflict with bridge replacement activities.
- Acquire Temporary Construction Easements (TCE) as needed.

Wildlife Crossing Improvement

- Improve wildlife terrestrial crossing by widening the creek channel width beneath the new bridge.

Transportation Management System (TMS)

- Installation of one (1) Closed-Circuit Television (CCTV) pole within the project limits.
- Installation of one (1) Changeable Message Sign (CMS) within the project limits.
- Installation of MVP with guardrail for access to CCTV and CMS electrical cabinet
- Placement of maximum number and size of conduits for future use in each bridge rail.

Full Closure/Detour

Most of the project's work would be carried out under standard traffic control, which involves a one-way lane closure, except for the main bridge construction. A full closure of SR 89 from PM 24.9 to PM 25.3 in El Dorado County would be required to replace the bridge. The proposed full closure is intended to take place during the off-peak season. This closure is anticipated to last three to seven days and involve continuous twenty-four-hour activities. All abutment cast-in-drilled-hole (CIDH) pile drilling, concrete pouring, and other activities would be conducted under temporary one-way lane closures prior to the main bridge construction activities.

During the full closure, a detour would be established for travelers using SR 28 to SR 50 as the primary alternative routes. The proposed detour route spans 53 miles and requires approximately 1 hour and 35 minutes to traverse (Figure 3). In comparison, the existing route along SR 89 is 17 miles and takes approximately 20 minutes from Meeks Bay to South Lake Tahoe. Caltrans would coordinate with all federal and local authorities, stakeholders, and emergency services providers in the area during all phases of the project.

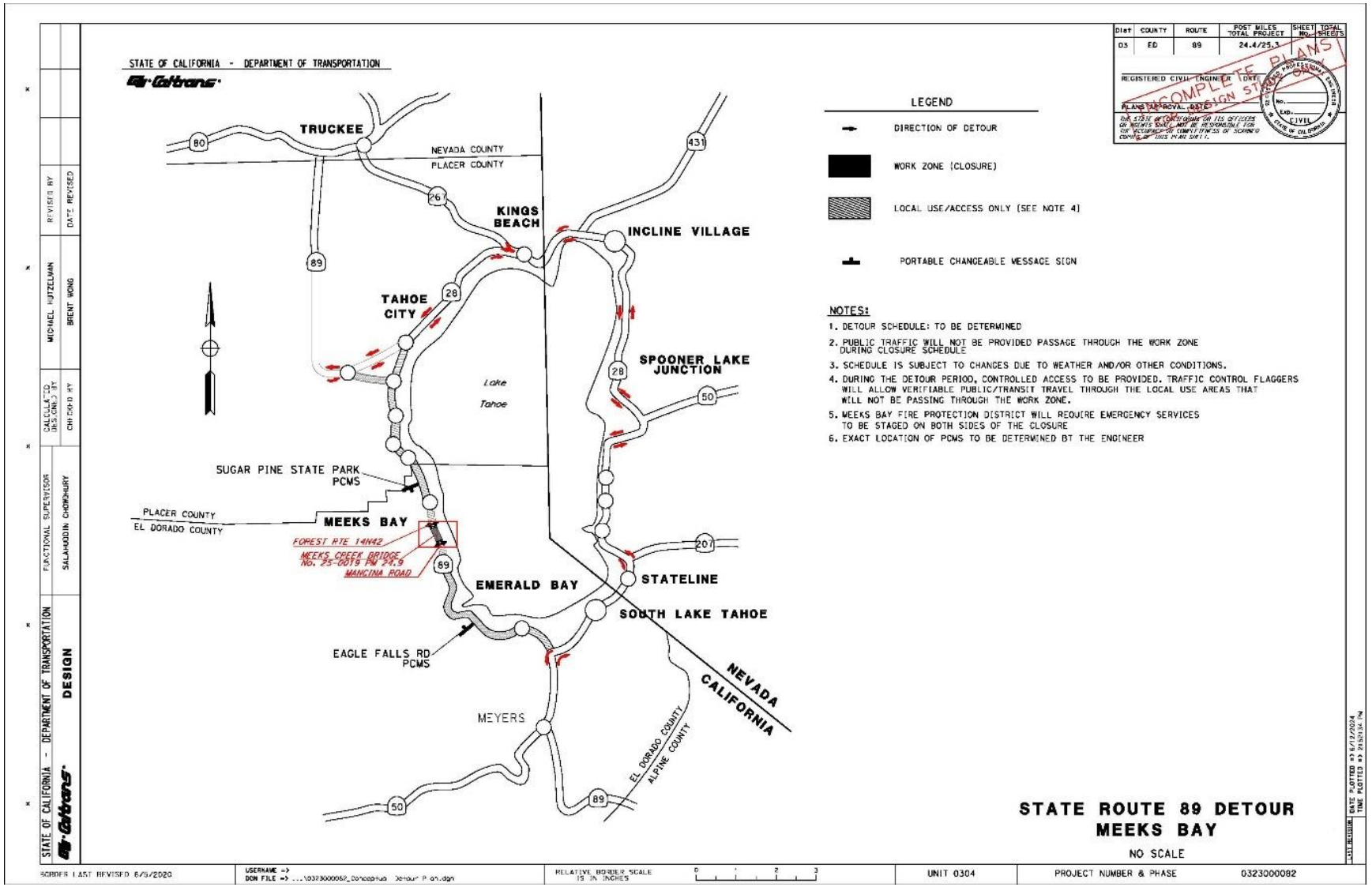

Figure 3. State Route 89 Detour Map

Temporary Construction Easements

No permanent acquisition or easement would be required for the project. Temporary Construction Easements (TCE) from the USDA Forest service would be needed on each side of the bridge. The TCE would be for possible construction equipment access, water diversion, and any access needed to conform to the creek during the creek restoration under the bridge.

No-Build (No-Action) Alternative

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

1.5 Permits and Approvals Needed

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

Table 1. Agency, Permits/Approval Needed and Status

Agency	PLACs	Status
U.S. Army Corps of Engineers (USACE)	Section 404 Permit for Placement of Fill Material into Waters of the United States	Pending
U.S. Fish and Wildlife Service (USFWS)	Section 7 Endangered Species Act: Biological Opinion and Letter of Concurrence	Pending
California Department of Fish and Wildlife (CDFW)	Section 1602 Lake and Streambed Alteration Agreement	Pending
Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification	Pending
USDA Forest Service	Section 4(f) Concurrence	Pending

For projects that have federal funds involved, Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 prohibits the Federal Transit Administration and other USDOT agencies from using land from publicly owned parks, recreation areas (including recreational trails), wildlife and water fowl refuges, or public and

private historic properties, unless there is no feasible and prudent alternative to that use and the action includes all possible planning to minimize harm to the property resulting from such a use. This project has federal funds and would require the temporary use of a Section 4(f) resource. See Appendix E for more information.

1.6 Standard Measures and Best Management Practices Included in All Alternatives

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

The project contains a number of standardized project features, standard practices (measures), and Best Management Practices (BMPs) which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project and, as such, are included as part of the project description. Any project-specific avoidance, minimization, or mitigation measures that would be applied to reduce the effects of project impacts are listed further below as Additional Measures or in Section 2.4.–Biological Resources.

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, construction lighting would be temporary, and directed specifically on the portion of the work area actively under construction.

AR-3: Where feasible, the removal of established trees and vegetation would be minimized. To demarcate areas where vegetation would be preserved and root systems of trees protected, Temporary High Visibility Fencing

(THVF) would be installed in Environmentally Sensitive Areas (ESAs) before start of construction.

Biological Resources

BR-1: General

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

BR-2: Animal Species

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

B. Pre-construction surveys for active raptor nests within one-quarter mile of the construction area would be conducted by a qualified biologist within one week prior to initiation of construction activities. Areas to be surveyed would be limited to those areas subject to increased disturbance due to construction activities (i.e., areas where existing traffic or human activity is greater than or equal to construction-related disturbance need not be surveyed). If any active raptor nests are identified, appropriate conservation measures (as determined by a qualified biologist) would be implemented. These measures may include, but are not limited to, establishing a construction-free buffer

zone around the active nest site, biological monitoring of the active nest site, and delaying construction activities near the active nest site until the young have fledged.

C. To prevent attracting corvids (birds of the *Corvidae* family which include jays, crows, and ravens), no trash or foodstuffs would be left or stored on-site. All trash would be deposited in a secure container daily and disposed of at an approved waste facility at least once a week. Also, on-site workers would not attempt to attract or feed any wildlife.

D. A qualified biologist would monitor in-stream construction activities that could potentially impact sensitive biological receptors (e.g., amphibians, fish). To ensure adherence to permit conditions, the biological monitor would be present during activities such as installation and removal of dewatering or diversion systems, bridge demolition, pile-driving and hoe-ramming, and drilling for bridge foundations to ensure adherence to permit conditions. In-water work restrictions would be implemented.

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

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

BR-3: Invasive Species

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

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

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

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

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

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

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

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: An archaeological monitor and Washoe tribal monitor would be used during ground-disturbing activities.

CR-2: 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-3: If human remains and related items are discovered on private or State land, they would be treated in accordance with State Health and Safety Code (H&SC) § 7050.5. Further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to California Public Resources Code (PRC) § 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD).

Human remains and related items discovered on federally owned lands would be treated in accordance with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (23 United States Code (USC) 3001). The procedures for dealing with the discovery of human remains, funerary objects, or sacred objects on federal land are described in the regulations that implement NAGPRA 43 Code of Federal Regulations (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 BMPs. New earthen slopes would be vegetated to reduce erosion potential.

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

Greenhouse Gas Emissions

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

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

GHG-3: Caltrans Standard Specification "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resources Board (ARB) (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 carbon dioxide (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* (California Code of Regulations [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 (SSP) "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 14-11.14 “Treated Wood Waste.”

HW-4: If asbestos-containing material is removed during this project, it would be removed and disposed of in accordance with SSP 14–11.16 Asbestos-containing Construction Materials in Bridges”.

Traffic and Transportation

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

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

Utilities and Emergency Services

UE-1: 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-2: The project is located within the *Very High* California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone (FHSZ). The contractor would be required to submit a jobsite Fire Prevention Plan as required by California Occupational Safety and Health Administration (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 Storm Water 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 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.

1.7 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation supporting a Categorical Exclusion determination would 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 (NMFS) and the United States Fish and Wildlife Service (USFWS)—in other words, species protected by the Federal Endangered Species Act).

Chapter 2. CEQA Environmental Checklist

Environmental Factors Potentially Affected

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

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

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

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

Project features, which can include both design elements of the project, as well as standardized measures that are applied to all or most Caltrans projects (such as Best Management Practices [BMPs] and measures included in the Standard Plans and Specifications or as Standard Special Provisions [Section 1.6]), are considered to be an integral part of the project and have been considered prior to any significance determinations documented in the checklist or document.

Project Impact Analysis Under CEQA

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

CEQA requires the identification of each potentially "significant effect on the environment" resulting from the project, and ways to mitigate each significant effect. Significance is defined as *"Substantial or potentially substantial adverse change to any of the physical conditions within the area affected by the project"* (14 CCR §

15382). CEQA determinations are made prior to and separate from the development of mitigation measures for the project.

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

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

If the action may have a potentially significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the Lead Agency may adopt a Negative Declaration (ND) if there is no substantial evidence that the project may have a potentially significant effect on the environment (14 CCR § 15070(a)). A proposed Negative Declaration must be circulated for public review, along with a document known as an Initial Study. CEQA also allows for a "Mitigated Negative Declaration" in which mitigation measures are proposed to reduce potentially significant effects to less than significant (14 CCR § 15369.5).

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

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

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

No-Build (No-Action) Alternative

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

Definitions of Project Parameters

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

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

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

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

Area of Visual Effect: The Area of Visual Effect (AVE) are those areas from which the project may be visible, as influenced by the presence or absence of intervening topography, vegetation, and structures. It is the sum of the viewsheds of all highway travelers with views from the road and all highway neighbors with views of the road.

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

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

The BSA for this project consists of the entire ESL and 100-feet downstream of the Meeks Creek Bridge (Figure 4). The BSA was developed to account for additional impacts to water quality as a result of potential sedimentation from bridge replacement and water diversion (Caltrans 2024c).

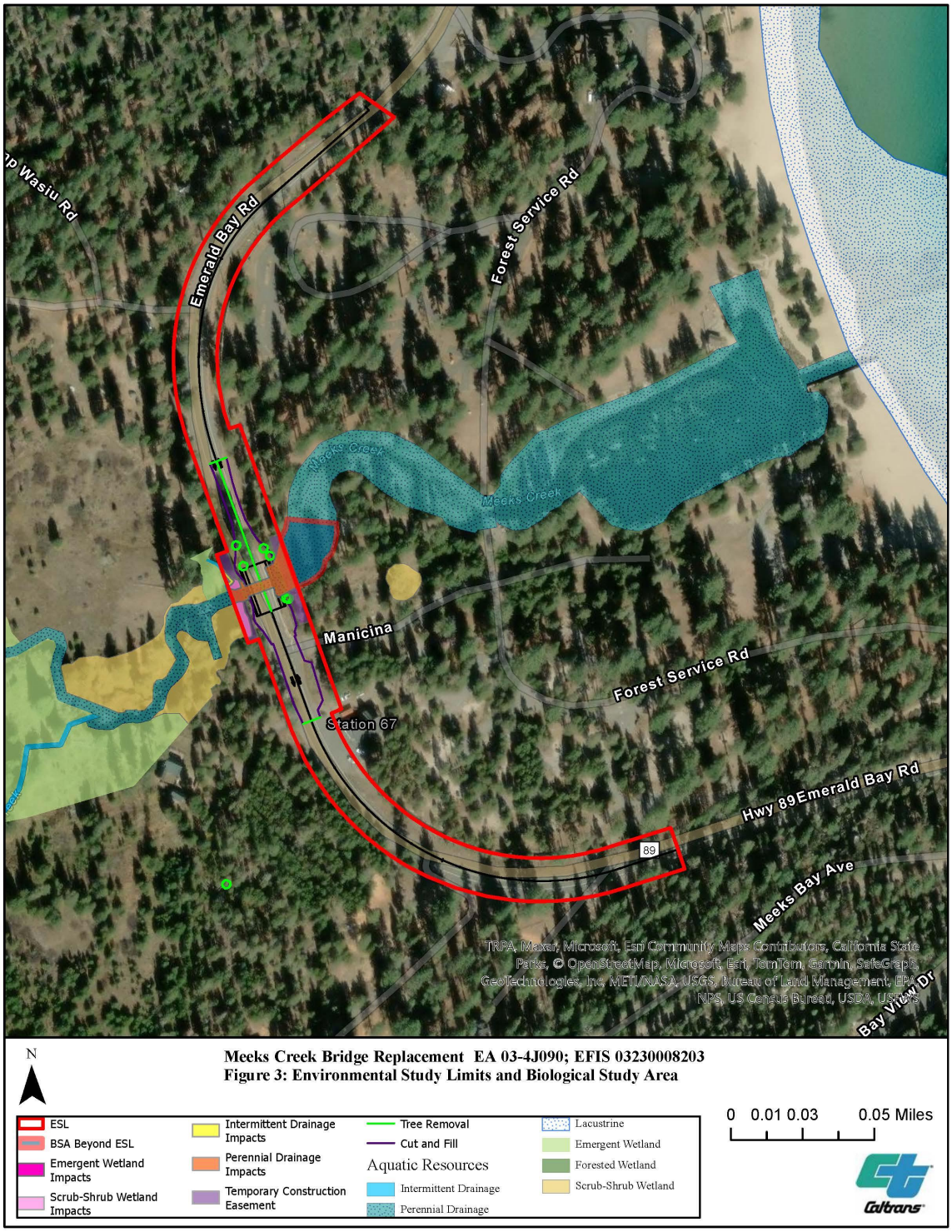

Figure 4. Environmental Study Limits and Biological Study Area

2.1 Aesthetics

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

Regulatory Setting

The California Environmental Quality Act (CEQA) establishes it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of *aesthetic*, natural, scenic and historic environmental qualities" (California Public Resources Code [PRC] Section 21001[b]).

California Streets and Highways code Section 92.3 directs Caltrans to use drought resistant landscaping and recycled water when feasible and incorporate native

wildflowers and native and climate-appropriate vegetation into the planting design when appropriate.

Affected Environment

Determinations in this section are based on the scope, description, and location of the proposed project, as well as the Visual Impact Assessment (VIA) Memorandum and Scenic Resource Evaluation dated July 8, 2024 (Caltrans 2024a). The project lies within the Lake Tahoe Basin of the Sierra Nevada region of northern California. This portion of SR 89 runs south to north along the west side of Lake Tahoe. The project lies 0.20 miles west of the Meeks Bay shoreline of Lake Tahoe. The landscape is characterized by a natural and rural setting with rolling hills to the north, west, and south, and forested areas in all directions. Very few structures are present in the area.

The Area of Visual Effect (AVE) for this project is mostly confined to the immediate areas along the highway. At Meeks Creek bridge, the AVE opens to the west, providing views of Meeks Creek, Meeks Meadow, forested hills, and a distant mountain ridgeline. The AVE also extends east with views of the creek and the northern edges of Meeks Bay Campground. The AVE includes various driveways and accessways for the campground and Meeks Bay shoreline, Meeks Bay Trailhead (located north of the bridge), and a Meeks Bay Fire Protection District station located south of the bridge.

The project site is located on a portion of SR 89 classified as an Officially Designated State Scenic Highway. However, no specific State-designated scenic or visual resources, such as vista points, scenic vistas, or historic buildings, are located within the AVE.

Environmental Consequences

The project would introduce somewhat incompatible elements within the AVE. The CCTV pole and MVP would be visually dissimilar features within the AVE. The scale and form of the CMS sign would also be inconsistent with the visual character of the area. It would obstruct and somewhat diminish views of the forested areas to the north and south of SR 89. The obstruction of views would be brief, and, overall, the forest and hills would remain the visually dominant features for all travelers and neighbors. In addition, views of the creek and meadow would remain unobstructed, and travelers' focus on the surrounding environment would not likely be deterred.

The tree removal, particularly removal of the trees closest to the bridge, would detract from the appearance of the highway as travelers approach the bridge and Meeks Creek. However, the continuity and dominant form of the forest along the highway would be maintained.

The project would further open views from the bridge, allowing greater visual access to Meeks Meadow, forested hills, and Meeks Creek to the west and the creek to the east. The project would also construct bridge railing that would resemble the existing bridge's stone railing. Together, these features would enhance the project's compatibility with the AVE's visual character and positively affect its visual quality. Lastly, although the project would widen the bridge's shoulders and sidewalks for enhanced bicycle and pedestrian access, the overall width of the bridge would increase only seven feet, creating a minimally noticeable change to the bridge. As proposed, the project would create a low adverse visual change to the environment.

Avoidance, Minimization and/or Mitigation Measures

Standard Measures and BMPs as outlined in Chapter 1, Section 1.6 would be incorporated into the project. Along with these standard measures, the following action can help avoid or minimize negative visual effects:

- To the extent feasible, provide highway revegetation planting to replace trees removed due to construction activities along the bridge embankments.

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

Discussion of CEQA Environmental Checklist Question 2.1—Aesthetics

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

No Impact. Although the project AVE includes scenic views of forested hills and other visually appealing natural features, it does not contain any expansive views of a highly valued landscape. Furthermore, as proposed, the project would only partially and briefly obstruct and diminish viewpoints with a moderate level of scenic importance within the AVE. Therefore, there would be 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?

Less than Significant Impact. The project AVE contains views of scenic and visual resources, including the surrounding forested hills, Meeks Bay Campground, Meeks Meadow, and Meeks Creek. As proposed, the project would not alter any designated scenic and visual resources within the AVE. Views of the creek and meadow from the highway would not be diminished or obstructed, however, views of the forest north and south from the highway would be partially obstructed and diminished by the project. The project would not alter, diminish, or obstruct views from the campground, the creek and meadow, or the trailhead. Overall, the forest and hills would remain the visually dominant features within the AVE. Therefore, the impact would be less than significant.

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?

Less than Significant Impact. The project would create a low adverse visual impact on the environment due to the proposed CMS sign, guardrail, and CCTV facilities and associated vegetation removal and minor earthwork along the bridge embankments. The previously listed project features would be somewhat incompatible and contrast with the AVE and would partially obstruct and diminish some views from the highway. Conversely, the project would positively affect the AVE by enhancing views from the bridge, and the proposed bridge railing design would resemble the existing bridge railing's rural aesthetic. In addition, the scale and form of the new bridge would be visually compatible with the AVE, and, overall, the forest and hills would remain the AVE's visually dominant features. Therefore, the impact would be less than significant.

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

Less than Significant Impact. Two project elements that could potentially create a new source of light or glare are the steel guardrail and CMS signs. The new steel guardrail would create some glare during daytime hours and may be a minor distraction to highway travelers in close proximity to the facility. The CMS would be used only during emergency incidents and messaging would be visible to travelers south of the sign, therefore, would not create a new substantial source of light. The

CMS sign would produce very minimal glare during nighttime hours and would not reflect onto the road surface. No glare would extend to the surrounding areas. Furthermore, the backside of the sign would appear dark to travelers north of the sign. Given the project would create a minimal new source of light or glare, the impact would be less than significant.

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 (ARB).

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, location of the proposed project, the Tahoe Regional Planning Agency (TRPA) Threshold Standards and Regional Plan amended May 22, 2024 (TRPA 2024), the USDA Natural Resources Conservation Service (NRCS) Web Soil Survey Map (NRCS 2024), and El Dorado County General Plan Conservation and Open Space Element adopted December 10, 2019 (El Dorado County 2019). Potential impacts to Agricultural and Forest Resources are not anticipated. The land near the proposed project is identified as recreation, residential and conservation. No prime farmlands or agricultural land were identified within the project limits. Forest land surrounds the project limits; however, the project would mostly be contained within the existing Caltrans right of way (ROW). Temporary Construction Easements (TCE) from the USDA Forest Service would be needed on each side of the bridge for possible construction equipment access during the bridge deck replacement, water diversion, and any access needed to conform to the creek during the creek restoration under the bridge. However, the work within the TCE would not change the land use of the area; therefore, the project would not convert farmland, forest land, or timberland. Thus, the project would not impact Agriculture and Forest Resources.

2.3 Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

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

Regulatory Setting

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

Affected Environment

Determinations in this section are based on the scope, description, and location of the proposed project, as well as The El Dorado County Air Pollution Control District

Guide to Air Quality Assessment dated February 2002 (El Dorado County Air Pollution Control District 2002) and the Air Quality and Greenhouse Gas Analysis Memorandum dated August 25, 2024 (Caltrans 2024b).

The proposed project is located within the Lake Tahoe Air Basin (LTAB) in El Dorado County, California. According to El Dorado County Air Pollution Control District Guide to Air Quality Assessment, the LTAB is comprised of the surface of Lake Tahoe and land up to the surrounding rim of the mountain ridges. The lake is at 6,200 feet above sea level. The mountains surrounding the lake are over 10,000 feet high. The project area has a mean annual precipitation of 31.46 inches with an average monthly minimum January temperature 19.1 degrees Fahrenheit (ºF) and an average monthly maximum July temperature of 77.9 ºF. Rain occurs mainly in the winter months and the average snowfall is 190.7 inches; average snow depth is 9 inches (Caltrans 2024c). Air quality in the basin is affected by the topography and meteorology of the area mentioned above. In the winter, these can lead to elevated carbon monoxide (CO) concentrations in the more congested/populated areas of the basin from vehicles and residential wood stoves/fireplaces.

The project lies within the Lake Tahoe Basin of the Sierra Nevada region of northern California. This portion of SR 89 runs south to north along the west side of Lake Tahoe. The project lies 0.20 miles west of the Meeks Bay shoreline of Lake Tahoe. Public campgrounds and recreational facilities are located east of the highway. The Meeks Creek Trail extends from SR 89 north of the bridge, and a Meeks Bay Fire Protection District station is situated southeast of the bridge.

The main bridge construction would require a full closure of SR 89. During the full closure, a temporary detour would be established for travelers using SR 28 to SR 50 as the primary alternative routes. The detoured section of SR 89 is a conventional highway with peak hour traffic volumes of 350 vehicles per hour (VPH) on Monday to Friday, 540 VPH on Saturday, and 600 VPH on Sunday and an annual average daily traffic of 2,431 vehicles per day (VPD) on Monday to Thursday, 2,611 VPD on Friday, 3,702 VPD on Saturday and 3,369 VPD on Sunday (Caltrans 2024b).

Environmental Consequences

The project proposes to replace Meeks Creek bridge with a single-span bridge approximately 90.5 feet long to accommodate two 12-foot wide lanes, two 8-foot wide shoulders, and 6-foot wide concrete sidewalks and concrete bridge railings on

both sides of the bridge. Though the bridge length would increase by approximately 60 feet and the width by approximately 7 feet, the project would not add lanes, change traffic volume, fleet mix, speed, or any other factor that would cause an increase in emissions relative to the no build alternative.

During the temporary detour that is necessary to construct the bridge, short-term operational and construction-related emissions would increase slightly due to the increased travel time.

Implementation of the following standard measure would reduce air quality impacts resulting from construction activities.

- The construction contractor must comply with air-pollution-control rules, regulations, ordinances, and statutes as noted in Caltrans Standard Specifications in Section 14-9.

Avoidance, Minimization and Mitigation Measures

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

Discussion of CEQA Environmental Checklist Question 2.3—Air Quality

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

No impact. The project would not result in changes to traffic volume, fleet mix, speed, location of existing facilities, or any other factor that would cause an increase in emissions relative to the No-Build alternative; therefore, the project would not cause an increase in long-term operational emissions. A minor increase in emissions would occur during construction; however, these emissions represent a small portion of regional emissions and would be conducted according to California Air Resource Board (ARB) regulations and Caltrans Standard Specifications. Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan.

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?

Less than Significant Impact. During the temporary detour, operational emissions would increase slightly due to the increased travel time. Table 2 shows a summary of estimated emissions with and without the proposed detour and estimated increase in emissions over the detour period. The project may result in the generation of short-term construction-related emissions, including fugitive dust and exhaust emissions from construction equipment. Fugitive dust, or particulate matter (PM_{10}), may be generated during excavation, grading, and hauling activities. However, both fugitive dust and emissions from construction equipment would be temporary in nature. Caltrans Standard Measures and BMPs would be implemented during all phases of construction work; therefore, the impact would be less than significant.

Table 2. Summary of Emissions with Detour and without Detour

Scenario	Carbon Monoxide (CO) (lbs)	PM_{10} (lbs)	Fine Particulate Matter ($PM_{2.5}$) (lbs)	Nitrogen Oxides (NOx) (lbs)
No Detour (Existing)	550	426	66	80
Detour	1,715	1,330	206	249
Comparison of Scenarios: No Detour (Existing) to Detour	1,165	903	140	165

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

Less Than Significant Impact. The closest receptors to the proposed project would be campers at the Meeks Bay Campground and hikers on the Meeks Creek Trail. As described in sections 2.3a and 2.3b above, the project would not cause an increase in long-term operational emissions. There however would be short-term operational and construction-related emissions during construction. Caltrans Standard Measures and BMPs would be implemented to reduce temporary air quality impacts from construction activities. Therefore, the impact would be less than significant.

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

Less Than Significant Impact. The project may result in the generation of short-term construction-related emissions, including fugitive dust and exhaust emissions from construction equipment. Fugitive dust, or particulate matter (PM_{10}), may be

generated during excavation, grading, and hauling activities. However, both fugitive dust and emissions from construction equipment would be temporary in nature. The project would comply with construction standards and Caltrans standardized procedures for minimizing air pollutants during construction; therefore, the impact would be less than significant.

2.4 Biological Resources

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

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
Would the project: f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

Regulatory Setting

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

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

Natural Communities

This section of the document discusses Natural Communities of Special Concern. 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.

Habitat areas that have been designated as critical habitat (CH) under the Federal Endangered Species Act are discussed below in the Threatened and Endangered Species section.

Wetlands and Other Waters

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

- Federal: Clean Water Act (CWA)–33 United States Code (USC) 1344 (USACE–Section 404 Permits)
- 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. "Special status" species are selected for protection because they are rare and/or subject to population and habitat declines The primary laws governing plant species include:

- Federal Endangered Species Act (FESA)–USC 16 Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402
- California Endangered Species Act (CESA)–CFGC Section 2050, et seq.
- Native Plant Protection Act–California Fish and Game Code Sections 1900–1913
- National Environmental Policy Act (NEPA)–40 CFR Sections 1500 through 1508
- California Environmental Quality Act (CEQA)–California Public Resources Code (PRC) Sections 21000–21177

Animal Species

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

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act–40 CFR Sections 1500 through 1508
- Migratory Bird Treaty Act–16 USC Sections 703–712
- Fish and Wildlife Coordination Act–16 USC Section 661

State laws and regulations relevant to wildlife include the following:

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

Threatened and Endangered Species

The primary laws governing threatened and endangered species include:

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

Invasive Species

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

Affected Environment

A NES (Caltrans 2024c) was prepared for the project. Caltrans coordinated with fisheries biologists, as well as agency personnel from USFWS, CDFW, US

Department of Agriculture (USDA) Forest Service Lake Tahoe Basin Management Unit (LTBMU or USDA Forest Service), and Lahontan Regional Water Quality Control Board (Lahontan RWQCB). See Chapter 3 for a summary of these coordination efforts and professional contacts. The following information relies on the NES.

Study Area

The project occurs where SR 89 crosses Meeks Creek. The ESL consists of the double-box culvert bridge and stone railing, the paved roadway on the bridge surface, sidewalks, roadway approaches to the bridge, bed, bank, and channel of Meeks Creek and some sparse montane riparian vegetation and Sierran mixed conifer plant species along the roadway beyond the cut and fill areas. The ESL extends approximately 32 feet and 34 feet beyond the invert of the culvert on the upstream and downstream sides, respectively.

The BSA consists of the entire ESL and 100 feet downstream within Meeks Creek. The BSA was developed to account for additional impacts to water quality as a result of potential sedimentation from bridge replacement work and water diversion.

Hydrology

The ESL is located within the Meeks Creek Watershed (Hydrologic Unit Code 16050101), an L-shaped basin that drains 8.1 square miles eastward from the crest of the Sierra Nevada. The only water body within the ESL is Meeks Creek, a perennial stream roughly 7.5 miles in length flowing northward from Rubicon Lake before turning sharply to the east and empties into Meeks Bay.

The full bank width of Meeks Creek is approximately 80 feet. The current structure width is less than 30 feet. As a constricted Meeks Creek flows through the two 8-foot by 10-foot double box culverts, it enters an area of intense human development and recreation on the shoreline. The structure concentrates these flows resulting in high velocity flow and extensive erosion downstream.

Habitat Connectivity/Fish Passage

Wildlife trail cameras were installed at the bridge structure in 2020 and were monitored during 2020 and 2021. These cameras captured pictures of bear, deer, and bird species including a blue heron and ducks utilizing or near the current double box culvert design. Furthermore, many of the pictures captured were of

humans within the structure and outside of it, as the area is a popular recreation site and connects the two campgrounds.

While not considered abundant in the vicinity of the project area, mule deer, which Tahoe Regional Planning Agency (TRPA) designates a special interest species, may forage or move through the project area on occasion. The project area does not contain deer fawning habitat and is not positioned in any important movement corridors for the Loyalton-Truckee mule deer herd. Additionally, the SR 89 corridor and disturbance from recreational use of the project area and surroundings limit the project area from functioning as an important deer movement corridor.

Small and medium sized mammals including but not limited to American badger, ringtail, Sierra Nevada snowshoe hare, western white-tailed jackrabbit, and other common mammal species could use the current structure or roadway in the area to move from the west side habitat to the lakeside habitat.

As stated in the hydrology section above, the Meeks Creek flow is concentrated through the culverts at less than half the bank full width resulting in high velocity flows through the structure. Over the years this has created downstream scour and a scour pool just below the outlet. In 1988, Caltrans installed baffles within the northern cell of the double-box culvert to promote fish passage as part of an encroachment permit issued by the LTBMU. However, a drop of a minimum of 4 feet at the invert of the culvert has developed due to erosion making the culvert inaccessible at all flows. This has created a complete barrier to fish migration upstream.

The proposed project would contribute towards the effort to restore fish passage. Coordination with the LTBMU, Lahontan RWQCB, and TRPA would continue as fish passage design elements and construction scenarios are developed.

Surveys

To prepare for the field surveys, biologists reviewed existing resource information related to the project to evaluate whether special-status species or other sensitive biological resources (e.g., waters of the United States) could occur in the ESL. The following sources were reviewed:

- California Native Plant Society's (CNPS) online Inventory of Rare and Endangered Plants of California

- California Natural Diversity Database (CNDDB) Meeks Bay and Homewood 7.5-minute U.S. Geological Survey topographic quadrangles records search
- USFWS Species List (obtained from Information for Planning and Consultation [IPaC])
- The project is located outside of National Oceanic and Atmospheric Administration (NOAA) Fisheries jurisdiction. Therefore, a NOAA Fisheries species list is not required and not available.

Based on the database queries listed above and initial reconnaissance survey from 2020 for another project in the same area, the BSA limits were set and the following surveys were conducted to document and evaluate potential impacts on biological resources within the BSA:

- Botanical surveys to identify plant species within the BSA on April 15, June 15, and July 23, 2023.
- Visual encounter surveys for Sierra Nevada yellow-legged frog (SNYLF).
- Wildlife cameras were installed near the structure to capture photo evidence of wildlife that might be using the double box culvert and adjacent stream channel of Meeks Creek.

Caltrans also utilized the aquatic resources delineation report that was prepared for LTBMU's Meeks Bay Restoration Project to analyze aquatic resources within the project area.

SENSITIVE NATURAL COMMUNITIES

The are no sensitive natural communities present within the project ESL and BSA.

RIPARIAN HABITAT

The section of Meeks Creek that is within the ESL has very little riparian vegetation. There are seven gray alders on the northeast bank of the stream located on the downstream side of the double-box culvert/bridge. There is also one willow species and one quaking aspen on the southeast bank. This vegetation was not extensive enough to map as a natural community.

The riparian vegetation in the project area is minimal and difficult to quantify in acres. Therefore, vegetation was quantified as individual trees, all with a diameter-

at-breast-height (DBH) of less than four inches. As currently designed, the project could require removal of this vegetation for bridge construction and utility relocation purposes. Vegetation removal would be kept to the minimum amount possible to conduct the work; trimming the vegetation is preferable and would be considered prior to removal to preserve as much of this riparian as possible.

Considering that impacts to riparian are minimal, and that Caltrans plans to re-vegetate the area in excess of what currently exists, there would be no cumulative impact. This project would be considered a net benefit to riparian in Meeks Creek and the watershed.

Through consultation with CDFW, USWFS, and the LTBMU, riparian impacts would be offset by on-site revegetation. Additional riparian vegetation would be planted downstream of the new bridge by Caltrans as part of the restoration portion of this project to return the creek to a more natural system. Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, Section 1.6 would be implemented as part of the proposed project and would minimize potential impacts.

WETLANDS AND OTHER WATERS

Affected Environment

Meeks Creek is a perennial stream. It is considered an aquatic resource of the United States/Waters of the State and is subject to both federal and state regulation.

In 2022 and 2023, Caltrans started communication with the LTBMU regarding the Meeks Bay Restoration Project, a triple agency project proposed by the LTBMU, TRPA, and Lahontan RWQCB to restore Meeks Creek and Meeks Bay in the vicinity of the Meeks Creek Bridge. After many virtual meetings between these agencies and USFWS, it was determined that Caltrans would utilize the biological studies conducted for the LTBMU's Meeks Bay Restoration Project to evaluate resources and impacts to those resources from this proposed project. This decision was made to minimize redundancy and minor disturbance from conducting biological surveys and wetland delineations.

The aquatic resources delineation report used for this proposed project was conducted by Ascent Environmental and prepared for the LTBMU in 2020. This delineation identified the perennial and intermittent drainages, scrub-shrub wetland,

and emergent wetland within the ESL for the Meeks Creek Bridge replacement. Aquatic Resources within the ESL are mapped below in Figure 5.

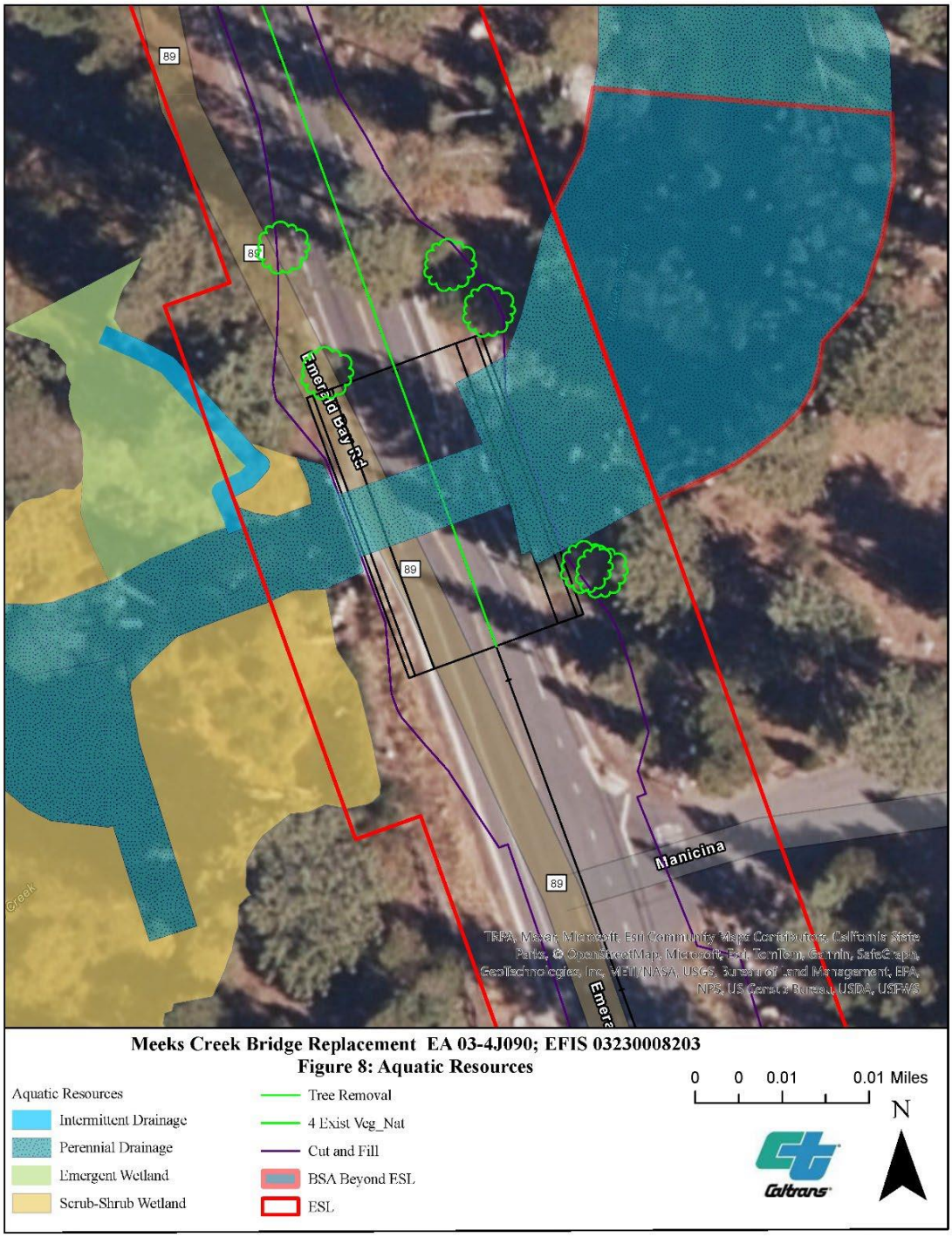

Figure 5. Aquatic Resources in the ESL

Environmental Consequences

The proposed project would permanently impact approximately 0.06 acres of the perennial drainage (Meeks Creek). Temporary impacts of approximately 0.20 acres could occur in Meeks Creek within the BSA due to increased sedimentation from the water diversion process. No work, construction, or heavy equipment would enter the BSA located downstream of Meeks Creek Bridge, located outside the project limits.

Temporary impacts would also occur immediately upstream and downstream of the structure within the Temporary Construction Easement (TCE). These temporary impacts include approximately 0.05 acres of Meeks Creek, 0.005 acres to the intermittent drainage, 0.03 acres to scrub-shrub wetland, and 0.001 acres of minimal impacts to emergent wetland (Figure 6). With the proposed method of accelerated bridge construction that would utilize a full road closure to replace the bridge, temporary impacts to Meeks Creek and the receiving body, Meeks Bay and Lake Tahoe, would be minimized to the greatest extent feasible.

Although minimal temporary and permanent impacts to these aquatic resources would occur, there is an overall benefit to restoring the hydrology of the stream. Meeks Creek would no longer be constricted through a double box culvert and would flow under a single span bridge and a natural stream bottom would be restored. Increasing the bridge length with no in-stream barriers, as proposed with this project, would reduce erosion and scour immensely, allow for overbank flooding and floodplain connectivity downstream of the structure, and would remove the current fish and aquatic species barrier. Thus, the project would have a less than cumulatively considerable impact related to aquatic resources.

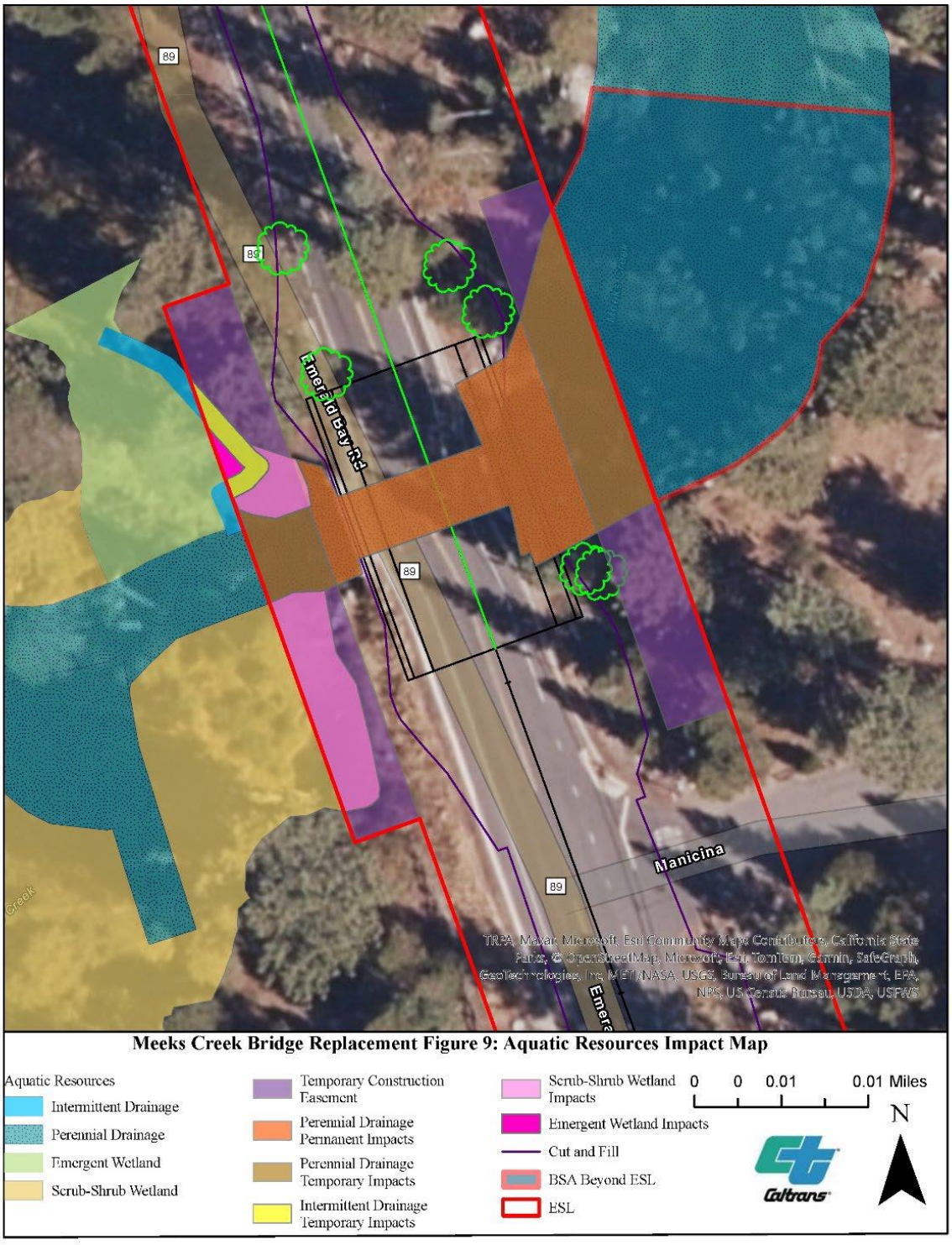

Figure 6. Aquatic Resources Impact Map

The implementation of Caltrans measures and BMPs identified in Chapter 1, Section 1.6 and the following avoidance and minimization measure would further minimize potential impacts to wetlands and other waters.

Measure 1 (M1): Install Fencing and/or Flagging to Protect Sensitive Biological Resources

- Prior to construction, Caltrans's contractor would install high-visibility orange construction fencing and/or flagging, as appropriate, along the perimeter of the work area adjacent to ESAs (e.g., other waters, special-status species habitat, and active bird nests). The fencing would be maintained throughout the duration of the construction period. If the fencing is removed, damaged, or otherwise compromised during construction, the fencing would be repaired or replaced. SSP 14-1.02 for ESA fencing would be incorporated into the project specifications in the contract.

To compensate for permanent project impacts on aquatic resources, Caltrans would participate in USACE's in-lieu fee program. The minimum compensation ratio for aquatic resources will be 1:1 (1 acre of aquatic habitat credit for every 1 acre of impact) to ensure no net loss of aquatic habitat functions and values. However, final permit-driven requirements and ratios will be determined by the USACE during the permitting process. On-site restoration for impacts to wetlands at a 1:1 ratio would also be proposed as part of the compensatory mitigation.

Caltrans will also obtain a Section 401 Water Quality Certification from the Lahontan RWQCB and a 1602 Lake and Streambed Alteration Agreement (LSAA) from CDFW that may contain additional BMPs and water quality measures to ensure the protection of water quality. Caltrans would implement the conditions and requirements of these permits.

A SWPPP would be developed and implemented for the project site. The primary elements of the SWPPP include the following: 1) description of site characteristics, including runoff and streamflow characteristics and soil erosion hazard, and construction procedures, 2) guidelines for proper application of erosion and sediment control BMPs, 3) description of measures to prevent and control toxic materials spills, and 4) description of construction site housekeeping practices. In addition to these primary elements, the SWPPP would specify that the extent of soil and vegetative disturbance will be minimized by control fencing or other means and

that the extent of soil disturbed at any given time will be minimized. The construction site BMPs associated with the SWPPP would include, but are not limited to the following:

- Conduct all drainage, earthwork, or foundation activities involving wetlands and other waters in the dry season (generally between June 15 and October 15, may vary based on weather or feasibility). However, since this project is located in an area of tourism and involves a road closure, dates are subject to change.
- Where working areas encroach on live or dry streams, lakes, or wetlands, Lahontan RWQCB-approved physical barriers adequate to prevent the flow or discharge of sediment into these systems shall be constructed and maintained between working areas and streams, lakes, and wetlands. During construction of the barriers, discharge of sediment into streams shall be held to a minimum. Discharge will be contained through the use of RWQCB-approved measures that will keep sediment from entering protected waters.
- Use only equipment in good working order and free of dripping or leaking engine fluids when working in and around drainages and wetlands. Perform all vehicle maintenance at least 300 feet from all water bodies. Conduct any necessary equipment washing where the water cannot flow into adjacent water bodies.
- Prohibit the following types of materials from being rinsed or washed into the shoulder areas: concrete, solvents and adhesives, thinners, paints, fuels, sawdust, dirt, gasoline, asphalt and concrete saw slurry, and heavily chlorinated water.
- Prevent discharge of turbid water to streams within and downstream of the ESL during any construction activities by filtering the discharge first using a filter bag, diverting the water to a settling tank or infiltration areas, and/or treating the water in a manner to ensure compliance with water quality requirements prior to discharging water to waterways.
- Prevent discharge of concrete to aquatic habitat as concrete is being poured, as required by the NPDES permit.
- Dispose of any surplus concrete rubble, asphalt, or other rubble from construction at a local landfill.

- Prepare and implement an erosion and sediment control plan for the proposed project. The plan will include the provisions and protocols listed below. The SWPPP for the proposed project will detail the applications and type of measures and the allowable exposure of unprotected soils.
- Oily or greasy substances originating from construction operations shall not be allowed to enter or be placed where they will later enter a live or dry stream, pond, or wetland.
- Asphalt concrete shall not be allowed to enter a live or dry stream, pond, or wetland.

Avoidance, Minimization and Mitigation Measures

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

PLANT SPECIES

Record searches were conducted to determine whether special-status (threatened, endangered, or species of special concern) plant species have the potential to occur within the BSA. Following desktop and literature review, botanical surveys for special-status plant species and general characterization of plants located within the ESL and BSA were conducted in accordance with the CDFW protocol (CDFW 2018). Caltrans biologists conducted the surveys on April 15, June 15, and July 23, 2020. No special-status plants were encountered during surveys. Based on the survey results, no special-status plant species would be affected by the proposed project. Additional botanical surveys will be completed in 2025 to increase the certainty that no special status plants will be impacted.

The following seven special-status species were identified as having potential suitable habitat within the ESL and BSA, however, these California Rare Plant Ranks (CRPR) plant species were not observed during botanical surveys. Therefore, these species (except for Tahoe yellow cress) will not be discussed further.

- Jone's Muhly (*Muhlenbergia jonesii*);
- Marsh skullcap (*Scutellaria galericulata*);
- Mingan moonwort (*Botrychium minganense*);
- Scalloped moonwort (*Botrychium crenulatum*);

- Subalpine aster (*Eurybia merita*);
- Tahoe yellow cress (*Rorippa subumbellata*); and
- Western waterfan lichen (*Peltigera gowardii*).

Tahoe Yellow Cress (Rorippa subumbellata)

Affected Environment

Tahoe yellow cress is designated as a sensitive plant and threshold indicator species by TRPA, a USDA Forest Service sensitive plant species and is listed as endangered by the state of California. This species can be present on lakeside margins and in riparian communities on decomposed granite sand. It is typically found at approximately 6,220 to 6,235 feet in elevation and blooms from May to September. The distribution and abundance of Tahoe yellow cress is closely linked to lake level, with greater abundance and more occurrences present during low lake levels when more beach habitat is available for colonization (Caltrans 2024c).

Environmental Consequences

The ESL and BSA do not contain sandy beaches nor lakeside margins, however suitable habitat and known occurrences of the species are in close proximity to the project area. Lake Tahoe is approximately 1,000 feet from the proposed project. This species does occur and has been documented in the Meeks Bay beach area, along the shore of Meeks Creek Marina area, and on a sandbar within Meeks Creek, downstream from the project. Avoidance and minimization measures would be incorporated to the project to ensure no impacts to this species would occur.

Per CESA, Caltrans has determined the project would have no impact and no state "take" of the species.

Avoidance, Minimization and Mitigation Measures

With implementation of the Standard Measures and Best Management Practices identified in Chapter 1, Section 1.6, BR-4 it is anticipated there would be no impacts to special-status plant species. The following additional avoidance and minimization measures would be implemented to minimize potential impacts to this species:

Measure 2 (M2): Avoid and Minimize Impacts to Special Status Plants and CRPR Plant Species

SSP 14-6.03A for Species protection would be incorporated into the project specifications in the contract.

- A qualified contactor supplied biologist would conduct pre-construction botanical surveys within the ESL and BSA to identify any special status plants in the ESL/BSA.
    - If no special status plants species are found, work would commence.
    - If special status species are found within the ESL/BSA, a qualified biologist would determine if a buffer can be established, or if the species can be re-located or propagated if found within the area of impact.
    - If Tahoe yellow cress is found to be present within the ESL/BSA, CDFW, USFS, and TRPA would be contacted, and further consultation would be required.

Measure 3 (M3): Conduct Mandatory Environmental Awareness Training for Construction Personnel

Before construction starts, worker environmental awareness training would be conducted to educate personnel, explaining protective measures, species identification, life history, habitat requirements during all life stages, and species' protective status. Proof of this instruction will be submitted to Caltrans and other agencies (e.g., CDFW, USFWS, TRPA) as appropriate.

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

ANIMAL SPECIES

Based on the USFWS and CDFW-CNDDB database queries, the following table indicates those special status animal species which could potentially occur within the Environmental Study Limits/Biological Study Area and thus could potentially be impacted by project construction (Table 3).

Table 3. Findings of Special Status Animal Species that May Potentially Occur within the Project Study Limits

Common Name	*Scientific Name*	Status Federal/State	Habitat Present/Absent	Effect/Impact Finding
AMPHIBIANS				
Sierra Nevada yellow-legged frog	*Rana sierrae*	FE/ST	Present	May Affect but not likely to adversely affect/ No Take
Southern long-toed salamander	*Ambystoma macrodactylum sigillatum*	--/SCC	Present	No Take
BIRDS				
American/northern goshawk	*Accipiter atricapillus*	--/SCC	Absent	No Take
Bald eagle	*Haliaeetus leucocephalus*	--/SE/FP	Present	No Take
California spotted owl	*Strix occidentalis occidentalis*	PT/--/SCC	Absent	No Take
Osprey	*Pandion haliaetus*	--/WL	Present	No Take
Willow flycatcher	*Empidonax traillii*	--/SE	Absent	No Take
FISH				
Lahontan cutthroat trout	*Oncorhynchus clarkii henshawi*	FT/--	Present	May Affect likely to adversely affect
Lahontan mountain sucker	*Catostomus lahontan*	--/SCC	Present	No Take
Lahontan Lake tui chub	*Siphateles bicolor pectinifer*	--/SCC	Absent	No Take
Mountain white fish	*Prosopium williamsoni*	--/SCC	Present	No Take
MAMMALS				
Fisher	*Pekania pennanti*	--/SCC	Absent	No Take
North American wolverine	*Gulo gulo luscus*	FT/--	Absent	No Effect
Sierra Nevada mountain beaver	*Aplodontia rufa californica*	--/SCC	Absent	No Take
Sierra Nevada red fox	*Vulpes vulpes necator*	FE/--	Absent	No Effect
Sierra Nevada snowshoe hare	*Lepus americanus tahoensis*	--/SCC	Absent	No Take
INVERTEBRATES				
Monarch butterfly	*Danaus plexippus*	FC/--	Absent	No Effect

[1]Federal Status: FT = Federal Threatened; FE = Federal Endangered; FC = Federal Candidate; FP = Fully Protected; -- = no listing

State Status: ST = State Threatened; SE = State Endangered; FP = Fully Protected; SSC = CDFW Species of Special Concern; SR = State Rare; WL = Watch List; -- = no listing

Those special status animal species that will not be impacted by the project, either because the project is out of the geographical range of the species or there is no suitable habitat for the species, are listed below and will not be discussed further.

- American/northern goshawk (*Accipiter atricapillus*)
- California spotted owl (*Strix occidentalis occidentalis*)
- Willow flycatcher (*Empidonax traillii*)
- Lahontan Lake tui chub (*Siphateles bicolor pectinifer*)
- Fisher (*Pekania pennanti*)
- North American wolverine (*Gulo gulo luscus*)
- Sierra Nevada mountain beaver (*Aplodontia rufa californica*)
- Sierra Nevada red fox (*Vulpes vulpes necator*)
- Sierra Nevada snowshoe hare (*Lepus americanus tahoensis*)
- Monarch butterfly (*Danaus plexippus*)

SPECIES OF SPECIAL CONCERN

The project could potentially impact the following three SSC: Mountain Whitefish (*Prosopium williamsoni*), Lahontan mountain sucker (Catostomus lahontan), and Southern Long-toed Salamander (*Ambystoma macrodactylum sigillatum*).

Mountain Whitefish (Prosopium williamsoni)

Affected Environment

Mountain whitefish in California inhabit clear, cold streams and rivers at elevations of 1,400 to 2,300 meters. While they are known to occur in a few natural lakes (e.g.

Lake Tahoe), there are few records from reservoirs. In streams, they are generally associated with large pools (over a meter in depth). In lakes, they typically live close to the bottom in fairly deep water, although they will move into shallows during spawning season. Spawning takes place in riffles where depths are greater than 75 cm and substrates are coarse gravel, cobble and rocks less than 50 centimeters in diameter. Mountain whitefish may be present in Meeks Creek and Meeks Bay lagoon.

Surveys for mountain whitefish were not conducted in Meeks Creek. The aquatic habitat (Meeks Creek) in the ESL/BSA is considered low quality for mountain whitefish because of the lack of large pools, riffles for spawning, and limited habitat (1300 feet) below the fish passage barrier. There is no critical habitat identified for mountain whitefish.

Environmental Consequences

Construction of the proposed project would impact approximately 0.06 acres of low quality potentially suitable habitat for mountain whitefish within the channel due to the placement of rock slope protection (RSP) or fill. Although the 0.06 acres of habitat would be impacted by fill in the form of RSP, construction of the proposed project would remove the current fish barrier and revegetate the stream channel within the ESL. In turn, the project would improve low-quality habitat and ultimately benefit the species.

Per CESA, Caltrans has determined the project would have no impact and no state "take" of the species.

Avoidance, Minimization and Mitigation Measures

With implementation of the Standard Measures and BMPs identified in Chapter 1, Section 1.6, it is anticipated there would be no impacts to Mountain whitefish (and all other fish species). The following additional avoidance and minimization measures would be implemented to minimize potential impacts to this species and all other fish species:

Measure 3 (M3): Conduct Mandatory Environmental Awareness Training for Construction Personnel

Before construction starts, worker environmental awareness training would be conducted to educate personnel, explaining protective measures, species

identification, life history, habitat requirements during all life stages, and species' protective status.

<u>Measure 4 (M4):</u> Avoid and Minimize Impacts on Mountain Whitefish, Lahontan mountain sucker, and Lahontan Cutthroat Trout (and all other aquatic species)

Caltrans or its contractors would implement the following measures during construction to avoid and minimize effects on Lahontan cutthroat trout and Mountain whitefish:

- Twenty-four hours prior to construction activities related to de-watering or diverting water, the project area shall be surveyed for LCT by a USFWS-approved biologist. Surveys of the project area shall be repeated if a two-week greater lapse in construction activity occurs. If LCT is encountered during construction, activities will cease until appropriate corrective measures have been completed or it has been determined that the LCT will not be harmed. Any sightings and incidental take will be reported to the USFWS immediately by telephone at (775) 688-1506 and e-mail or written letter addressed to the Reno Division, Chief, within one working day of the incident.
- On-site monitoring during de-watering or water diversion activities will be conducted by a USFWS approved biologist. If LCT are encountered, construction activities would be suspended, and LCT would be relocated. Further consultation with USFWS could be required, activities would commence after consulting with USFWS and compliance with ESA is demonstrated. All native aquatic species encountered (LCT, Lahontan mountain sucker, mountain whitefish, and southern long-toed salamander) will be relocated upstream of the diversion in Meeks Creek or downstream of the diversion near Meeks Bay by a qualified biologist. All relocated fish and aquatic species will be identified and recorded, and the contractor supplied biologist (CSB) will stay on location until it appears that all species within the action area/de-watered portion of the creek has safely been relocated.

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

Lahontan mountain sucker (Catostomus lahontan)

Affected Environment

Lahontan mountain suckers are characteristically found in shallow, clear, low-gradient streams. They are associated with diverse substrates, from sand to boulders, in areas with dense cover. In California, Lahontan mountain suckers occur in some tributaries to Lake Tahoe. Lahontan mountain sucker is not known to inhabit Meeks Creek.

Environmental Consequences

The proposed project would not result in any long-term negative change to fish passage or migration. The project would replace box culverts with a single span bridge, conform the creek bed, and restore connectivity within Lake Tahoe, which would result in a long-term improvement of fish passage and migration conditions in the project area. This impact would be a beneficial effect with regards to fish passage.

Caltrans would incorporate avoidance measures to avoid take of the species.

Avoidance, Minimization and Mitigation Measures

With implementation of the Standard Measures and BMPs identified in Chapter 1, Section 1.6, and additional avoidance and minimization measures (M4), it is anticipated there would be no impacts to this species.

Southern Long-toed Salamander (Ambystoma macrodactylum sigillatum)

Affected Environment

Southern long-toed salamanders are a medium-sized member of the mole salamander family that inhabits alpine meadows, high mountain ponds, and lakes. They can be found up at an elevation of 10,000 feet high. Adults spend much of their life underground, utilizing small mammal burrows. Found in moist areas under wood, logs, rocks, bark, and other objects near breeding sites. Breeding occurs in permanent or temporary ponds, lakes, and flooded meadows. Adults migrate to breeding sites in winter and spring and move to upland sites in the fall.

Environmental Consequences

The proposed project could result in direct mortality, wounding, injury, or harassment of individuals as a result of water diversion, de-watering, or in-channel construction activities. Potential indirect impacts on stream habitat resulting from project construction activities include increased turbidity and siltation from disturbance of soils in and near the stream. Aquatic resources downstream from the project area could be adversely affected by siltation and sedimentation, and by exposure of construction-related contaminants or hazardous materials (e.g., fuels, lubricants, or hydraulic fluids). Another potential indirect impact of construction activities in and near Meeks Creek is the possible introduction of invasive aquatic species, which could degrade water quality and adversely affect important habitat for native species.

With the proposed method of accelerated bridge construction, temporary impacts to southern long-toed salamander, and potentially suitable habitat for the species would be minimized to the greatest extent feasible. Caltrans has determined that this project would not result in take of southern long-toed salamander.

Avoidance, Minimization and Mitigation Measures

With implementation of the Standard Measures and BMPs identified in Chapter 1, Section 1.6, BR-2 as well as additional avoidance and minimization measure (M1, M3, M4, and the one listed below, M5), it is anticipated there would be minimal impacts to the species.

Measure 5 (M5): Avoid and Minimize Effects on Southern Long-toed Salamander

- Pre-construction survey for southern long-toed salamander in Meeks Creek would be conducted two weeks prior to the start of construction activities. If southern long-toed salamander is found within the project footprint, Caltrans would coordinate with CDFW on how to proceed and relocation of individuals could be required.
- Biological monitors would be present for all de-watering activities.
- If encountered, southern long-toed salamander would be relocated upstream of the diversion in Meeks Creek or downstream of the diversion near Meeks Bay by a qualified biologist. All relocated fish and aquatic species would be identified and recorded, and the contractor supplied biologist (CSB) will stay

on location until it appears that all species within the action area/de-watered portion of the creek has safely been relocated.

THREATENED AND ENDANGERED SPECIES

Lahontan Cutthroat Trout (Oncorhynchus clarkii henshawi)

Affected Environment

Lahontan cutthroat trout (LCT) is designated as a federally threatened species by USFWS (Caltrans 2024c). LCT historically occupied large freshwater and alkaline lakes, small mountain streams and lakes, small tributary streams, and major rivers of the Lahontan Basin of northern Nevada, eastern California, and southern Oregon, including the Truckee, Carson, Walker, Susan, Humboldt, Quinn, Summit Lake/Black Rock Desert, and Coyote Lake watersheds.

Optimal stream habitat for LCT is characterized by clear, cold water with silt-free substrate and a 1:1 pool-riffle ratio. Streams should have a variety of habitats, including areas with slow deep water, abundant instream cover (i.e., large woody debris, boulders, undercut banks), and relatively stable streamflow and temperatures. LCT typically spawns from April through July. Their spawning is as follows: they pair up, display courtship, lay eggs in redds or nests dug by females, and chase intruders away from the nest.

Surveys for LCT were not conducted in Meeks Creek for this project, but in recent years USFWS and the Washoe Tribe have released LCT at Meeks Bay which is located approximately 540 feet from Meeks Creek Bridge. The aquatic habitat (Meeks Creek) in the project area is considered low quality for LCT because of the high level of disturbance; low amounts of cover, shade, and habitat structure; and the presence of nonnative fish. These factors likely preclude the establishment of an LCT population in this tributary of Lake Tahoe. However, although the habitat quality is low, recent releases of LCT by USFWS and the Washoe Tribe in Meeks Bay increase the likelihood of the species being present.

The nearest known natural occurrence of LCT is in Hidden Lake and approximately 8 miles from the project site in Taylor Creek. Individuals may move from Lake Tahoe into stream environments to spawn; however, the project site is not currently expected to support this species because of habitat degradation and limited function (particularly for spawning), the barrier to movement, presence of nonnative

salmonids, and overall rarity of LCT in the watershed. Overall, the quality of aquatic habitat for LCT in this portion of Meeks Creek on the project site is low. If LCT did occur in this reach, the abundance of nonnative salmonids, barrier to movement, and habitat degradation would make their persistence unlikely. However, without conclusive data on the recovery of LCT in the Lake Tahoe combined with recent release in Meeks Bay, Caltrans must consider this species as having the potential to occur.

Environmental Consequences

Construction of the project could cause potential injuring, harming, harassing, stressing, or killing of LCT in the action area during construction related activities associated with water drafting/dewatering and electrofishing/fish salvage needed to implement Meeks Creek and Lagoon restoration. Resource protection measures would be implemented to alleviate unintended harm to LCT during dewatering. Construction of the project would remove the current fish barrier and revegetate the stream channel within the ESL. The project would improve this low-quality habitat and ultimately benefit the species.

Construction of the proposed project would result in approximately 0.06 acres of low quality potentially suitable habitat for LCT within the channel due to the placement of RSP or fill, however, substrate, grading, and design criteria for the species would be implemented. Although the 0.06 acres would be impacted by fill in the form of RSP, the fish barrier would be removed and ultimately the 0.06 acres of stream channel would be improved for the species, resulting in a net benefit.

With the proposed method of accelerated bridge construction, temporary impacts to Meeks Creek, LCT, and potentially suitable habitat for LCT would be minimized to the greatest extent feasible. Noise impacts to LCT and other fish species are not anticipated.

Project actions are not expected to result in direct mortality, wounding, injury, or harassment of individuals as a result of water diversion, de-watering, or in-channel construction activities. There is a possibility that LCT could be present in the dewatering area and would need to be relocated outside the project limits. Potential indirect impacts on stream habitat resulting from project construction activities include increased turbidity and siltation from disturbance of soils in and near the stream. Another potential indirect impact of construction activities in and near Meeks

Creek is the possible introduction of invasive aquatic species, which could degrade water quality and adversely affect important habitat for native species.

Per FESA, Caltrans has determined the project may affect, likely to adversely affect this species. Caltrans will move forward with formal Section 7 consultation for the proposed project as the project may affect, likely to adversely affect federally threatened species, Lahontan cutthroat trout.

Avoidance, Minimization and Mitigation Measures

Caltrans Standard Measures and BMPs identified in Chapter 1, Section 1.6, as well as additional avoidance and minimization measures (M3 and M4) would be implemented to ensure that construction activities avoid and minimize potential impacts to LCT within and adjacent to the limits of disturbance and de-watering associated with the construction.

Measure 3 (M3): Conduct Mandatory Environmental Awareness Training for Construction Personnel

Before construction starts, worker environmental awareness training would be conducted to educate personnel, explaining protective measures, species identification, life history, habitat requirements during all life stages, and species' protective status.

Measure 4 (M4): Avoid and Minimize Impacts on Mountain Whitefish, Lahontan mountain sucker, and Lahontan Cutthroat Trout (and all other aquatic species)

Caltrans or its contractors would implement the following measures during construction to avoid and minimize effects on Lahontan cutthroat trout and mountain whitefish:

- Twenty-four hours prior to construction activities related to de-watering or diverting water, the project area shall be surveyed for LCT by a USFWS-approved biologist. Surveys of the project area shall be repeated if a two-week greater lapse in construction activity occurs. If LCT is encountered during construction, activities will cease until appropriate corrective measures have been completed or it has been determined that the LCT will not be harmed. Any sightings and incidental take will be reported to the USFWS

immediately by telephone at (775) 688-1506 and e-mail or written letter addressed to the Reno Division, Chief, within one working day of the incident.

- On-site monitoring during de-watering or water diversion activities will be conducted by a USFWS approved biologist. If LCT are encountered, construction activities would be suspended, and LCT would be relocated. Further consultation with USFWS could be required, activities would commence after consulting with USFWS and compliance with ESA is demonstrated. All native aquatic species encountered (LCT, Lahontan mountain sucker, Mountain whitefish, and Southern long-toed salamander) will be relocated upstream of the diversion in Meeks Creek or downstream of the diversion near Meeks Bay by a qualified biologist. All relocated fish and aquatic species will be identified and recorded, and the CSB will stay on location until it appears that all species within the action area/de-watered portion of the creek has safely been relocated.

The fundamental duty of a federal lead agency under Section 7 of the FESA is to ensure that federal actions do not jeopardize the continued existence of listed species. The following is noted on page 4-50 of the FESA Section 7 Consultation Handbook (USFWS and NMFS, 1998): “Section 7 requires the minimization of the level of take. It is not appropriate to require mitigation for the impacts of incidental take.”

As required by FESA, Caltrans will implement reasonable and prudent measures to minimize and avoid take of the listed species. The proposed project will not jeopardize the continued existence of LCT. As proposed, the project would benefit the species by removing the fish barrier and contributing to the overall restoration of Meeks Creek and its watershed.

While the proposed project has the potential to affect LCT, the avoidance and minimization measures and fish passage design features will minimize the potential adverse effects. No compensatory mitigation is proposed, as the project is self-mitigating. As mentioned previously, construction of the proposed project would remove the current fish barrier and revegetate the stream channel within the ESL. The proposed project would improve this low-quality habitat for LCT and ultimately benefit the species. Hydrology of the creek would be restored allowing for all aquatic organism movement including LCT and other native fish species.

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

Sierra Nevada Yellow-legged Frog (Rana sierrae)

Affected Environment

The Sierra Nevada yellow legged frog (SNYLF) is listed as endangered under FESA, threatened under CESA, and is designated as a sensitive species by the LTBMU. The SNYLF inhabits lakes, ponds, meadow streams, isolated pools, and sunny riverbanks in the Sierra Nevada Mountains. SNYLF prefers open streams and lake edges with a gentle slope up to a depth of 5 to 8 centimeters. seem to be preferred. Waters that do not freeze to the bottom and which do not dry up are required for the species. The frog spends the winter at the bottom of frozen lakes and emerges shortly after snow melts. Breeding habitat consists of ponds, lakes and streams that do not dry out in summer, are deep enough to prevent freezing to the bottom in winter. Juvenile and adult frogs are highly aquatic and are rarely found more than a few feet from water.

In 2016, USFWS published its final designation of critical habitat for SNYLF. The project ESL is not located within critical habitat for SNYLF. SNYLF critical habitat is approximately 4.5 miles west and Meeks Creek only connects to waters in the critical habitat hydrologically via Lake Tahoe.

Potential suitable habitat occurs in the ESL; however, it is not considered optimal breeding or non-breeding habitat due to the highly degraded conditions of this section of the stream, amount of human disturbance and recreation, lack of stream bank vegetation, and abundance of nonnative fish predators. Amphibian surveys in Meeks Meadow and Meeks Creek conducted by the LTBMU in 2013, 2016, and 2017 did not detect Sierra Nevada yellow-legged frog. Additionally, no SNYLF at any life stage (egg masses, tadpoles, juvenile and adult frogs) were encountered during visual encounter surveys that were conducted by Caltrans Biologists on April 15, June 15, and July 23, 2020.

Environmental Consequences

Presence of SNYLF within the ESL is highly unlikely due to degraded habitat conditions, absence of known occurrences in the vicinity, and overall rarity.

Construction would occur during low-flow conditions, and diversions would occur during the dry season (generally between June 15 and October 15; however, this may vary based on weather of feasibility). Restoration activities and the bridge replacement would improve overall habitat and passage for the species and could contribute to this species using this habitat in the future. However, with the abundance of human activity and recreation, lack of stream bank vegetation, and abundance of nonnative fish predators SNYLF may never utilize this area.

Caltrans has decided to move forward with informal Section 7 ESA consultation on the project, due to the ESL being located on USDA Forest Service or LTBMU land. Their requirements as mentioned in the EIS/EIR for LTBMU's Meeks Bay Restoration Project is as follows:

> Potentially suitable habitat for SNYLF on LTBMU lands (and eight other National Forests in Forest Service Region 5) has been generally defined by USFWS (2014b) in a Programmatic Biological Opinion (BO; December 19, 2014, Ref # FFO8ESMFOO-2014-F-0557) as: elevations above 4,500 feet; permanent water bodies or those hydrologically connected with permanent water including adjacent areas up to 82 feet (25 meters) away; and overland areas in between water bodies within 984 feet (300 meters) of one another. Although not currently expected to support Sierra Nevada yellow-legged frog based on site-specific ecological conditions and past survey results, Meeks Creek and its adjacent uplands meet the general definition of potentially suitable habitat established in the Programmatic BO.

Per FESA, Caltrans has determined the project may affect, but is not likely to adversely affect this species.

Per CESA, Caltrans has determined the project would have no impact and no state "take" of the species.

Avoidance, Minimization and Mitigation Measures

Caltrans Standard Measures and BMPs identified in Chapter 1, Section 1.6, BR-2 as well as additional avoidance and minimization measure (M1, M3, M4, and the one listed below, M6), would be implemented to avoid and minimize potential impacts to SNYLF within and adjacent to the limits of disturbance and during de-watering actions associated with the construction.

Measure 6 (M6): Avoid and Minimize Effects on Sierra Nevada Yellow-legged Frog

- Conduct a pre-construction survey for SNYLF in Meeks Creek two weeks prior to the start of disturbance in the stream would help minimize impacts to the species. If SNYLF are encountered within the survey area, Caltrans would be required to consult with USFWS under Section 7 of the Endangered Species Act prior to proceeding with construction.

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

MIGRATORY AND NON-MIGRATORY BIRD SPECIES

Affected Environment

The Federal Migratory Bird Treaty Act (MBTA) (15 USC 703-711), Title 50 Code of Federal Regulations (CFR) Part 21 and 50 CFR Part 10, the California Fish and Game Code (CFGC) Sections 3503, 3513, 3800, and AB-2627 protect migratory birds, their occupied nests, and their eggs from disturbance or destruction. The MBTA provides protection in part by restricting the disturbance of nests during the bird nesting season.

The following species do not have suitable nesting habitat within the ESL, however suitable nesting habitat for these species is available in close proximity to the ESL or in the general vicinity.

- Osprey (*Pandion haliaetus*)
- Bald Eagle (*Haliaeetus leucocephalus*)

Osprey is designated by TRPA as a special interest species and state watch listed. Osprey forage in Lake Tahoe as well as several other fish-bearing lakes, streams, and rivers within the Tahoe Basin. Nesting and foraging habitat suitable for osprey is present in the project vicinity. TRPA maintains a non-degradation standard for habitat within a 0.25-mile buffer zone (“disturbance zone”) around each osprey nest site. The number of nesting pairs, active nests, and associated disturbance zones in the shorezone vary annually, and the locations of nest sites have shifted over the last several years. Based on the most recent distribution of osprey disturbance zones identified by TRPA, the project area is outside of any disturbance zone. (Caltrans 2024c).

Bald eagle is federally protected by USFWS under the Bald and Golden Eagle Protection Act, listed under CESA as endangered, and fully protected under California Fish and Game Code, and is also USDA Forest Service sensitive as well as designated special interest by TRPA. The species requires large bodies of water or free-flowing streams with abundant fish and adjacent snags or other perches for hunting. They generally nest in undisturbed coniferous forests, usually within 1 mile of a lake or reservoir. Nesting bald eagles have been documented approximately 1.6 miles north and 5 miles southeast of the project area. The project area does not contain nesting habitat suitable for bald eagle and is outside of any bald eagle disturbance zone identified by TRPA (Caltrans 2024c).

Environmental Consequences

No impacts to nesting birds are anticipated as a result of the project. Minimal tree removal is proposed as part of the project. Tree removal for the project would likely take place during the nesting season of protected raptors and migratory birds (February 1-September 30). However, with implementation of the following minimization measure, no impacts or take of migratory or non-game birds is anticipated.

Measure 7 (M7): Nesting Bird Surveys

- If tree removal is conducted within the nesting season (February 1–September 30) focused surveys for active nests of such birds would be conducted by a qualified biologist within 5 days prior to tree removal. There is also potential for waterfowl nesting within the wetland areas and nesting surveys of those areas would also be required. If a lapse in project-related work of 5 days or longer occurs, another survey would be required before the work can be reinitiated. SSP 14-6.03A for species protection would be incorporated into the project specifications in the contract. If a nest is found, coordination with the appropriate agencies would occur and a buffer would be established. Course of action would be determined at that time and a nesting bird monitoring plan may be developed.

Avoidance, Minimization and Mitigation Measures

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

INVASIVE SPECIES

In response to EO 13112, Federal Highway Administration (FHWA) requires an analysis of the risk for any federal funded action to cause or promote the introduction or spread of invasive species. Under NEPA Delegation, Caltrans is required to implement the duties and responsibilities normally carried out by FHWA. Disturbed soils are the perfect medium for the establishment of noxious weeds. The clearing, grading, and soil moving operations associated with roadway construction provide an opportunity for noxious weeds to become established. Additionally, majority of the vegetative species observed within the project limits, particularly grasses and forbs are non-native.

Staging and storage of equipment should only be done in weed free areas. Hand, mechanical, or chemical eradication treatments may be needed for these areas. Additionally, areas may need to be designated as excluded from contractor's use.

All equipment and vehicles used for project implementation must be free of invasive plant material before moving into the project area. Equipment would be considered clean when visual inspection does not reveal soil, seeds, plant material or other such debris. Cleaning shall occur at a vehicle washing station or steam-cleaning facility before the equipment and vehicles enter the project area.

All gravel, fill, or other materials would be required to be weed-free. Onsite sand, gravel, rock, or organic matter will be used when possible. Otherwise, weed-free materials would be obtained from sources that have been certified as weed-free. Weed-free mulches and topsoil will be used. Topsoil would be salvaged from the project area for use in onsite revegetation, unless contaminated with invasive species. Material (or soil) from areas contaminated by cheatgrass would not be used.

To further minimize the risk of introducing additional non-native species into the area:

- Seed and plant mixes must be approved by the USDA Forest Service Botanist or their designated appointee who has knowledge of local flora.
- Invasive species would not be intentionally used in revegetation. Seed lots would be tested for weed seed and test results would be provided to USDA Forest Service Botanist or their designated appointee.

- Persistent nonnative plants, such as such as timothy (*Phleum pretense*), orchardgrass (*Dactylis glomerata*), ryegrass (Lolium spp.), or crested wheatgrass (*Agropyron cristatum*) would not be used in revegetation.
- Seed and plant material would be from native, high-elevation sources as much as possible. Areas would be revegetated with regionally and elevational appropriate species to the area.

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 Impact.

No impacts to nesting birds are anticipated as a result of the project. Minimal tree removal is proposed as part of the project and would likely take place during the nesting season of protected raptors and migratory birds. However, with implementation of Standard measures and BMPs identified in Chapter 1, Section 1.6, BR-2 no impacts or take of migratory or non-game birds is anticipated.

The project is located outside of NOAA Fisheries jurisdiction. There are no anadromous fish or NMFS federally regulated species that occur in the Meeks Bay 7.5-minute quadrangle. No critical habitat was identified within the project ESL or BSA. Therefore, no effects to NOAA Fisheries species are anticipated.

Plant Species

The BSA does not contain suitable habitat for designated state endangered plant species, Tahoe yellow cress. However, suitable habitat and known occurrences of the species are in close proximity to project area. Based on the survey results, Tahoe yellow cress or other special-status plant species would not be affected by the proposed project, given no special-status plants were found to be present within the BSA or ESL. However, potentially suitable habitat does exist within the ESL for several CRPR plant species. Plant surveys would also be conducted next spring and

summer to increase confidence that special-status plants do not occur within the ESL/BSA. Additionally, Standard Measures and BMPs outlined in in Chapter 1, Section 1.6, BR-4, and additional avoidance and minimization measures (M2 and M3) would be incorporated to the project to ensure no impacts to Tahoe yellow cress and CRPR plant species would occur. Therefore, no impacts are anticipated.

Animal Species

The BSA has low quality habitat for Mountain whitefish and Lahontan mountain sucker. The construction of the project would cause mostly temporary impacts, if any, to these species. As proposed, the project would remove the current fish barrier (two box culverts) and revegetate the stream channel within Caltrans ROW. The species would ultimately benefit from the project, as the low quality habitat would be improved. With this habitat improvement and the implementation of avoidance and minimization measures in this section, as well as measures and BMPs in Chapter 1, Section 1.6, no impacts to these species are anticipated.

There is potential suitable habitat for Southern long-toed salamanders in the project area. The proposed project could result in direct mortality, wounding, injury, or harassment of individuals as a result of water diversion, de-watering, or in-channel construction activities. However, with the proposed method of accelerated bridge construction, temporary impacts to southern long-toed salamander, and potentially suitable habitat for the species would be minimized to the greatest extent feasible. Furthermore, the project would implement Caltrans Standard Measures and BPMs outlined in Chapter 1, Section 1.6 and additional avoidance and minimization measures (M1, M3, M4, and M5), to minimize or eliminate impacts to southern long-toed salamander. Therefore, the impact would be less than significant.

Threatened and Endangered Species

Lahontan cutthroat trout is designated as a federally threatened species by USFWS. Meeks Creek is not presently known to support LCT and habitat for LCT in the ESL is poor quality with a complete fish barrier currently in place, however recent releases of LCT in Meeks Bay (located 540 feet from Meeks Creek Bridge) increase the likelihood of the species being present within Meeks Creek. Construction of the project could cause potential injuring, harming, harassing, stressing, or killing Lahontan cutthroat trout in the action area during construction related activities associated with water drafting/dewatering and electrofishing/fish salvage needed to implement Meeks Creek restoration. Resource protection measures will be

implemented to alleviate unintended harm to Lahontan cutthroat trout during dewatering and species relocation (if needed). Project actions are not expected, although possible, to result in direct mortality, wounding, injury, or harassment of individuals as a result of water diversion, de-watering, or in-channel construction activities. There is a possibility that LCT could be present in the dewatering area and would need to be relocated outside the project limits.

Construction of the project would remove the current fish barrier and revegetate the stream channel within the ESL. This would improve the low-quality habitat and ultimately benefit the species. While the proposed project has the potential to affect LCT, the avoidance and minimization measures and fish passage design features will minimize the potential adverse effects. No compensatory mitigation is proposed, as the project is self-mitigating. As mentioned previously, construction of the proposed project would remove the current fish barrier and revegetate the stream channel within the ESL. The project would improve this low-quality habitat for LCT and ultimately benefit the species. Hydrology of the creek would be restored allowing for all aquatic organism movement including LCT and other native fish species.

The Sierra Nevada yellow legged frog is listed as endangered under FESA, threatened under CESA, and is designated as a sensitive species by the LTBMU. Potential suitable habitat occurs in the ESL; however, it is not considered optimal breeding or non-breeding habitat. No SNYLF were encountered during visual encountered surveys.

With implementation of Caltrans Standard Measures and BMPs outlined in Chapter 1, Section 1.6, and the additional measures mentioned in this section for LCT and SNYLF, there would be less than significant impacts to these two species.

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 Impacts. There is very little riparian vegetation present within the ESL. Surveys determined there are seven gray alders, one willow species, and

one quaking aspen within the ESL. As currently designed, the project could require removal of vegetation for bridge construction and utility relocation purposes. However, vegetation removal would be kept to the minimum amount possible to conduct the work; trimming the vegetation is preferable and would be considered prior to removal to preserve as much of this riparian as possible. Furthermore, additional riparian vegetation would be planted downstream of the new bridge by Caltrans as part of the restoration portion of this project to return the creek to a more natural system. In addition, through consultation with CDFW, USWFS, and the LTBMU, riparian impacts from the project would be offset by on-site revegetation. Therefore, the impact would be less than significant.

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 Impact. There are wetlands within the BSA. The proposed project would permanently impact approximately 0.06 acres of the perennial drainage. Temporary impacts of approximately 0.20 acres could occur in Meeks Creek within the BSA due to increased sedimentation from the water diversion process. The following temporary impacts would also occur immediately upstream and downstream of the structure: approximately 0.05 acres of Meeks Creek, 0.005 acres to the intermittent drainage, 0.03 acres to scrub-shrub wetland, and 0.001 acres of minimal impacts to emergent wetland (Figure 6 above).

Although minimal temporary and permanent impacts to these aquatic resources would occur, there would be an overall benefit to restoring the hydrology of the stream. Meeks Creek would no longer be constricted through a double box culvert and would flow under a single span bridge and natural stream bottom would be restored.

Temporary and permanent impacts would be minimized with implementation of the measures in this section and Standard Measures and BMPs outlined in Chapter 1, Section 1.6. In addition, Caltrans would compensate for permanent project impacts on aquatic resources in accordance with permitting requirements set forth by the

USACE, and Lahontan RWQCB. Final permit-driven mitigation ratios would be determined during the permitting process. Thus, the impact to Wetlands and Other Waters would be less than significant.

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 Impact. The project would not substantially interfere with habitat connectivity in the proposed project area. Current conditions at the bridge have created a complete barrier to fish migration upstream. The project would restore the fish passage and migratory conditions in the project area by replacing the box culverts with a single span bridge, conforming the creek bed near the bridge, and restoring connectivity with Lake Tahoe. However, there could be an increase in turbidity and siltation from disturbance of soils in and near the stream during construction such as de-watering or water diversion activities. This would be a temporary impact on potential stream habitat for special-status species like Mountain Whitefish, Lahontan mountain sucker, and LCT. Impacts would be minimized by implementation of measures identified in this section, and Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, Section 1.6. Given this, and that the proposed project would contribute towards the effort to restore fish passage overall, the impact would be less than significant.

While not considered abundant in the vicinity of the project area, mule deer may forage or move through the project area on occasion. The project area does not contain deer fawning habitat and is not positioned in any important movement corridors for the Loyalton-Truckee mule deer herd. Additionally, the SR 89 corridor and disturbance from recreational use of the project area and surroundings limit the project area from functioning as an important deer movement corridor.

Small and medium sized mammals including but not limited to American badger, ringtail, Sierra Nevada snowshoe hare, western white-tailed jackrabbit, and other common mammal species could use the current structure or roadway in the area to move from the west side habitat to the lakeside habitat. The movement of these

terrestrial wildlife along Meeks Creek could be temporarily impacted during the construction of the bridge. However, the project proposes to incorporate terrestrial wildlife improvements in the form of an earthen bench for passage beneath the proposed single-span bridge structure. Thus, the impact would be less than significant.

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 local policies or ordinances protecting biological resources. Thus, no impact is anticipated.

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

> ***f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

No Impact. The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Thus, no impact is anticipated.

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 following: Archaeological Survey Report dated September 19, 2024 (Caltrans 2024d), Finding of No Historic Properties Affected Report dated September 19, 2024 (Caltrans 2024e), and consultation with local Native American Tribes as identified by the Native American Heritage Commission (NAHC), local historical societies, and the USDA Forest Service. Potential impacts to Cultural Resources are not anticipated due to archaeological and cultural studies conducted by Caltrans staff, which included background research, literature review, in-person field surveys, and extended phase one excavations. There are no listed or eligible historic properties in the project area. No burial sites were identified within the project limits. The proposed project is not anticipated to disturb any human remains. It has been determined that any potential effects on Cultural Resources would be minimized by implementation of Caltrans Standard Measures and BMPs outlined earlier in Chapter 1, Section 1.6.

2.6 Energy

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

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

Determinations in this section are based on the scope, description, and location of the proposed project, as well as the Energy Analysis Memorandum dated August 25, 2024 (Caltrans 2024f).

Transportation energy is generally described in terms of direct and indirect energy. Direct energy is the energy consumed in the actual propulsion (e.g., automobiles, trains, airplanes). This energy consumption is a function of traffic characteristics such as vehicle miles traveled (VMT), speed, vehicle mix, and thermal value of the fuel being used. Some projects may also include features such as new or replacement roadway lighting or other features requiring electricity, which is an ongoing and permanent source of direct energy consumption.

Indirect energy is defined as all the remaining energy consumed to run a transportation system, including maintenance energy, and any substantial impacts on energy consumption related to project-induced land use changes and mode shifts, as well as any substantial changes in energy associated with vehicle operation, manufacturing, or maintenance due to increased automobile use. The one-time energy expenditure involved in constructing a project is also considered indirect energy.

The project area is surrounded by a mix of industrial, vacant, commercial, and residential land uses (TRPA 2024). Additionally, the USDA Forest Service Meeks Bay Campground is on the east side of the proposed project area. The detoured section of SR 89 is a conventional highway with peak hour traffic volumes of 350 vehicles per hour (VPH) on Monday to Friday, 540 VPH on Saturday, and 600 VPH on Sunday and an annual average daily traffic of 2,431 vehicles per day (VPD) on Monday to Thursday, 2,611 VPD on Friday, 3,702 VPD on Saturday and 3,369 VPD on Sunday.

Environmental Consequences

Activities that consume energy also contribute to other related impacts. Greenhouse gas emissions, for example, are linked to energy consumption. In transportation, CO_2 is the primary greenhouse gas (GHG) pollutant due to its abundance when compared with other vehicle emitted GHGs, including methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbon (HFC), and black carbon (BC).

Direct energy consumption can be quantified by using an approved version of the emissions modeling tool, Caltrans Emission Factors (CT-EMFAC) model or Emission Factors (EMFAC). Construction energy consumption can be estimated using the Caltrans Construction Emission Tool (CAL-CET), or the Sacramento Metropolitan Air Quality Management District's (SMAQMD) Road Construction Emissions Model (RCEM), or the California Emissions Estimator Model (CalEEMod). If energy consumption is not quantified in the emissions modeling tool used, gasoline and diesel consumption can be estimated from CO_2 using U.S. EPA's GHG equivalencies formulas for diesel and gasoline.

The proposed project does not change capacity or fleet mix, direct energy consumption from mobile sources would remain the same with the build and no build alternatives. However, there would be an increase in operational energy

consumption during the detour due to the increased distance vehicles would travel. CT-EMFAC version 2021 was used to evaluate the increased operational energy consumption due to the detour. To evaluate gasoline and diesel consumed by construction equipment, CAL-CET version 2021 was used. CAL-CET version 2021 outputs fuel and electricity consumption estimates based on project-specific construction information.

Avoidance, Minimization and Mitigation Measures

The use of Standard Measures and construction BMPs would minimize energy consumption from construction activities, including but not limited to:

1. Limit idling of vehicles and equipment.
2. Using solar-powered equipment, if feasible (example - signal boards).
3. Regular vehicle and equipment maintenance.
4. If feasible, recycle non-hazardous waste and excess materials to reduce disposal offsite.

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

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. Construction of the project would primarily consume diesel and gasoline through operation of heavy-duty construction equipment, material deliveries, and debris hauling. Energy use associated with proposed project construction is estimated to result in the total short-term diesel consumption of 11,096 gallons and total gasoline consumption of 4,798 gallons. This represents a small demand on local and regional energy consumption, and this demand would cease once construction is complete. Moreover, construction-related energy consumption would be temporary and not a permanent new source of energy demand.

During the temporary detour, operational energy consumption would increase slightly due to the increased travel time. Table 4 shows a summary of estimated energy consumption with and without the proposed detour and estimated increase in emissions over the detour period. This increase in operational energy consumption would be temporary and would cease on completion of construction.

Table 4. Summary of Energy Consumption with Detour and without Detour

Scenario	Energy Consumption Gasoline (gallons)	Energy Consumption Diesel (Gallons)	Energy Consumption Electricity (kWh)	Total Energy Consumption (in 100,000 BTU)
No Detour (Existing)	7,219	492	1,840	9,416
Detour	22,505	1,534	5,736	29,357
Comparison of Scenarios: No Detour (Existing) to Detour	15,287	1,042	3,896	19,941

This project would not result in changes in traffic volumes, vehicle mix, or any other factor that would cause an increase in direct energy consumption of the project from that of the No-Build Alternative. Therefore, there would be no change in long-term operation energy consumption due to the project. Given there would be a one-time expenditure of energy to construct the new bridge that would be temporary in nature and no long-term operation energy consumptions, there would be a less than significant impact.

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

No Impact. The project would not conflict with a State or local plan for renewable energy or energy efficiency. The project would not increase capacity and would not result in inefficient energy use after construction. Caltrans standard measures would be implemented during construction to reduce wasteful and unnecessary energy use. Therefore, impacts are not anticipated.

2.7 Geology and Soils

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
ii) Strong seismic ground shaking?				✓
iii) Seismic-related ground failure, including liquefaction?				✓
iv) Landslides?				✓
Would the project: b) Result in substantial soil erosion or the loss of topsoil?				✓
Would the project: c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				✓
Would the project: d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				✓

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the following: Department of Conservation's California Geological Survey Maps website accessed September 17, 2024 (DOC 2024a), U.S. Geological Survey Landslide Inventory Map accessed September 17, 2024 (USGS 2024), the Structures Preliminary Geotechnical Report Memorandum dated June 15, 2023 (Caltrans 2023b), and the Paleontological Resources Assessment Memorandum dated July 22, 2024 (Caltrans 2024g). Potential impacts to geology and soils are not anticipated based on the following:

- The potential for surface fault rupture at the site is low as there are no known faults Holocene or younger in age that fall within 1,000 feet of the proposed structure, and the proposed structure does not fall within an Alquist-Priolo fault zone.

- The potential for earthquake induced liquefaction at the site is considered negligible due to the relatively shallow depth to glacial deposits and/or bedrock.

- The project site and the adjacent areas are relatively flat. The existing approach embankment slopes are anticipated to consist of dense and/or stiff compacted fill soil. Based on these soil conditions and the absence of soil liquefaction potential, the existing fill slopes at the site are not considered subject to instability during the design seismic ground motion event.

- The project area is not susceptible to landslides, nor has a landslide occurred where the proposed project is located.

- The proposed project would implement erosion control during construction; therefore, there would be no substantial soil erosion or the loss of topsoil.

- According to the soil survey map for the Tahoe Basin Area, California and Nevada, only one map unit occurs within the cut and fill area (NRCS 2024). The soils in cut and fill areas are Marla loamy coarse sand with 0 to 5 percent slopes. This map unit composition is made up of 80 percent Marla and similar soils and 20 percent minor components. Adjacent areas to the cut and fill limits consist of Tahoe complex, 0 to 2 percent slopes, Celio loamy coarse sand, 0 to 5 percent slopes, and Gefo gravelly loamy coarse sand, 0 to 30 percent slopes (Caltrans 2024c). Any pertinent Caltrans seismic standards would be followed when constructing the proposed project. Given this, there are no substantial risks to life or property anticipated regarding expansive soils.

- The proposed project would not construct septic tanks or alternative waste-water disposal systems.

- Based on the Geologic Map of Lake Tahoe Basin California and Nevada, the rock that would be disturbed by the project is Pleistocene aged Tioga glacial outwash deposits. There is no paleontological resource potential in the area and therefore it is anticipated the glacial outwash would have a low paleontological resource potential.

2.8 Greenhouse Gas Emissions

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

Climate Change

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

Human activities generate GHGs consisting primarily of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG. While it is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2 that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO_2.

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

Regulatory Setting

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

FEDERAL

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

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

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

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

STATE

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

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

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

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

Affected Environment / Environmental Setting

The proposed project is in El Dorado County on SR 89. The landscape is characterized by a natural and rural setting with rolling hills to the north, west, and south, and forested areas in all directions. SR 89 is a two-lane conventional highway that serves local and recreational traffic along the western shore of Lake Tahoe. The El Dorado County Transportation Commission (EDCTC) is a state-mandated Regional Transportation Planning Agency (RTPA) that guides transportation development in the project area. The El Dorado County General Plan - Public Health, Safety, and Noise section address GHGs in the project area.

GHG INVENTORIES

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

NATIONAL GHG INVENTORY

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. Total national GHG emissions from all sectors in 2022 were

5,489.0 million metric tons (MMT), factoring in deductions for carbon sequestration in the land sector. (Land Use, Land Use Change, and Forestry provide a carbon sink equivalent to 15% of total U.S. emissions in 2022 [U.S. EPA 2024a].) While total GHG emissions in 2022 were 17% below 2005 levels, they increased by 1% over 2021 levels. Of these, 80% were CO_2, 11% were CH_4, and 6% were N_2O; the balance consisted of fluorinated gases. From 1990 to 2022, CO_2 emissions decreased by only 2% (U.S. EPA 2024a).

The transportation sector's share of total GHG emissions remained at 28% in 2022 and continues to be the largest contributing sector (Figure 7). Transportation activities accounted for 37% of U.S. CO_2 emissions from fossil fuel combustion in 2022. This is a decrease of 0.5% from 2021 (U.S. EPA 2024a, 2024b).

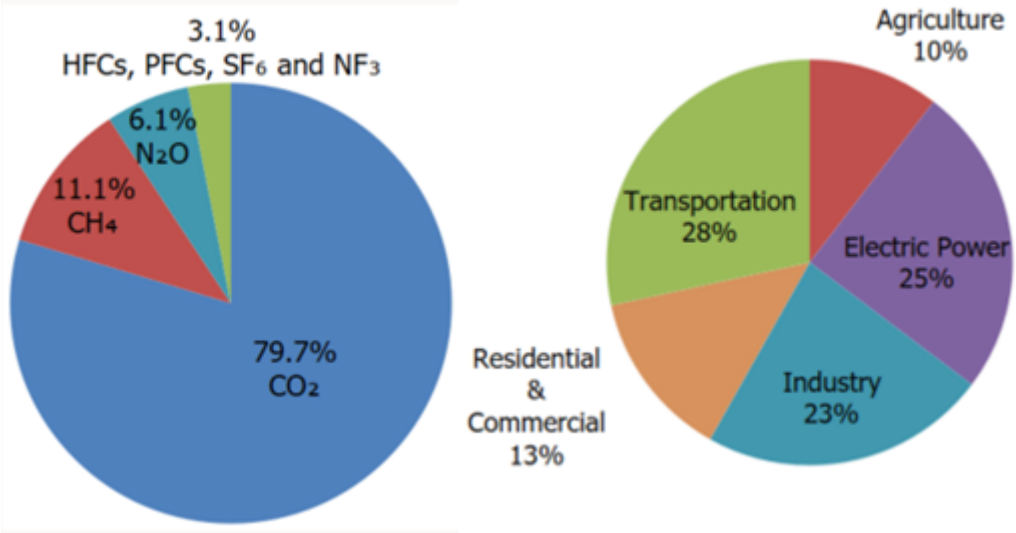

Figure 7. U.S. 2022 Greenhouse Gas Emissions

(Source: U.S. EPA 2024b)

STATE GHG INVENTORY

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. Overall statewide GHG emissions declined from 2000 to 2021 despite growth in population and state economic output (Figure 8). Transportation emissions remain the largest contributor to GHG emissions in the state (Figure 9) (ARB 2023).

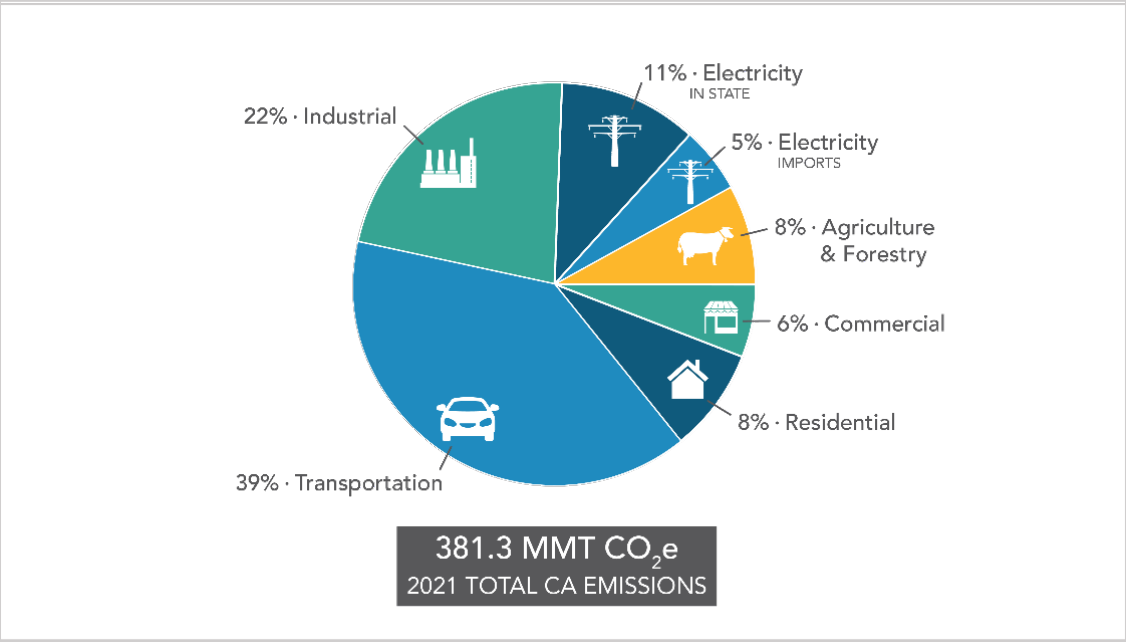

Figure 8. California 2021 Greenhouse Gas Emissions by Economic Sector

(Source: ARB 2023)

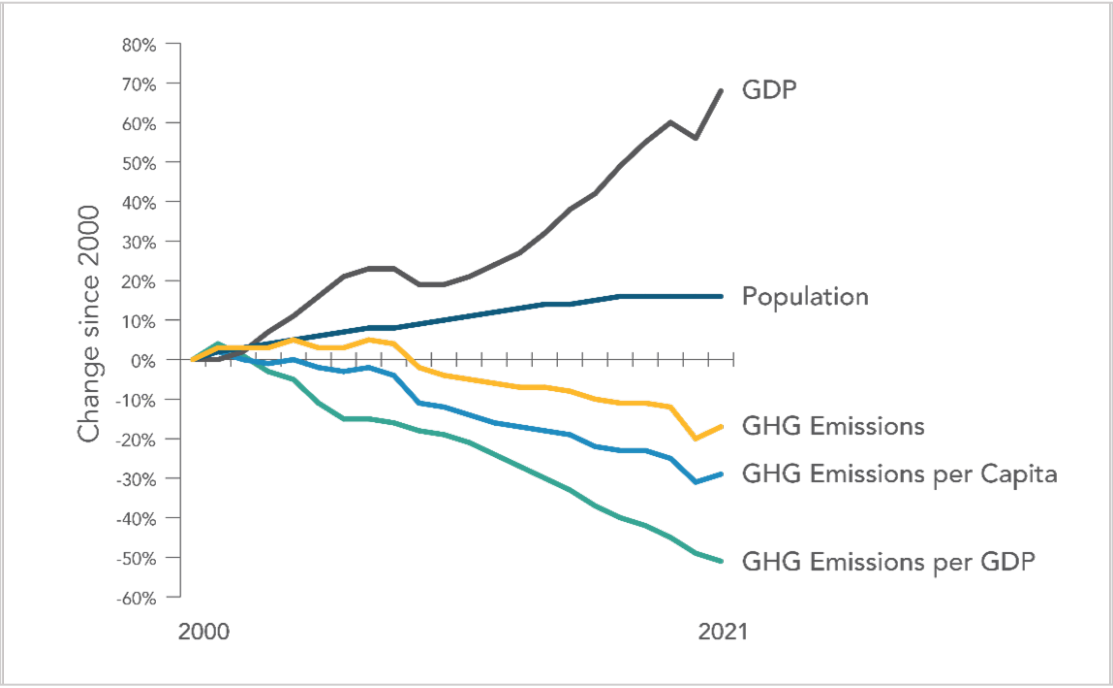

Figure 9. Change in California Gross Domestic Product (GDP), Population, and GHG Emissions since 2000

(Source: ARB 2023)

AB 32 required ARB 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. ARB 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 (ARB 2022a).

REGIONAL PLANS

As required by *The Sustainable Communities and Climate Protection Act of 2008*, ARB 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 the Tahoe Metropolitan Planning Organization (TMPO) or the Tahoe Regional Planning Agency (TRPA). The regional reduction target for TMPO/TRPA is 5 percent by 2035 (ARB 2021).

Table 5 lists the policies and actions aimed at addressing climate change and reducing GHG emissions.

Table 5. Regional and Local Greenhouse Gas Reduction Plans

Title	GHG Reduction Policies or Strategies
Tahoe Regional Planning Agency (TRPA) Threshold Standards and Regional Plan (amended May 2024)	• Support mixed-use, transit-oriented development, and community revitalization projects that encourage walking, bicycling, and easy access to existing and planned transit stops in town centers. • Implement greenhouse gas reduction strategies in alignment with federal, state, tribal, and regional requirements and goals. • Develop and implement project impact analysis, mitigation strategies and fee programs to reduce Vehicle Miles Traveled and auto trips.

Title	GHG Reduction Policies or Strategies
	• Facilitate and promote the use of zero emission transit, fleet, and personal vehicles through implementation of the Tahoe-Truckee Plug-In Electric Vehicle Readiness Plan, education, incentives, funding and permit streamlining. • Collaborate with all jurisdictions and employers in the basin to develop, maintain, and implement programs to reduce employee vehicle trips. • Leverage transportation projects to benefit multiple environmental thresholds through integration with the Environmental Improvement Program. • Develop and implement a cooperative continuous, and comprehensive Congestion Management Process to adaptively manage congestion within the Region's multimodal transportation system, with a focus on peak traffic periods and Basin entry/exit routes.
El Dorado County General Plan (Adopted July 2004; Amended May 2024)	• Policy 6.7.2.1 Develop and implement a public awareness campaign to educate community leaders and the public about the causes and effects of El Dorado County air pollution and about ways to reduce air pollution. • Policy 6.7.2.2 Encourage, both through County policy and discretionary project review, the use of staggered work schedules, flexible work hours, compressed work weeks, teleconferencing, telecommuting, and car pool/van pool matching as ways to reduce peak-hour vehicle trips. • Policy 6.7.2.3 To improve traffic flow, synchronization of signalized intersections shall be encouraged as a means to reduce congestion, conserve energy, and improve air quality. • Objective 6.7.5 Agricultural and Fuel Reduction Burning: Adopt and maintain air quality regulations which will continue to permit agricultural and fuel reduction burning while minimizing their adverse effects.

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

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

Operational Emissions

Non-Capacity-Increasing Projects

The purpose of the proposed project is to replace Meeks Creek Bridge, restore the creek, and improve fish and wildlife passage. The project would not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on SR 89, 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 will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. While construction GHG emissions are only produced for a short time, they have long-term effects in the atmosphere, so cannot be considered "temporary" in the same way as criteria pollutants that subside after construction is completed.

Use of long-life pavement, improved traffic management plans, and changes in materials can also help offset GHG emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities. Construction is anticipated to begin in 2027 and occur over approximately 200 working days.

The Caltrans Construction Emissions Tool (CAL-CET) 2021 version 1.0.2 tool was used to estimate average CO_2, CH_4, N_2O, black carbon (BC), and hydrofluorocarbon-134a (HFC-134a) emissions from construction activities. Table 6 summarizes estimated GHG emissions generated by on-site equipment for the project. The total CO_2e produced during construction is estimated to be 171 metric tons.

Table 6. CAL-CET Estimates of GHG Emissions During Construction

Construction Year	CO_2 (tons)	CH_4 (ton)	N_2O (ton)	BC (ton)	HFC-134a (ton)	CO_2e (metric ton)
2027	172	0.003	0.013	0.004	0.007	171

* A quantity of GHG is expressed as carbon dioxide equivalent (CO_2e) that can be estimated by the sum after multiplying each amount of CO_2, CH_4, N_2O, and HFCs by its global warming potential (GWP). Each GWP of CO_2, CH_4, N_2O, BC, and HFCs is 1, 25, 298, 460 and 1,430, respectively.

All construction contracts include Caltrans Standard Specifications related to air quality. Section 7-1.02A and 7 1.02C, Emissions Reduction, requires contractors to

comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations. Section 14-9.02, Air Pollution Control, requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

The above mentioned standard specifications as well as the additional measures listed below would help reduce GHG emissions.

- Utilizing a traffic management plan (TMP) to minimize vehicle delays.
- Maintaining equipment in proper tune and working condition.

CEQA Conclusion

While the proposed project would result in GHG emissions during construction, it is anticipated the project would not result in any increased operational GHG emissions since it would not increase capacity, change travel demands or traffic patterns. The project would not increase the number of travel lanes on SR 89, so no increase in VMT would occur. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG reduction measures and Caltrans' Standard Measures and BMPs from Chapter 1, Section 1.6, 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 (ARB 2022b).

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

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of VMT. Reducing today's petroleum use in cars and trucks is a key state goal for reducing greenhouse gas emissions by 2030 (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 ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set

forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

Climate Action Plan for Transportation Infrastructure

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

California Transportation Plan

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan’s climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021a).

Caltrans Strategic Plan

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

Caltrans Policy Directives and Other 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. C*altrans 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 GHG emissions and potential climate change impacts from the project.

- Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality (Caltrans Standard Specification [SS] 14-9).
- Compliance with Title 13 of the California Code of Regulations, which includes idling restrictions of construction vehicles and equipment to no more than 5 minutes.
- Caltrans Standard Specification 7-1.02C "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board.
- Utilize a Transportation Management Plan to minimize vehicle delays.
- Maintain equipment in proper tune and working condition.
- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.

Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's

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

FEDERAL EFFORTS

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

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

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

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

STATE EFFORTS

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

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

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

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

planning, design, and implementation processes to respond to the observed and anticipated climate change impacts (Climate-Safe Infrastructure Working Group 2018).

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

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

SB 1 Coastal Resources: Sea Level Rise (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 2023).

PROJECT ADAPTATION ANALYSIS

The adaptation analysis is intended to demonstrate how the proposed project will be adapted or resilient to future climate change effects. Future changes in sea level rise, precipitation and flooding, wildfire, and temperature were considered in the planning and design decisions for the proposed project. The project proposes to replace the Meeks Creek bridge and conform the creek bed. All drainages in the project area would retain their current pattern of flow. After construction, Meeks Creek would no longer be constricted through a double box culvert. The creek would flow under a single span bridge and natural stream bottom would be restored. The new bridge and creek rehabilitation would better facilitate runoff during precipitation events. In turn, this would increase resiliency of the drainage system against flooding from any change in precipitation. Additionally, project elements such as widening of the bridge and installing guardrail that would utilize steel posts would assist in building a wildfire resilient highway system.

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

Sea Level Rise

The proposed project is outside the Coastal Zone and not in an area subject to sea level rise. Accordingly, direct impacts to transportation facilities due to projected sea level rise are not expected (Figure 10 and 11).

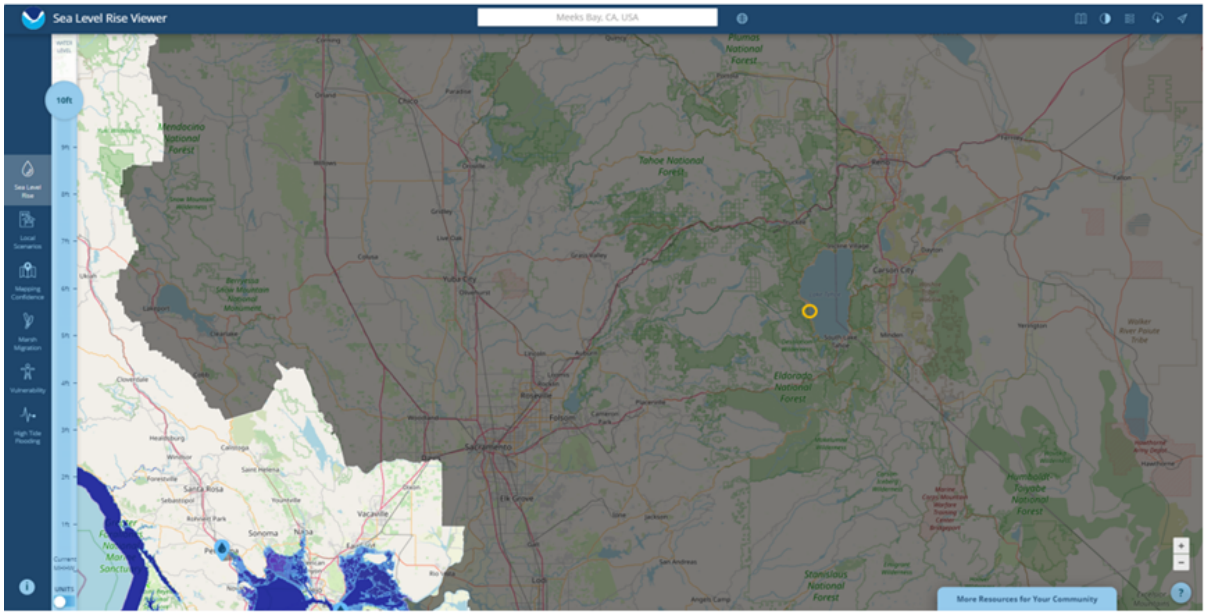

Figure 10. Sea Level Rise in Relation to the Project (Overview)

Source: National Oceanic and Atmospheric Administration (NOAA) 2024

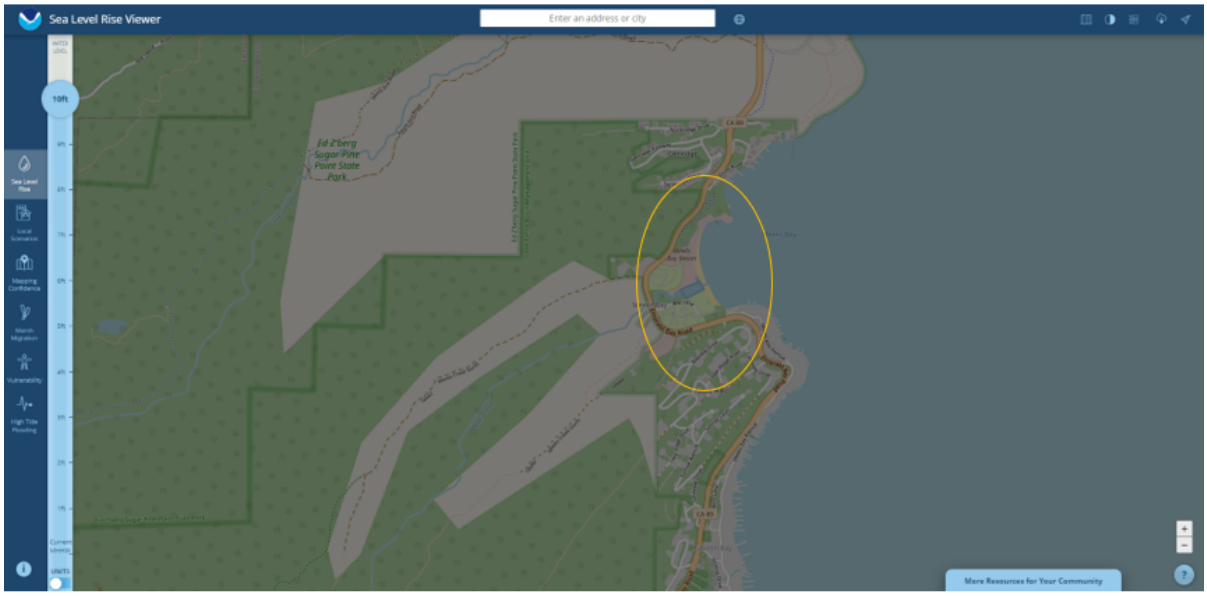

Figure 11. Sea Level Rise in Relation to the Project (Zoomed in)

Source: NOAA 2024

Precipitation and Flooding

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

To determine the impacts of the proposed project area on SR 89 due to precipitation and flooding, the 100-year flood event was assessed to project how 100-year flood rainfall is to change as a result of climate change. The 100-year flood event is commonly used in the sizing and design of culverts and drainage systems. In most cases, it is assumed that the 100-year flood is caused by a 100-year precipitation event. For the proposed project area, the 100-year rainfall precipitation depth is projected to increase by as much as 5.2 to 7.1 percent by 2055 (Caltrans 2024h).

The proposed project scope is to replace the Meeks Creek bridge and restore the creek to address downstream scour that has resulted from high velocity flows through the structure. The proposed project would be designed to perpetuate flow in the existing direction and would have greater capacity than the existing condition.

The widening of the structure and restoration of the creek would improve the drainage system at Meeks Creek Bridge, and in turn, potentially reduce future risks of localized flooding.

Wildfire

The project limits are within both a State Responsibility Area (SRA) served by CAL FIRE and a Federal Responsibility Area (FRA) in El Dorado County. Within the SRA, the project is located within a *very high* CAL FIRE Fire Hazard Severity Zone, as shown below in Figure 12.

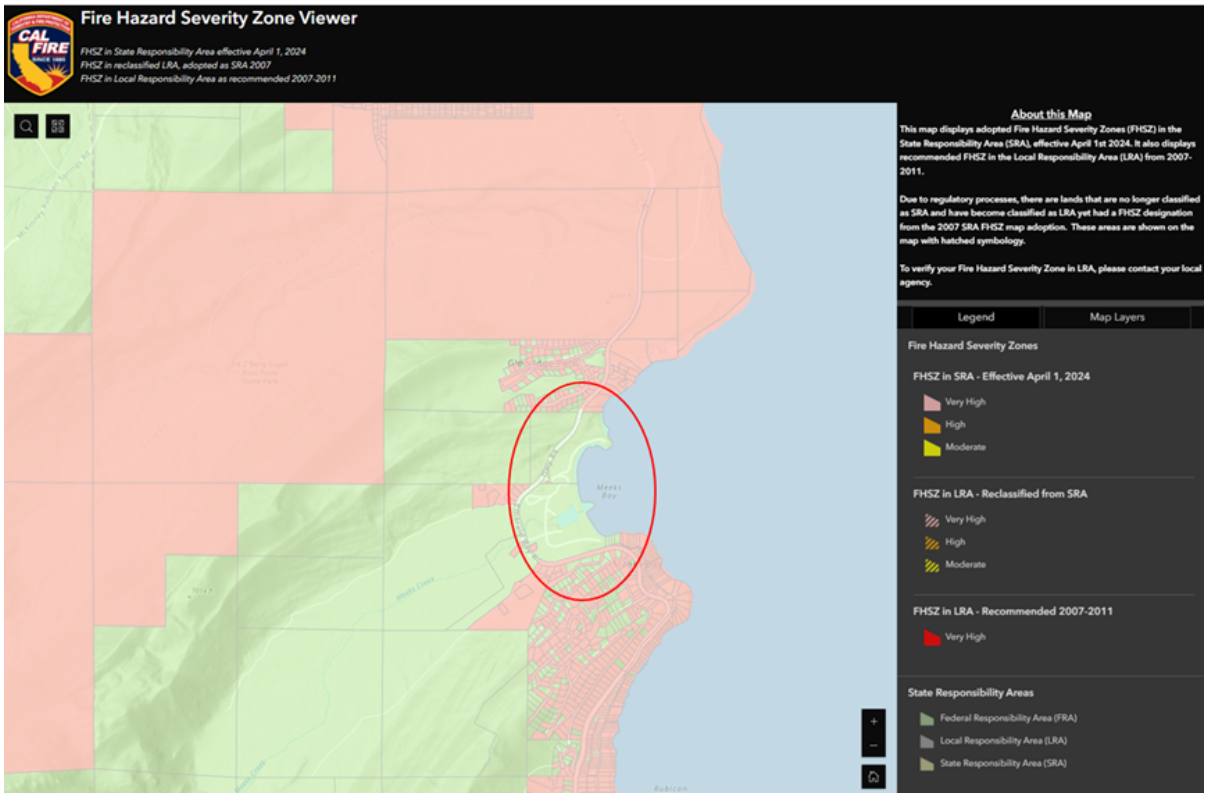

Figure 12. CAL FIRE Fire Map of the Project Area in Fire Hazard Severity Zones in State Responsibility Area

Source: CAL FIRE 2024

The Caltrans Climate Change Vulnerability Assessments for District 3 identified the proposed project site within an area with *Very High* level of wildfire concern (Caltrans 2019). Future level of wildfire concern for the Caltrans State Highway System within District 3, are based on the Representative Concentration Pathways (RCP) 8.5 emissions scenario. This scenario assumes that high emission trends

continue to the end of century. By 2085, the project area is projected to remain in an area of *Very High* level of wildfire concern (Caltrans 2019).

Although there is work proposed in a *Very High* FHSZ, project elements assist in building a wildfire resilient highway system. A project feature that would protect the project from wildfire includes the installation of guardrail that would utilize steel posts as they are more resilient to wildfire compared to the wood post counterpart. The widening of the bridge would provide a larger buffer during potential wildfire events. Additionally, Caltrans Standard Specifications that mandates fire prevention procedures to avoid accidental fire starts during construction would be implemented.

Temperature

The Caltrans *Climate Change Vulnerability Assessment* for District 3 uses climate data provided by the Scripps Institution of Oceanography to project average maximum temperature increases over the course of seven consecutive days throughout District 3. The project area reflects an average temperature increase of 10.0 to 11.9 ºF by 2085 (Caltrans 2019). Average minimum temperature increase was also projected with minimum temperature increasing 4.0 to 5.9 ºF through 2055 and 8.0 to 9.9 ºF degrees through 2085.

Higher temperatures could affect safety of employees working outdoors, survival of landscaping and vegetation in the Caltrans right-of-way, and the condition of pavement and structures, which could require more frequent maintenance. The rise in temperature could worsen the current vulnerable condition of the large culvert at the proposed project area. The large culverts at Meeks Creek Bridge have been identified in the Caltrans *Adaptation Priority Report* for District 3 as a Priority 1 Climate Vulnerable Asset due to a mix of high riverine flooding scores and long detours around the assets and/or high average annual daily traffic (AADT). The project's proposed scope of work to remove the existing box culverts and restore the Meeks Creek channel would address the asset's climate vulnerability and provide resiliency to current temperature effects.

2.9 Hazards and Hazardous Materials

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

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

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many 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

Determinations in this section are based on the scope, description, and location of the proposed project, as well as the Initial Site Assessment (ISA) Memorandum dated July 16, 2024 (Caltrans 2024i).

The project lies within the Lake Tahoe Basin of the Sierra Nevada region of northern California. The section of 89 within the project limits runs south to north along the west side of Lake Tahoe. This portion of the project is a two-lane conventional highway that serves local and recreational traffic along the western shore of Lake Tahoe.

The review for the potentially hazardous waste impacts within the project limits included a review of the project plans, and review of the GeoTracker data management system that contains records for hazardous waste sites. Aerially Deposited Lead (ADL) from the historical use of leaded gasoline, leaded airline fuels and waste incineration exists along roadways throughout California. There is the likely presence of soils with elevated concentrations of lead as a result of ADL on the State Highway System right of way (ROW) within the project limits. This project area is not listed as a Cortese site.

Environmental Consequences

Since construction of the proposed project cannot avoid disturbing soils, a Site Investigation (SI) would be required during the design phase. The SI involves sampling soils for ADL, bridge asbestos, and lead paint testing. It would determine if hazardous soils exist and what actions, if any, would need to occur during construction. A Hazardous Materials Disclosure Document (HMDD) would be required for attachment to the Certificate of Sufficiency (COS) before any ROW could be acquired. The HMDD would be provided once ROW mapping is finalized in later design stages of the project.

Avoidance, Minimization and Mitigation Measures

Standard Measures and BMPs as outlined in Chapter 1, Section 1.6 would be incorporated into the project to minimize any hazardous waste impacts.

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

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

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

Less than Significant Impact. There is potential for ADL to occur within the project limits. Sampling taken during the SI would determine what actions, if any, are needed during construction regarding the handling, transporting, or disposing of these soils.

Hazardous levels of lead and chromium are known to exist in the yellow traffic stripes. Since these traffic stripes would be cold planed along with the roadway, the levels of lead and chromium would become non-hazardous. These grindings consisting of the roadway material and the yellow traffic stripes would be removed and disposed of under Caltrans' Standard Special Provision 36-4 (Residue Containing High Lead Concentration Paints) which requires a Lead Compliance Plan (LCP). Non-hazardous levels of lead are known to exist in the white traffic striping. These grindings would be removed and disposed of in accordance with the same specification.

The proposed project would have a less than significant impact on public exposure to hazards. The project features mentioned above would be implemented as appropriate, and impacts would be further reduced. Therefore, this impact would be less than significant.

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. As described above in question 2.9a, hazardous materials have the potential to occur within the project limits. Implementation of Caltrans Standard Specifications for the removal and handling of known hazardous materials (such as ADL, and yellow traffic striping) would minimize the chances of an accidental release of hazardous materials into the environment. Therefore, the impact would be less than significant.

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. There are no existing or proposed schools within one-quarter mile of the project. Therefore, there would be no impact.

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

No Impact. This proposed project is not on a site included on a list of hazardous material sites under Government Code Section 65962.5, so there would be no impact from such sites. Therefore, there would be no impact.

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 within two miles of a public airport or public use airport. Therefore, there would be no impact.

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

Less than Significant Impact. The proposed project would utilize a full highway closure for up to seven days in order to replace the existing bridge as mentioned in Chapter 1, Section 1.4. As the detour route for this closure spans 53 miles and requires approximately 1 hour and 35 minutes to traverse around Lake Tahoe, the emergency response and evacuation plans in the area could temporarily be impacted. Emergency services would be staged on both sides of the closure to ensure there is adequate response on both the north and south end of the project during this portion of construction. Additionally, Caltrans will continue coordination with emergency services providers and nearby federal and local authorities during all phases of the project to minimize interference of emergency plans. Therefore, the impact would be less than significant.

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

Less than Significant Impact. The proposed project is in a very high-risk area for wildfires. There is a fire station within the project vicinity that would need to be accommodated to maintain sufficient emergency access during one-lane closures. During the full highway closure, the Meeks Bay Fire Protection would be staged on both sides of the full highway closure to ensure there is adequate emergency response near the project area. Extensive coordination and outreach with emergency response agencies would occur prior to the closure to ensure minimal disruptions to service during construction. Extensive public outreach leading up to the temporary closure would also be implemented to notify the traveling public in the region of the detour. As all emergency services and the public would be notified of full closures before construction, the impact would less than significant.

2.10 Hydrology and Water Quality

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

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

Regulatory Setting

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

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

Affected Environment

Determinations in this section are based on the scope, description, and location of the proposed project, as well as the Water Quality Assessment dated July 15, 2024 (Caltrans 2024j) and Floodplain Hydraulic Study dated December 15, 2023 (Caltrans 2023c). This proposed project is located within the Sierra Nevada Mountains of California and is positioned between Tahoe City and Emerald Bay, on the west side of Lake Tahoe. The elevation within the project limit varies from a maximum elevation of 6,266 feet at the north end of the project to a minimum elevation of 6,245 feet located at Meeks Bay Fire Protection Department.

The project is located within the Meeks Creek Watershed (Hydrologic Unit Code 16050101). The only water body within the ESL is Meeks Creek, a perennial stream roughly 7.5 miles in length flowing northward from Rubicon Lake before turning sharply to the east and empties into Meeks Bay. The watershed consists of the upper watershed, lower meadow, and shoreline zone (Caltrans 2024c).

Environmental Consequences

The current bridge length is less than 30 feet, and the new bridge would be approximately 90.5 feet long, allowing for a more natural flow under SR 89. Increasing the bridge length with no in-stream barriers would reduce erosion and scour immensely and allow for overbank flooding and floodplain connectivity downstream of the structure.

The potential for turbidity impacts from erosion is specifically of concern from construction-related activities; however, would be minimized through implementation of Section 13 of the Caltrans Standard Specifications which guide the standard measures that will be implemented to comply with water quality laws, regulations and permits.

The proposed project scope proposes temporary or permanent fill to jurisdictional waterways; therefore, the project is anticipated to be subject to CWA Section 404 regulations and permitting, and a Section 401 Certification (Caltrans 2024c). Although temporary and permanent impacts to water resources would occur, there is an overall benefit to restoring the hydrology of the stream. Meeks Creek would no longer be constricted through a double box culvert and would flow under a single span bridge and natural stream bottom would be restored.

Standard Measures and BMPs as outlined in Chapter 1, Section 1.6 would be incorporated into the project to minimize any impacts. Additional BMPs would also likely be incorporated in the approved project-specific Stormwater Pollution Prevention Plan during the construction phase of the project.

Avoidance, Minimization and Mitigation Measures

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

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

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

Less than Significant Impact. Indirect impacts to surface water could occur due to siltation and erosion runoff from adjacent project activities, which could result in reduced water quality. With Caltrans' existing requirements to comply with stormwater regulations, and the implementation of Standard Measures and BMPs as noted in Chapter 1, Section 1.6, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water. Therefore, the impact would 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 proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. All drainages in the project area would retain their current pattern of flow. Flow at the Meeks Creek Bridge after construction would have operation improvement. Furthermore, there are not any municipal or domestic water supply reservoirs near the project area. Therefore, no impact would occur.

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. The proposed project would not substantially alter the existing drainage pattern that would result in substantial erosion or siltation. The purpose of the project is to repair current scour or erosion damage downstream of bridge. Therefore, no impact would occur.

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

Less than Significant Impact. The project would add impervious surface to the project area. The slight increase in impervious surfaces would come from the construction of a maintenance vehicle pullout. This would not result in a substantial

increase in surface runoff on- or off-site. Treatment BMPs would be implemented, when and where applicable, to minimize potential impacts due to new impervious areas. Therefore, less than significant impacts are anticipated.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

No Impact. The proposed project would not create or contribute to runoff water that would exceed the capacity of existing or planned stormwater drainage systems. The replacement of Meeks Creek Bridge with no in-stream barriers would increase water conveyance so that runoff water would not exceed the capacity of the system. Furthermore, as required by Caltrans Statewide Municipal Separate Storm Sewer Systems (MS4) Permit and the Construction General Permit (CGP), appropriate and applicable temporary and permanent design BMPs would be implemented to address potential impacts resulting from construction operations and new design features constructed within the project limits. Therefore, no impacts are anticipated.

(iv) impede or redirect flood flows?

No Impact. The project would not impede or redirect flood flows. Increasing the bridge length with no in-stream barriers would improve flows overall by maintaining the exiting stormwater flow pattern and decreasing volumetric flow rates. Therefore, no impacts are anticipated.

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

No Impact. The proposed project is not in an area at risk of tsunamis but is in an area at risk of seiches. The project would not store pollutants and would not be constructed with hazardous materials that would threaten the public if disturbed by a flood event. Therefore, there would be no impact.

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

No Impact. The proposed project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater

management plan. Caltrans is required to comply with existing stormwater regulations, which would prevent conflicts with a water quality control plan. Therefore, there would be no impact.

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 El Dorado County General Plan - Land Use Element dated December 10, 2019 (El Dorado County 2019), and Tahoe Regional Planning Agency Threshold Standards and Regional Plan amended May 22, 2024 (TRPA 2024a). Potential impacts to Land Use or Planning are not anticipated. There would be no change to existing land uses or motor vehicle circulation patterns. Furthermore, the project scope is restricted to the existing roadway and immediately adjacent areas and does not include an extension or expansion of a highway system that would encourage an increase in highway travelers. The proposed project is consistent with statewide, regional, and local planning goals.

2.12 Mineral Resources

Question:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
Would the project: b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the California Department of Conservation Mineral Resources Map accessed September 12, 2024 (DOC 2024b), and the El Dorado County General Plan - Conservation and Open Space Element dated December 10, 2019 (County El Dorado 2019). Potential impacts to Mineral Resources are not anticipated due to lack of identified mineral resources within the project limits. There are no designated mineral resource areas of state or regional importance in the project area, and the proposed project would not reduce the availability of a locally important mineral resource recovery site. Therefore, impacts to mineral resources are not anticipated.

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

Determinations in this section are based on the scope, description, and location of the proposed project, as well as the Noise Analysis Memorandum dated August 24, 2024 (Caltrans 2024k). The proposed project is located in El Dorado County on SR 89. The project area is surrounded by a mix of industrial, vacant, commercial, and residential land uses. Additionally, the U.S. Forest Service Meeks Bay Campground is on the east side of the proposed project area. Numerous campsites are located immediately adjacent to the proposed work area. The nearest occupied residential

land use is over 200 feet from the proposed project area. There is a six-foot concrete block privacy wall that shields portions of the Meeks Bay Campground from the proposed roadway construction area. The wall does not shield the campground area near the proposed bridge work.

SR 89 is a conventional highway with peak hour traffic volumes of 350 vehicles per hour (VPH) on Monday to Friday, 540 VPH on Saturday, and 600 VPH on Sunday. According to Caltrans 2022 Traffic Census data, peak hour traffic volumes along the detour route in California range between 741 VPH and 2,122 VPH.

Environmental Consequences

Long-term traffic noise impacts are not anticipated as the new bridge would be constructed in the same location as the existing bridge, and traffic volumes, composition and speeds would remain the same after construction.

The full closure of SR 89/temporary detour for the main bridge construction could temporarily increase noise levels along the detour route. Under the decibel (dB) scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when doubling the traffic volume, the resulting sound level at a given distance would be 3 dB higher. During peak hour traffic conditions, the detour traffic from SR 89 would not result in a doubling of peak hour traffic volumes on SR 28 or SR 50. The detour would result in a temporary increase of operational noise along the detour route of 3 A-weighted decibels (dBA) or less. It is generally accepted that the average healthy ear can barely perceive a noise level change of 3 dBA.

Residents, businesses, and visitors would be temporarily exposed to elevated noise levels during construction operations. Construction noise would primarily result from the operation of heavy construction equipment and arrival and departure of heavy-duty trucks. Table 7 shows that construction equipment is expected to generate noise levels ranging from 70 to 90 dBA at a distance of 50 feet. Noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance. The loudest noise generating construction activity on this project would occur during bridge demolition. Bridge demolition is expected to generate noise levels up to 90 dBA maximum sound level (Lmax) at 50 feet. The figures in Appendix D shows the predicted sound level contours during roadway and bridge construction.

Table 7. Construction Equipment Noise

Construction Phase	Equipment	Maximum Noise Level (Lmax, dBA at 50 feet)
Roadway Construction	Excavator	81
	Heavy Truck	77
	Roller	80
	Pavement Scarafier	85
	Paver	77
	Tractor	84
Bridge construction (excluding pile driving)	Bore/Drill Rig	84
	Crane	81
	Concrete Saw	90
	Excavator	85
	Heavy Truck	84
	Air Compressor	81
	Concrete Truck	71
	Hoe Ram	90

The following avoidance and minimization measures would be implemented to minimize construction noise:

- Caltrans Standard Specification Section 14- 8.02, “Noise Control,” which states the following: (1) Control and monitor noise from work activities and, (2) Do not exceed 86 dBA LMax at 50 feet from the job site activities from 9 p.m. to 6 a.m.
- Prepare a noise control plan to minimize construction noise including back up alarms.
- Conduct noise monitoring the first time each construction activity is performed and to investigate noise complaints that are attributed to a particular construction operation.
- If feasible, schedule operation of hoe ram, concrete saw, pneumatic tools, and other demolition equipment to daytime hours. If demolition occurs during nighttime hours provide shielding between the demolition operation and campground.
- Unnecessary idling of internal combustion engines should be prohibited.

- Stationary equipment, such as compressors and generators, should be shielded and located as far away from residential and campground uses as practicable.
- Locate equipment and materials storage sites as far away from residential and campground uses as practicable.
- Notify residents within 500 feet of the project area at least two weeks prior to the start of nighttime construction.
- Coordinate construction schedule with USDA Forest Service and provide prior notification to campground guests of potential disturbance.

Avoidance, Minimization and Mitigation Measures

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

Discussion of CEQA Environmental Checklist Question 2.13—Noise

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact. Long-term traffic noise impacts are not anticipated as the new bridge would be constructed in the same location as the existing bridge, and traffic volumes, composition and speeds would remain the same after construction. Short-term, the detour could temporarily increase noise levels along the detour route, as there would be more travelers using SR 28 and SR 50. During construction, equipment is expected to generate noise levels ranging from 70 to 90 dBA at a distance of 50 feet and would decrease over distance at a rate of 6 dB per doubling of distance. Given that construction noise would be short-term, and the proposed project would implement measures mentioned in this section to minimize construction noise, there would be a less than significant impact.

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

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

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

No Impact. This project is not located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. Therefore, there would be no impact.

2.14 Population and Housing

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project as well as the as well as the El Dorado County General Plan Housing Element dated August 2021; amended March 2022 (El Dorado County 2022). The proposed project would not include substantial unplanned population growth, either directly or indirectly. The project involves no residential development or extension of roadways or infrastructure, which could induce population growth in an area. The project would not require right of way acquisition and would not cause the displacement of the local population, nor would it necessitate the construction of replacement housing elsewhere. Therefore, no impacts to population and housing are anticipated.

2.15 Public Services

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the El Dorado County General Plan - Public Health, Safety, and Noise element dated August 2021; amended March 2022 (El Dorado County 2022) and the Transportation Management Plan dated August 15, 2024 (Caltrans 2024l). The proposed project would not directly or indirectly result in an increase in population, which is typically a factor that increases the demand for

public services such as schools, parks or other public facilities. Given that the project would not increase population, driving the need for more public services, and that Caltrans would notify and coordinate any road closures with emergency service providers, no impact to public services is anticipated.

2.16 Recreation

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				✓
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to recreation are not anticipated. The proposed project has three recreational facilities near the project limits: Meeks Bay Campground, Meeks Bay Trailhead, and Meeks Bay Resort. Access to the campground, trailhead, and resort would be maintained during construction. The project would not increase the use of existing neighborhood parks, regional parks, or other recreational facilities. The purpose of this project is to replace the Meek Creek bridge and restore the creek within Caltrans right of way. Temporary Construction Easements (TCE) would be needed adjacent to the bridge to accommodate creek restoration and construction of new bridge. However, these areas would not expand or require the construction of any additional recreational facilities. Temporary impacts on USDA Forest Service land during construction are addressed in a Section 4(f) evaluation and *de minimis* finding provided in Appendix E. Given this, the project is anticipated to have no impact on recreation.

2.17 Transportation

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

Regulatory Setting

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

Affected Environment

The project is located within the Lake Tahoe Basin of the Sierra Nevada region of northern California. The section of 89 within the project limits runs south to north along the west side of Lake Tahoe. This portion of the project is a two-lane conventional highway that serves local and recreational traffic along the western shore of Lake Tahoe.

Most of the project's work would be carried out under standard traffic control, which involves a one-way lane closure, except for the main bridge construction. In order to replace the existing bridge, the project would utilize a full highway closure for three

to seven days. Full closure of the roadway at the project location would allow for the contractor to use the roadway between the driveway entrances at Forest Service Road, also known as Manicina, and Forest Route 14N42 for stage construction. During the full closure, a detour would be established for travelers using SR 28 to SR 50 as the primary alternative routes that spans 53 miles.

There are emergency services near the project area, Meeks Bay Fire Protection District- Station 67 being the closest.

Environmental Consequences

The proposed project is not a capacity increasing project and would not increase VMT. The project would not increase hazards due to a geometric design feature or an incompatible use.

Due to the full highway closure, the project would temporarily impact emergency services in the area. Caltrans would work with emergency services to determine agreements and provisions necessary to access and provide service to both sides of the highway during the full closure. With continued coordination with all local authorities and emergency services providers in the area during all phases of the project, less than significant impacts are anticipated.

Avoidance, Minimization and Mitigation Measures

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

Discussion of CEQA Environmental Checklist Question 2.17—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 transportation alternatives. As the proposed project does not conflict with the Tahoe Regional Planning Agency's Transportation Plan or Active Transportation plan, there would be no impacts.

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

No Impact. The proposed project would not conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b). The proposed project is a bridge replacement project and would not increase vehicular capacity. Therefore, there would be no impact.

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 does not include modification to the existing roadways or design features that would increase hazards due to geometric design. The construction of the project would occur within the project site boundary and would utilize standard reversing traffic control and short-term full highway closures. No sharp curves, dangerous intersections, or incompatible uses would be introduced by the proposed project. Therefore, there would be no impact.

d) Would the project result in inadequate emergency access?

Less than Significant Impact. The proposed project would be utilizing a full highway closure between three to seven days in order to replace the existing bridge. During the full highway closure, the Meeks Bay Fire Protection would be staged on both sides of the closure to ensure there is adequate emergency response near the project area. During one-lane closures, the fire department and any other emergency services would be accommodated to maintain sufficient emergency access. Coordination is still in progress with the local emergency services that are within the jurisdiction of the project vicinity. Project plans also would be reviewed by the appropriate Caltrans staff to ensure conformance with all applicable fire safety code and ordinance requirements for emergency access. Therefore, impacts would be less than significant.

2.18 Tribal Cultural Resources

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the following: Archaeological Survey Report dated September 19, 2024 (Caltrans 2024d), Finding of No Historic Properties Affected Report dated September 19, 2024 (Caltrans 2024e), and consultation with local Native American tribes as identified by the NAHC, local

historical societies, and the USDA Forest Service. Potential impacts to Tribal Cultural Resources are not anticipated. No tribal cultural properties listed within the National Register of Historic Places, California Historical Landmarks, California Inventory of Historic Resources, California Points of Historical Interest, or California Register of Historical Resources are present within the proposed project limits.

The NAHC was contacted to request a search of the sacred lands file and an updated list of Native American contacts for the project area. Consultation letters were sent to United Auburn Indian Community of the Auburn Rancheria, Wilton Rancheria, Colfax Todd's Valley Consolidated Tribe, Nevada City Rancheria Nisenan Tribe, T'si Akim Maidu, Washoe Tribe of Nevada and California, and Ione Band of Miwok Indians. The Washoe Tribe of Nevada and California will monitor during construction and receive cultural documents completed for this project for their review. All consultation would remain open for the life of the project.

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?				✓

Regulatory Setting

The primary law governing utilities and service systems is CEQA.

Affected Environment

Determinations in this section are based on the scope, description, and location of the proposed project. Various underground and overhead utilities are present within the project area. These include facilities such as overhead electrical and fiber optic lines mounted on utility poles, a water line, and sewer line.

Environmental Consequences

Conflicts with underground and/or above-ground utilities are anticipated. Water and sewer lines are in conflict and would need to be relocated permanently. Due to the equipment needed for the bridge construction, overhead fiber optic and electrical lines may be relocated as well. This activity may require that utilities be turned off for short periods and would result in minimal impacts to local residents.

Construction of the proposed project would generate an increased amount of soil waste material. Waste would be reused, recycled, or disposed of in accordance with Caltrans standard measures. Once built, the project would not generate solid waste material.

The project's impact on solid waste collection services would be limited to the construction phase. Any impacts on solid waste collection services would be minimal.

Water would be needed for implementing palliative dust control. A municipal supply location would be identified prior to awarding the contract. The water needed for dust control is anticipated to have a minimal impact on the municipal water supply.

Avoidance, Minimization and Mitigation Measures

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

Discussion of CEQA Environmental Checklist Question 2.19—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?

Less than Significant Impact. The proposed project would not result in changed land use or require additional structures or any uses that would increase demand for water, wastewater, stormwater drainage, electric power, natural gas, or telecommunication facilities. However, there are several utility companies within the project limits including Liberty Utilities LLC, Pacific Bell, Tahoe City Public Utility District (PUD) water, Tahoe City PUD sewer, Tahoe Swiss Village Utility Inc., AT&T, and Comcast. An existing water pipe and an underground gravity sewer line conflict with the proposed work. There are also existing overhead electrical and fiber optic lines as well as utility poles that are in conflict. Caltrans will coordinate with utility owners to appropriately relocate or protect these utilities prior to construction. Given this, a less than significant impact to the environment is anticipated from utility relocations.

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. Short-term water demand would increase to provide for dust control and construction needs; however, it would be relatively small. There would be no requirement for water to serve the project past construction. Therefore, there would be no impact.

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 proposed project would not have a demand for wastewater treatment once built or during construction. Therefore, there would be no impact.

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?

Less than Significant Impact. Construction of the proposed project would generate some solid waste material. The construction-related waste would not be substantial and would be limited to the construction period. Reuse of asphalt, concrete, and other excavated materials during the construction process would occur if feasible. Waste would be recycled as possible. Therefore, the impact would be less than significant.

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

No Impact. Caltrans Standard Specification 14-10 (Solid Waste Disposal and Recycling), along with other standards that govern the use of recycled materials, ensure that the proposed project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, there would be no impact.

2.20 Wildfire

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

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

Regulatory Setting

The primary law governing wildfire is CEQA.

Affected Environment

Determinations in this section are based on the scope, description, and location of the proposed project, as well as the Transportation Management Plan (TMP) dated August 15, 2024 (Caltrans 2024l), and *Fire Hazard Severity Zones (FHSZ) Viewer* (CAL FIRE 2024). The project limits are within both a State Responsibility Area (SRA) served by CAL FIRE and a Federal Responsibility Area (FRA). The project is located within a *very high* CAL FIRE FHSZ (Figure 13).

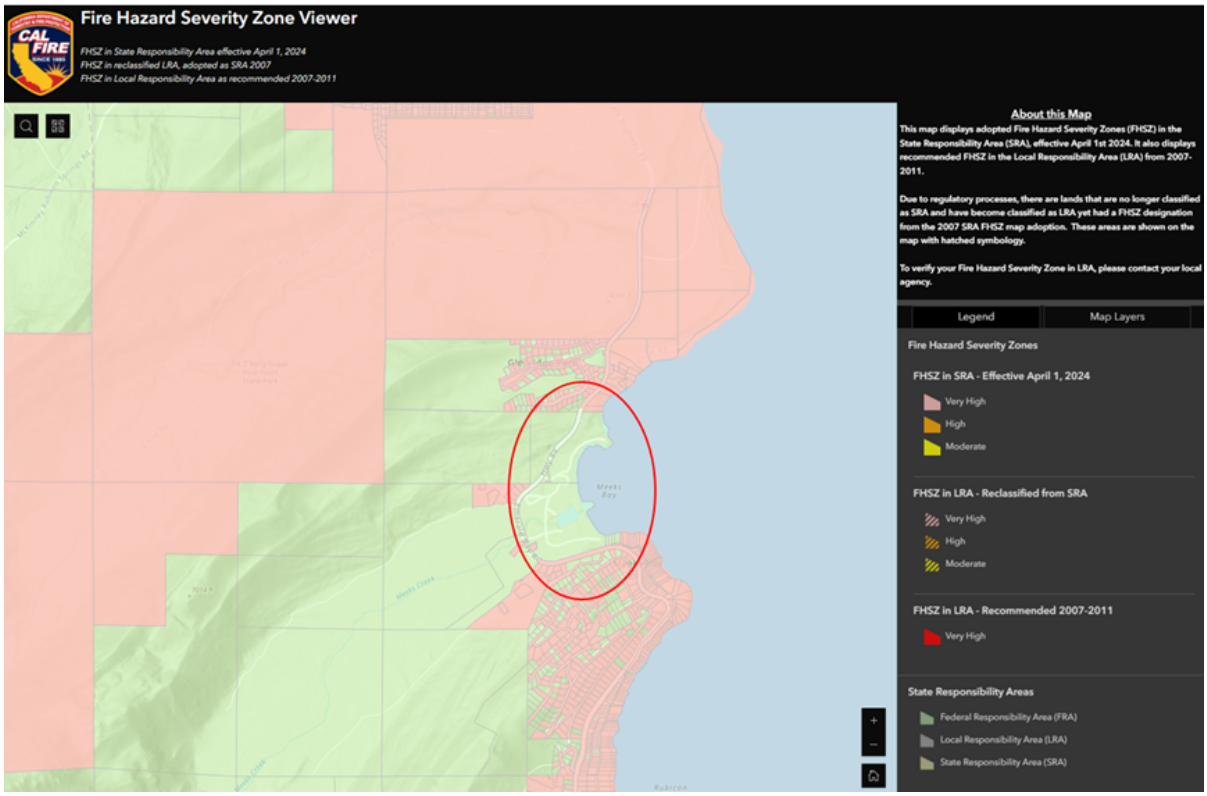

Figure 13. Project location in relation to CAL FIRE Fire Hazard Severity Zone

Environmental Consequences

Though the project is within lands classified as “Very High” FHSZ’s, the project proposes to replace an existing bridge and drainage and would not require new infrastructure that would exacerbate fire risks. Once built, the project would improve

traffic operations throughout the project area, and in turn, improve the ability of the highway to serve the public during wildfire emergencies. If a wildfire burned within the project area, the built project would reduce exposure to the public by increasing the distance between the travelling public and combustible material.

Most of the project would be carried out under standard traffic control, which involves a one-way lane closure, except for the main bridge construction. A full closure of SR 89 for up to seven days would be required in order to replace the bridge. Figure 3 in Chapter 1, Section 1.4 above shows the detour plan for bridge replacement work. Extensive coordination and outreach with emergency response agencies would occur prior to the closure. Public outreach would also be implemented to notify the traveling public in the region of the temporary detour.

Avoidance, Minimization and Mitigation Measures

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

Discussion of CEQA Environmental Checklist Question 2.20—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?***

Less than Significant Impact. The proposed project is surrounded by an area that has a very high risk for wildfires. The proposed project would utilize a full highway closure for up to seven days in order to replace the existing bridge. There is an existing fire station within the project vicinity that would need to be accommodated to maintain sufficient emergency access during the highway closure. Coordination is still in progress with the local emergency services that are within the jurisdiction of the project vicinity and would continue throughout the project phases. As local emergency services would be notified of the project schedule and the full closure before construction, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, any impacts would be less than significant.

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. No changes to road slope that would affect prevailing winds or other factors are in the scope of work; thus, this project would not exacerbate wildfire risks and would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Furthermore, the widening of the bridge would provide a larger buffer during wildfire events. Therefore, there would be no impact.

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 project does not require the installation or maintenance of additional associated infrastructure that may exacerbate fire risk or that may result in temporary ongoing impacts to the environment. Therefore, there would be no impact.

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 project does not 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. All disturbed areas would be stabilized and vegetated in accordance with plans approved by the District Landscape Architect. Additionally, the drainages within this project would retain their current pattern flow, with operation improvement expected at Meeks Creek Bridge. Therefore, there would be no impact.

2.21 Mandatory Findings of Significance

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

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

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 Impact. The proposed project does not have the potential to substantially degrade the quality of the environment. Based on the scope, description, location of the proposed project, NES and determinations outlined in Chapter 2, Section 2.4 Biological Resources, the impact would be less than significant.

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

No Impact. The proposed project would not result in any adverse effects that, when considered in connection with other projects, would be considered cumulatively considerable. Therefore, there would be no impact.

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

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

2.22 Cumulative Impacts

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

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

Per Section 15130 of CEQA, a Cumulative Impact Analysis (CIA) discussion is only required in "…situations where the cumulative effects are found to be significant." Based on the scope and scale of the potential effects and the inclusion of Standard Measures and Best Management Practices, the proposed project would not be expected to have any cumulative impacts. Given this, an EIR and CIA were not required for this project.

Chapter 3. Agency and Public Coordination

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

Below is a discussion of the most recent coordination efforts for this proposed project.

On August 27, 2024, USDA Forest Service personnel Theresa Cody and Ashley Sibr, and Caltrans personnel, Thaleena Bhattal, Bibiana Rodriguez, Brent Wong and Joshua Mok met in a virtual meeting to discuss potential Section 4(f) impacts at three locations that are near the project limits. Feedback received during the meeting has been incorporated into the Section 4(f) determination provided in Appendix E. Written concurrence from USDA Forest Service on the Section 4(f) determination will be requested after the public notice period and after the public has had a chance to comment on the *de minimis* finding.

On September 19, 2024, Caltrans held a virtual Interagency meeting to discuss the project Draft Environmental Document (DED) and Draft Project Report (DPR), including the full closure alternative, project description, scope, and schedule. The primary purpose of the meeting was to gather comments, address questions and concerns from stakeholders, and incorporate their input into the DED before circulating the document for public review and comments. Representatives of the following agencies were in attendance: USDA Forest Service, TRPA, Nevada Department of Transportation, Placer County Department of Public Works,

Department of Public Works in Tahoe, Tahoe City PUD, El Dorado County Department of Transportation, Meeks Bay Fire Protection District, and CAL FIRE. Caltrans will continue coordination throughout the lifetime of the project.

Along with the recent meetings mentioned above, there were various other meetings conducted with the USDA Forest Service, TRPA, the Lahontan RWQCB, and the USFWS in 2022, 2023, and 2024. Close coordination and document review will continue with these agencies and professional contacts. In the design phase of the project Caltrans will coordinate with CDFW Fish Passage Engineering Liaison and conduct a pre-application Lake and Streambed Alteration Agreement field review. Consultation with USFWS would also occur in the next phase of the project. Consultation with USACE, USFWS, CDFW, and Lahontan RWQCB related to obtaining permits would occur during the design phase.

Tribal Consultation

The Native American Heritage Commission (NAHC) was contacted to request a search of the sacred lands file and an updated list of Native American contacts for the project area. On October 11th, 2023, the NAHC responded to the sacred land request and provided a list of Tribal entities to contact for consultation. The following tribes were contacted:

- United Auburn Indian Community of the Auburn Rancheria
- Wilton Rancheria
- Colfax Todd's Valley Consolidated Tribe
- Nevada City Rancheria Nisenan Tribe
- T'si Akim Maidu
- Ione Band of Miwok Indians
- Washoe Tribe of Nevada and California

Initial correspondence was sent November 2, 2023, and was followed up by phone calls and/or emails on December 4, 2023. All consultation efforts with Tribal partners are ongoing and will remain open for the life of the project.

Consultation with local historical societies was also conducted. The El Dorado County Historical Society was asked to consult on this project on November 2nd, 2023 via email and followed up on December 4th, 2023. At this time no response

has been received. All consultation with Historical Societies will remain open during the life of this project.

Circulation

The Initial Study/Proposed Negative Declaration will be made available for public review and comment from November 15, 2024, to December 27, 2024.

Chapter 4. List of Preparers

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

California Department of Transportation, District 3

Thaleena Bhattal	Senior Environmental Scientist
Bibiana Rodriguez	Environmental Scientist
Jeff Juarez	Landscape Associate
Ryan Pommerenck	Air Quality, Noise, GHG and Energy Specialist
Sarah-Jane Gerstman	Biologist
Danielle Claus	Archaeologist
Jim Allen	Paleontologist
Lauryl Rudolph	Paleontologist
Rajive Chadha	Hazardous Waste Specialist
Jarod Barkley	Water Quality Specialist
Brandon Boge	Hydraulics Specialist
Brent Wong	Design Project Engineer
Joshua Mok	Structures Design Project Engineer
Berhane Tesfagabr	Project Manager

Chapter 5. Distribution List

Federal and State Agencies

California Department of Fish and Wildlife, North Central Region
1701 Nimbus Road
Rancho Cordova, CA 95670

Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

U.S. Army Corps of Engineers, Sacramento District
1325 J Street, Room 1640
Sacramento, CA 95814

United States Fish and Wildlife Service
1340 Financial Boulevard Suite 161
Reno, NV, 89502

California Highway Patrol
2063 Hopi Avenue
South Lake Tahoe, CA 96150

Nevada Department of Transportation
1263 South Stewart Street
Carson City, NV 89712

USDA Forest Service, Lake Tahoe Basin Management Unit
35 College Drive
South Lake Tahoe, CA 96150

CAL FIRE, Station 5
1009 Boulder Mountain Court
South Lake Tahoe, CA 96150

Tahoe Transportation District
PO Box 499
Zephyr Cove, NV 89448

Regional/County/Local Agencies

City of South Lake Tahoe Public Works Department
1740 D Street
South Lake Tahoe, CA 96150

El Dorado County Department of Transportation
2441 Headington Road
Placerville, CA 95667

Meeks Bay Fire Protection District (Station 67)
PO Box 5879
Tahoe City, CA 96145

Placer County Department of Public Works
3091 County Center Drive, Suite 220
Auburn, CA 95603

Tahoe City Public Utility District
PO Box 5249
Tahoe City, CA 96145

Tahoe Regional Planning Agency
PO Box 5310
Stateline, NV 89449

Utilities

Liberty Utilities
PO Box 107
Tahoe Vista, CA 96148

Chapter 6. References

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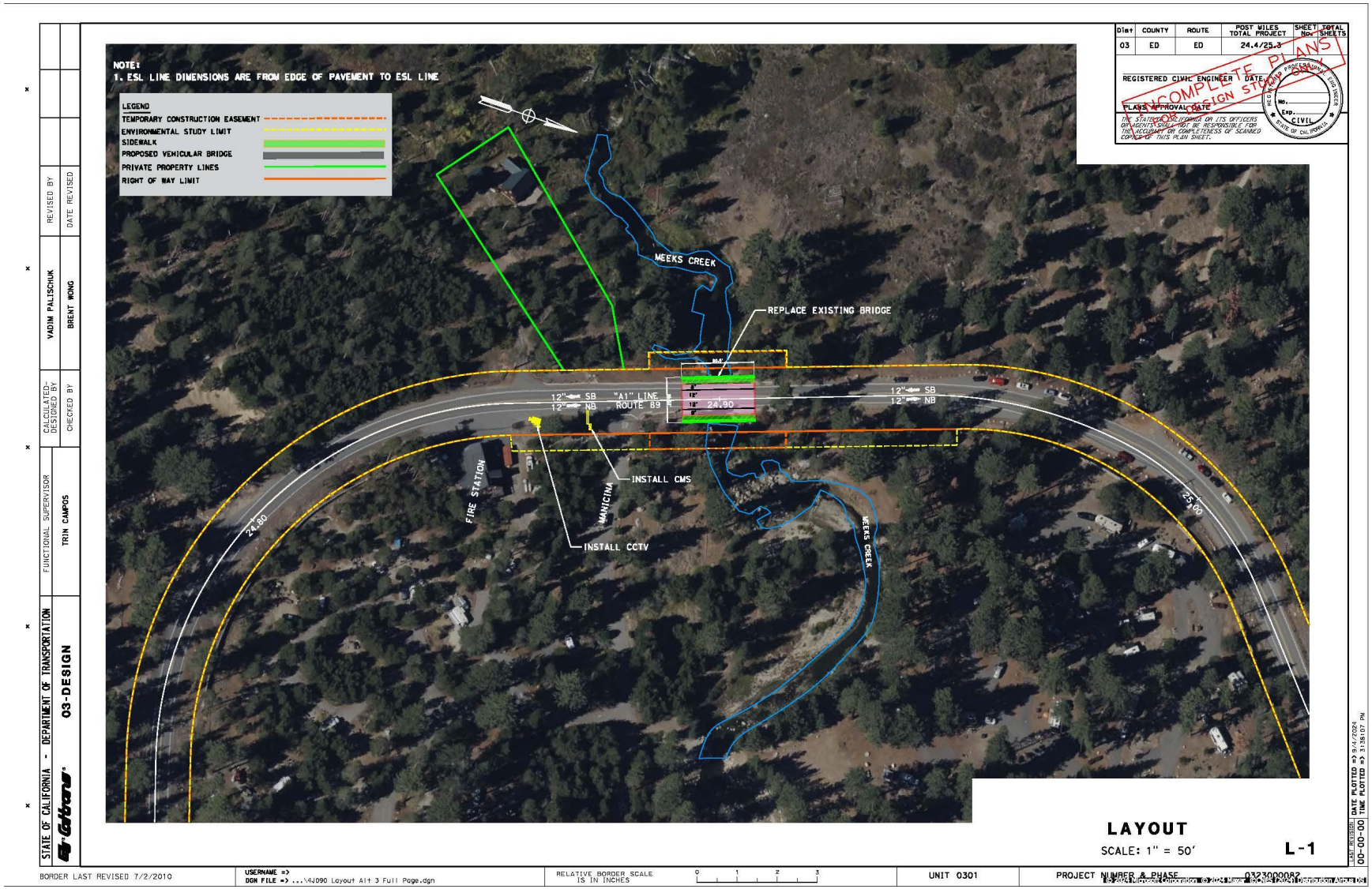
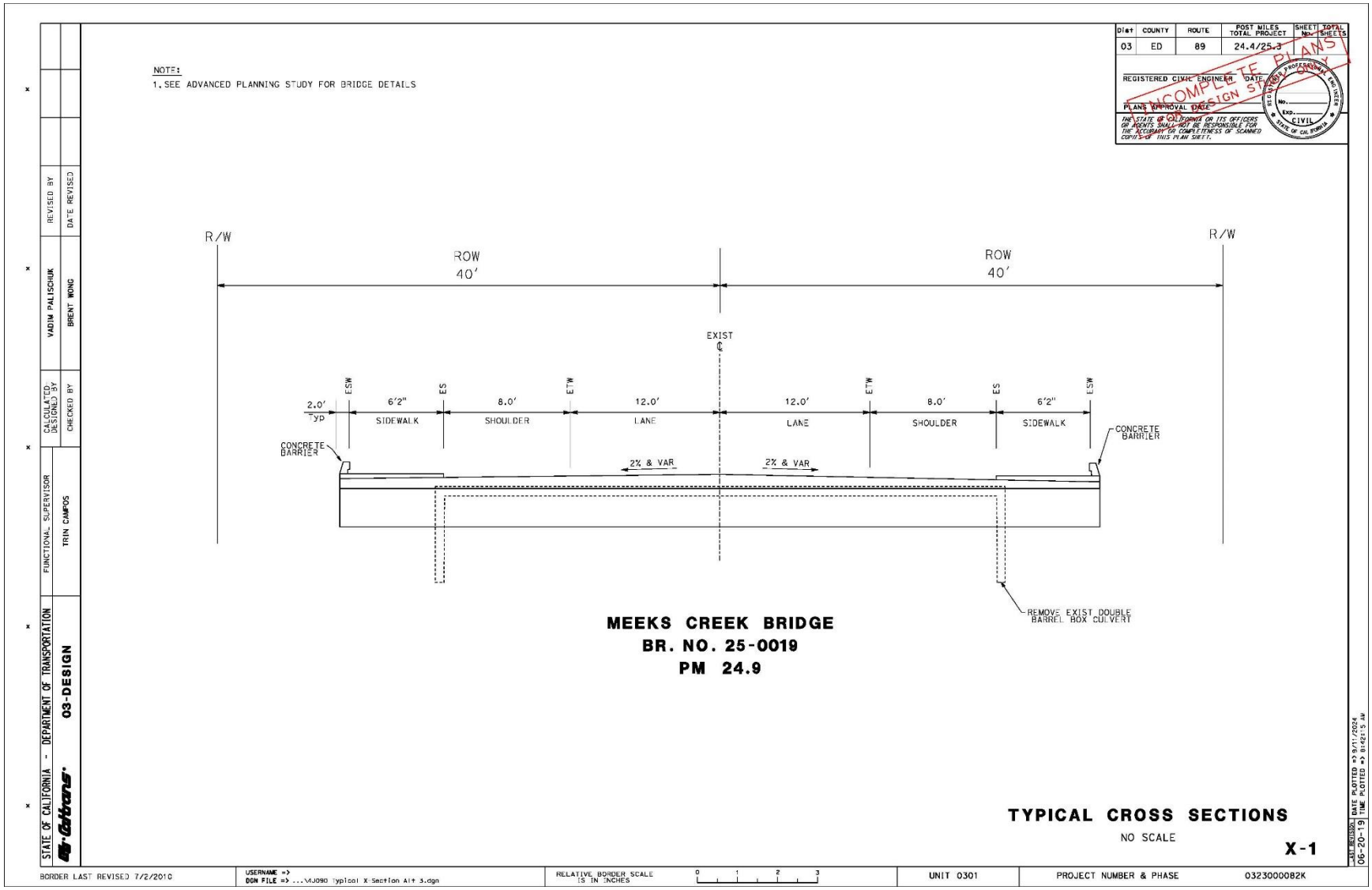
Appendix A. Project Layout and Typical Section


NOTE:
1. ESL LINE DIMENSIONS ARE FROM EDGE OF PAVEMENT TO ESL LINE
LEGEND
TEMPORARY CONSTRUCTION EASEMENT
ENVIRONMENTAL STUDY LIMIT
SIDEWALK
PROPOSED VEHICULAR BRIDGE
PRIVATE PROPERTY LINES
RIGHT OF WAY LIMIT
MEEKS CREEK
REPLACE EXISTING BRIDGE
12" SB
12" NB
"A1" LINE
ROUTE 89
24.90
INSTALL CMS
INSTALL CCTV
FIRE STATION
MANICHINA
MEEKS CREEK
24.90
25.00
Dist
COUNTY
ROUTE
POST MILES TOTAL PROJECT
SHEET No.
TOTAL SHEETS
03
ED
ED
24.4/25.3
REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
INCOMPLETE PLANS
NOT FOR CONSTRUCTION
DESIGN STAGE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
LAYOUT
SCALE: 1" = 50'
L-1
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
03-DESIGN
FUNCTIONAL SUPERVISOR
TRIN CAMPOS
CALCULATED-DESIGNED BY
VADIM PALISCHUK
CHECKED BY
BRENT WONG
REVISED BY
DATE REVISED
LAST REVISION
DATE PLOTTED => 9/4/2024
TIME PLOTTED => 31:38:07 PM
00-00-00
BORDER LAST REVISED 7/2/2010
USERNAME =>
DGN FILE => ...\4J090 Layout A11 3 Full Page.dgn
RELATIVE BORDER SCALE IS IN INCHES
0 1 2 3
UNIT 0301
PROJECT NUMBER & PHASE 0323000082


NOTE:
1. SEE ADVANCED PLANNING STUDY FOR BRIDGE DETAILS
Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS
03 | ED | 89 | 24.4/25.3
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
INCOMPLETE PLANS
DESIGN SAMPLE ONLY
R/W
ROW 40'
ROW 40'
R/W
EXIST
ESW
ES
ETW
2.0' Typ
6'2" SIDEWALK
8.0' SHOULDER
12.0' LANE
12.0' LANE
8.0' SHOULDER
6'2" SIDEWALK
CONCRETE BARRIER
CONCRETE BARRIER
2% & VAR
2% & VAR
REMOVE EXIST DOUBLE BARREL BOX CULVERT
MEEKS CREEK BRIDGE
BR. NO. 25-0019
PM 24.9
TYPICAL CROSS SECTIONS
NO SCALE
X-1
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
03-DESIGN
FUNCTIONAL SUPERVISOR: TRIN CAMPOS
CALCULATED/DESIGNED BY: VADIM PALISCHUK
CHECKED BY: BRENT WONG
REVISED BY
DATE REVISED
BORDER LAST REVISED 7/2/2010
USERNAME => ...
DGN FILE => ...V4J090 Typical X Section Alt 3.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0301
PROJECT NUMBER & PHASE 0323000082K
ADV REVISION DATE PLOTTED => 3/11/2024
06-20-19 TIME PLOTTED => 08:42:15 AM

Appendix B. Title VI–Non-Discrimination Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

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

September 2023

NON-DISCRIMINATION POLICY STATEMENT

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

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

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

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

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

TONY TAVARES
Director

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

Appendix C. CNDDB, USFWS, and CNPS Species Lists

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Meeks Bay (3912011) OR Homewood (3912012))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American goshawk *Accipiter atricapillus*	ABNKC12061	None	None	G5	S3	SSC
amphibious caddisfly *Desmona bethula*	IITRI77010	None	None	G2G3	S2S3	
bald eagle *Haliaeetus leucocephalus*	ABNKC10010	Delisted	Endangered	G5	S3	FP
Fen *Fen*	CTT51200CA	None	None	G2	S1.2	
Fisher *Pekania pennanti*	AMAJF01020	None	None	G5	S2S3	SSC
flat-leaved bladderwort *Utricularia intermedia*	PDLNT020A0	None	None	G5	S3	2B.2
Great Basin rams-horn *Helisoma newberryi*	IMGASM6020	None	None	G1	S1S2	
Lahontan Lake tui chub *Siphateles bicolor pectinifer*	AFCJB1303P	None	None	G4T3	S1S2	SSC
Lahontan mountain sucker *Catostomus lahontan*	AFCJC02330	None	None	GNR	S2	SSC
Lake Tahoe amphipod *Stygobromus lacicolus*	ICMAL05970	None	None	G1	S1	
Lake Tahoe benthic stonefly *Capnia lacustra*	IIPLE03200	None	None	G1	S1	
Lake Tahoe stygobromid *Stygobromus tahoensis*	ICMAL05A70	None	None	G1	S1	
long-legged myotis *Myotis volans*	AMACC01110	None	None	G4G5	S3	
marsh skullcap *Scutellaria galericulata*	PDLAM1U0J0	None	None	G5	S2	2B.2
Mingan moonwort *Botrychium minganense*	PPOPH010R0	None	None	G5	S4	4.2
mountain whitefish *Prosopium williamsoni*	AFCHA03060	None	None	G5	S3	SSC
mud sedge *Carex limosa*	PMCYP037K0	None	None	G5	S3	2B.2
North American porcupine *Erethizon dorsatum*	AMAFJ01010	None	None	G5	S3	
osprey *Pandion haliaetus*	ABNKC01010	None	None	G5	S4	WL
scalloped moonwort *Botrychium crenulatum*	PPOPH010L0	None	None	G4	S3	2B.2

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sierra marten *Martes caurina sierrae*	AMAJF01014	None	None	G4G5T3	S3	
Sierra Nevada mountain beaver *Aplodontia rufa californica*	AMAFA01013	None	None	G5T3T4	S2S3	SSC
Sierra Nevada snowshoe hare *Lepus americanus tahoensis*	AMAEB03012	None	None	G5T3T4Q	S2	SSC
southern long-toed salamander *Ambystoma macrodactylum sigillatum*	AAAAA01085	None	None	G5T4	S2	SSC
Stebbins' phacelia *Phacelia stebbinsii*	PDHYD0C4D0	None	None	G3	S3	1B.2
subalpine aster *Eurybia merita*	PDASTEB030	None	None	G5	S3	2B.3
Tahoe yellow cress *Rorippa subumbellata*	PDBRA270M0	None	Endangered	G1	S1	1B.1
upswept moonwort *Botrychium ascendens*	PPOPH010S0	None	None	G4	S2	2B.3
Wawona riffle beetle *Atractelmis wawona*	IICOL58010	None	None	G3	S1S2	
western goblin *Botrychium montanum*	PPOPH010K0	None	None	G3G4	S2	2B.1
willow flycatcher *Empidonax traillii*	ABPAE33040	None	Endangered	G5	S3	

Record Count: 31

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
Phone: (775) 861-6300 Fax: (775) 861-6301

In Reply Refer To: 06/18/2024 23:21:34 UTC
Project Code: 2024-0105972
Project Name: Meeks Creek Bridge Replacement

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

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

OFFICIAL SPECIES LIST

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

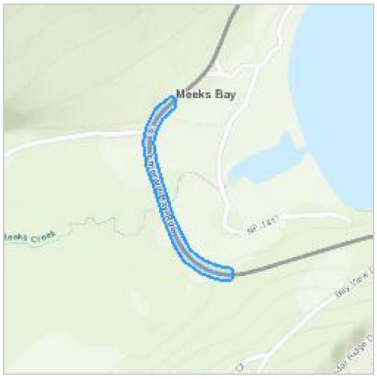
This species list is provided by:

Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
(775) 861-6300

PROJECT SUMMARY

Project Code: 2024-0105972
Project Name: Meeks Creek Bridge Replacement
Project Type: Bridge - Replacement
Project Description: Bridge Replacement for fish passage
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.035937399999995,-120.1256020110356,14z



Counties: El Dorado County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

---

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

MAMMALS

NAME	STATUS
North American Wolverine *Gulo gulo luscus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5123	Threatened
Sierra Nevada Red Fox *Vulpes vulpes necator* Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4252	Endangered

BIRDS

NAME	STATUS
California Spotted Owl *Strix occidentalis occidentalis* Population: Sierra Nevada No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7266	Proposed Threatened

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
Sierra Nevada Yellow-legged Frog *Rana sierrae* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9529	Endangered

FISHES

NAME	STATUS
Lahontan Cutthroat Trout *Oncorhynchus clarkii henshawi* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3964	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

CRITICAL HABITATS

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

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

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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

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

BALD & GOLDEN EAGLES

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

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

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

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

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

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

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

PROBABILITY OF PRESENCE SUMMARY

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

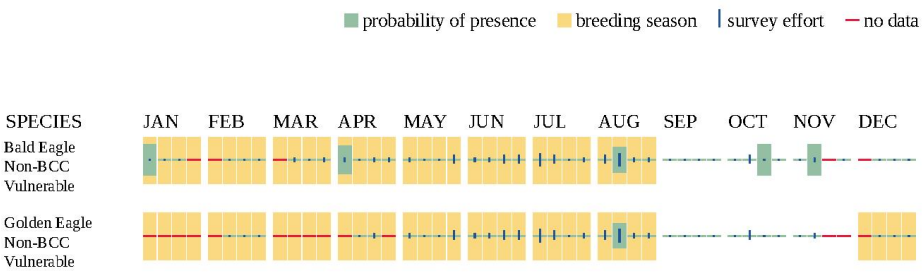
Probability of Presence (▪)

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

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

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

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



Additional information can be found using the following links:

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

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

MIGRATORY BIRDS

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

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

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

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

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Black Swift *Cypseloides niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Black-throated Gray Warbler *Setophaga nigrescens* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9584	Breeds May 1 to Jul 20

NAME	BREEDING SEASON
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10955	Breeds Mar 1 to Jul 31
California Spotted Owl *Strix occidentalis occidentalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/7266	Breeds Mar 10 to Jun 15
Calliope Hummingbird *Selasphorus calliope* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9526	Breeds May 1 to Aug 15
Cassin's Finch *Haemorhous cassinii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Clark's Grebe *Aechmophorus clarkii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10575	Breeds Jun 1 to Aug 31
Evening Grosbeak *Coccothraustes vespertinus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9465	Breeds May 15 to Aug 10
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31
Hermit Warbler *Setophaga occidentalis* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11957	Breeds May 5 to Jul 15
Oak Titmouse *Baeolophus inornatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31

NAME	BREEDING SEASON
Western Grebe *aechmophorus occidentalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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

Probability of Presence (▪)

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

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

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

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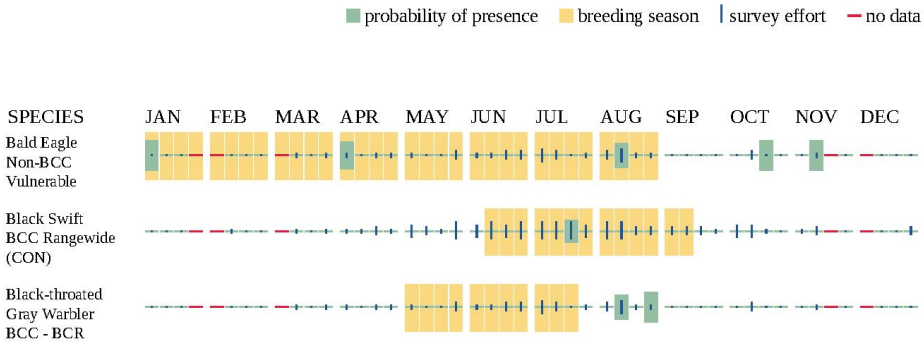


Additional information can be found using the following links:

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

WETLANDS

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

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

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

RIVERINE

- R2UBHx

IPAC USER CONTACT INFORMATION

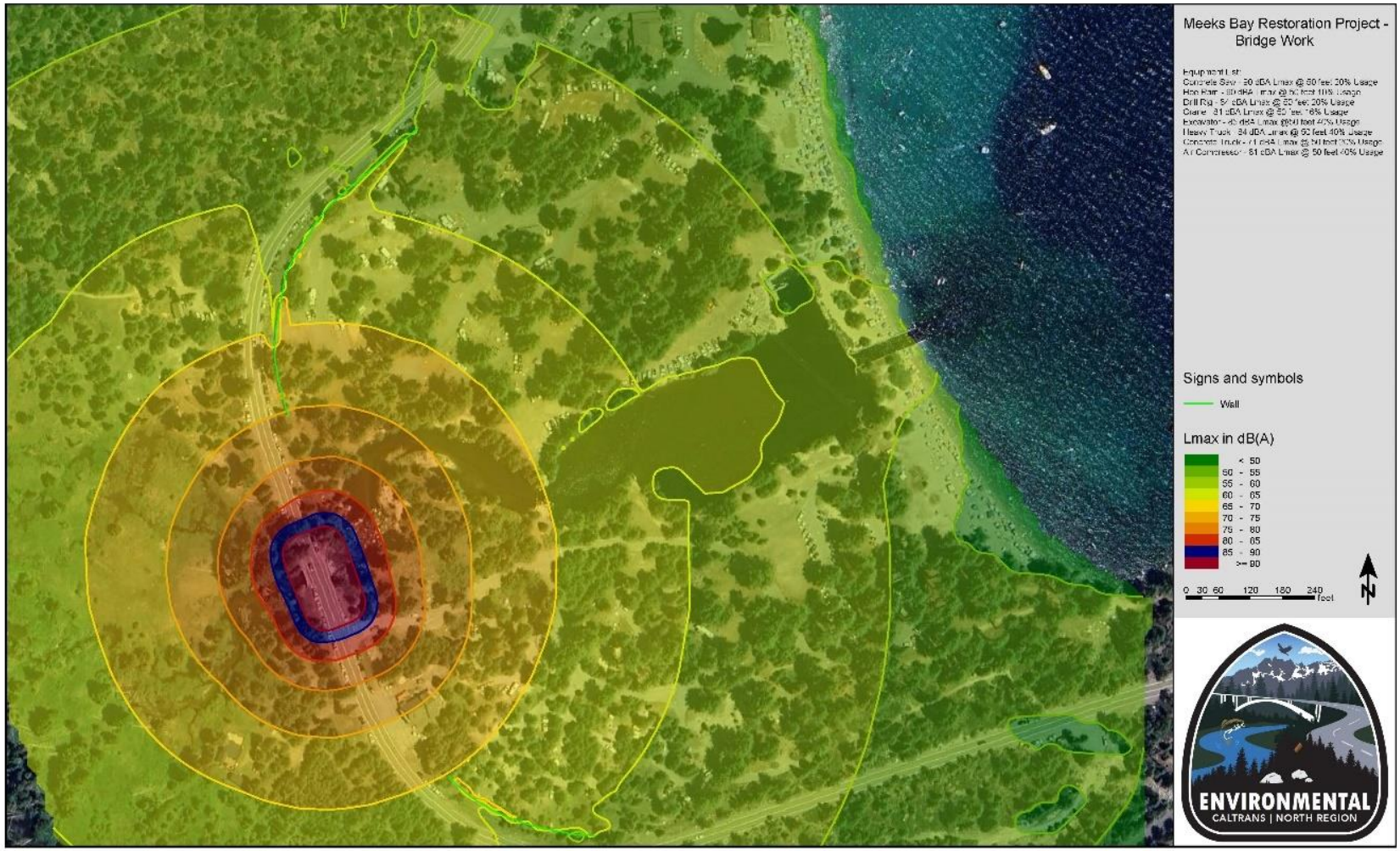
Agency: California Department of Transportation District 3
Name: Sarah-Jane Gerstman
Address: 703 B St.
City: Marysville
State: CA
Zip: 95901
Email sarah-jane.gerstman@dot.ca.gov
Phone: 5307205869

CNPS Rare and Endangered Plants				
ScientificName	CommonName	CRPR	CESA	FESA
Astragalus austiniae	Austin's astragalus	1B.3	None	None
Bruchia bolanderi	Bolander's bruchia	4.2	None	None
Utricularia intermedia	flat-leaved bladderwort	2B.2	None	None
Muhlenbergia jonesii	Jones' muhly	4.3	None	None
Utricularia minor	lesser bladderwort	4.2	None	None
Scutellaria galericulata	marsh skullcap	2B.2	None	None
Botrychium minganense	Mingan moonwort	4.2	None	None
Carex limosa	mud sedge	2B.2	None	None
Engellaria obtusa	obtuse starwort	4.3	None	None
Botrychium crenulatum	scalloped moonwort	2B.2	None	None
Eriophorum gracile	slender cottongrass	4.3	None	None
Phacelia stebbinsii	Stebbins' phacelia	1B.2	None	None
Eurybia merita	subalpine aster	2B.3	None	None
Rorippa subumbellata	Tahoe yellow cress	1B.1	CE	None
Bulbostylis capillaris	thread-leaved beakseed	4.2	None	None
Meesia triquetra	three-ranked hump moss	4.2	None	None
Botrychium ascendens	upswept moonwort	2B.3	None	None
Botrychium montanum	western goblin	2B.1	None	None
Peltigera gowardii	western waterfan lichen	4.2	None	None

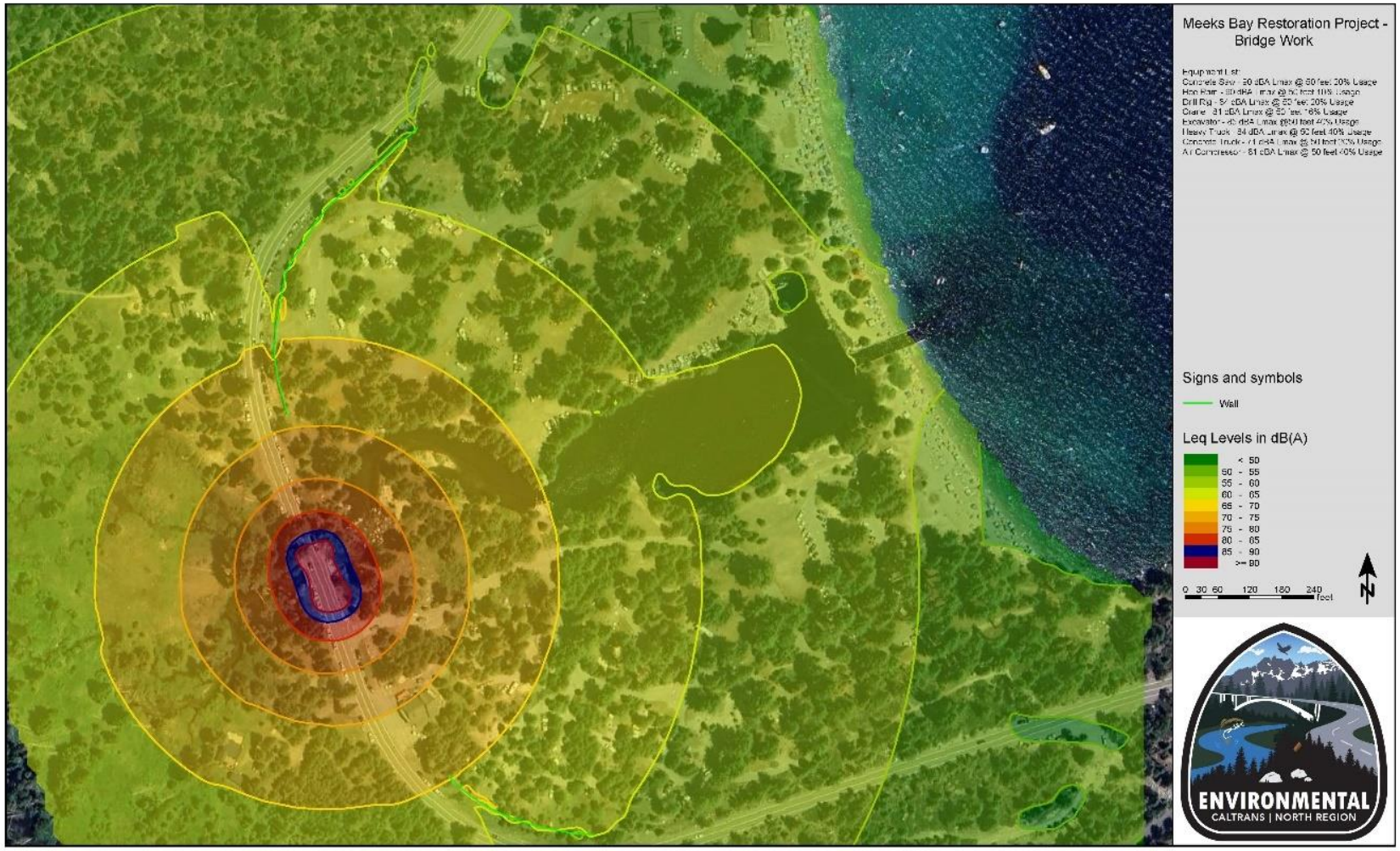
Appendix D. Predicted Sound Level Contours During Roadway and Bridge Construction

Attachment 1 - Nighttime Limit Map - Bridge Work

Attachment 2 - Lmax Contour Map - Bridge Work

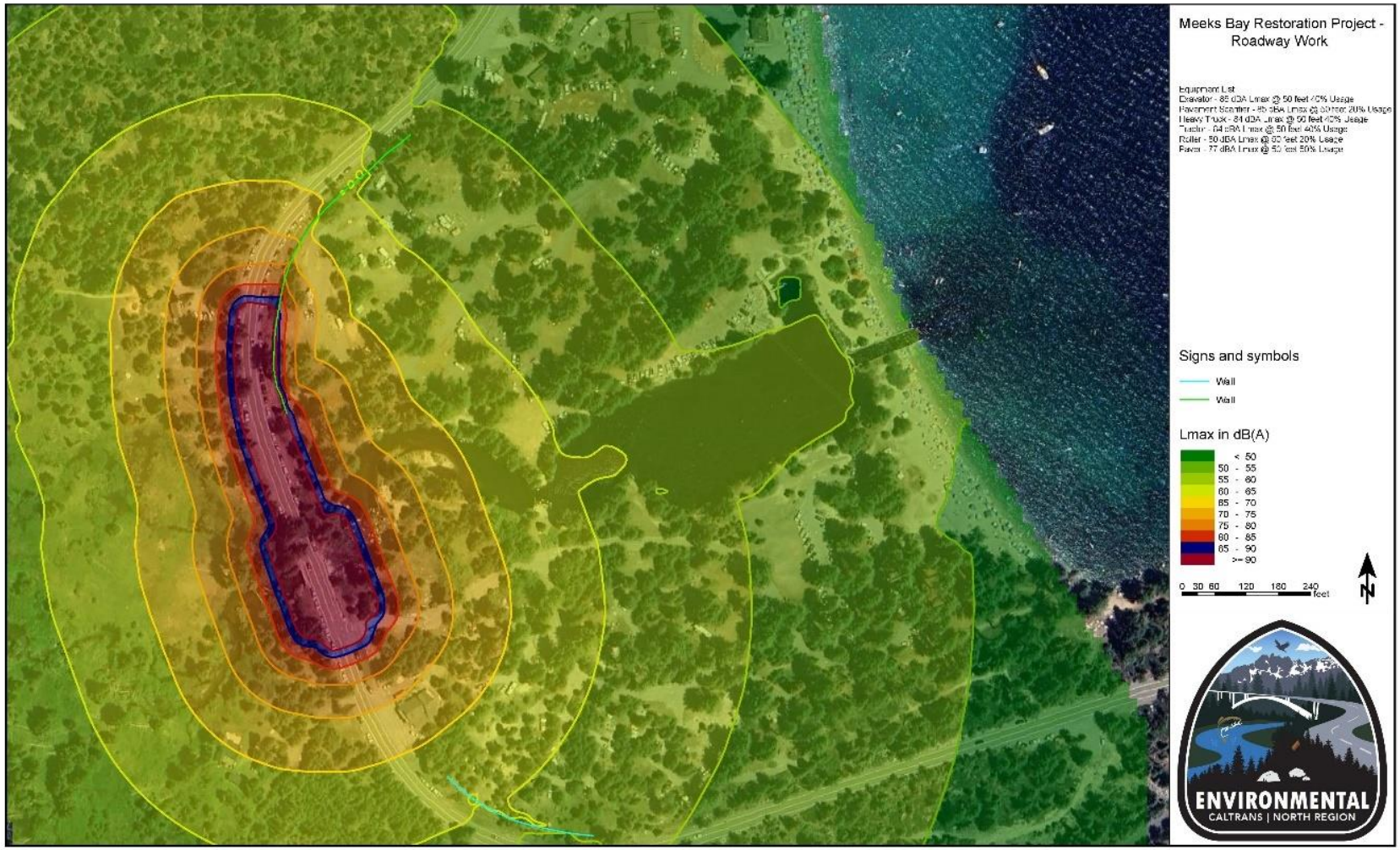


Attachment 3 - Leq Contour Map - Bridge Work

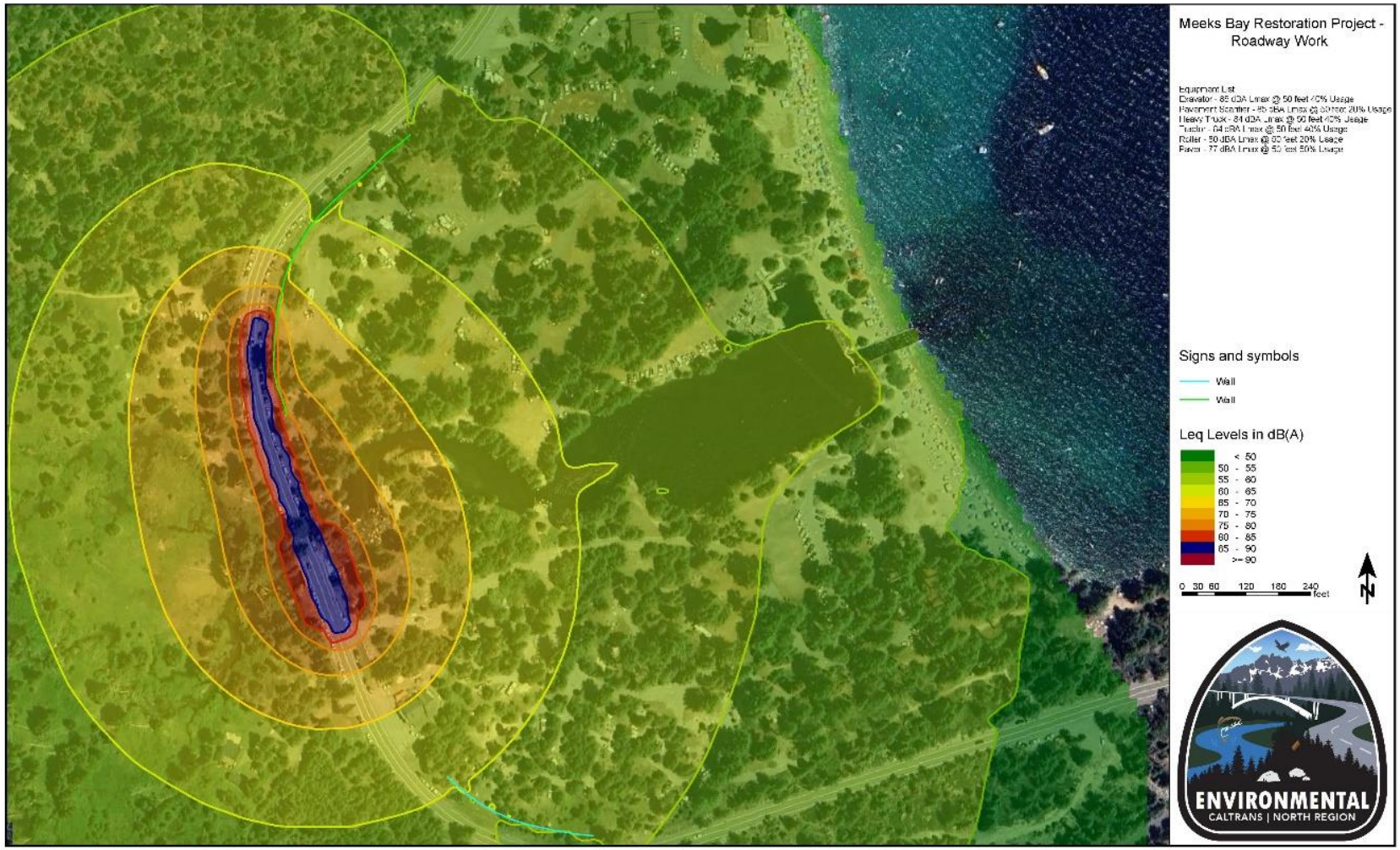


Attachment 4 - Nighttime Limit Map - Roadway Work

Attachment 5 - Lmax Contour Map - Roadway Work



Attachment 6 - Leq Contour Map - Roadway Work



Appendix E. Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code (USC) 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that the Secretary of Transportation may approve a transportation program or project . . . “requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

Section 4(f) further requires coordination with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and the Department of Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer (SHPO) is also needed.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 USC 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

The activities associated with the project would occur near recreational facilities located along the project limits. Consultation with USDA Forest Service is ongoing; the draft Section 4(f) analyses are on the following pages.

E.1 INTRODUCTION

This section of the document discusses de minimis impact determinations under Section 4(f). Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only de minimis impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a de minimis impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) de minimis findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including de minimis impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

E.2 DESCRIPTION OF PROPOSED PROJECT

The California Department of Transportation (Caltrans) proposes a fish passage/terrestrial wildlife connectivity and bridge scour repair project on State Route (SR) 89 between Post Miles (PM) 24.4 and PM 25.3 in El Dorado County. The project proposes to remove Meeks Creek Bridge (Bridge No. 25-0019), construct a new bridge on SR 89 to provide fish and wildlife passage, repair scour damage, provide bicycle and pedestrian access, add Transportation Management Systems (TMS) elements with a Maintenance Vehicle Pullout (MVP), and restore Meeks Creek channel within Caltrans right of way.

Purpose

The purpose of this project is to address existing fish passage barrier, improve terrestrial wildlife connectivity, reduce potential for channel clogging at the upstream side, repair scour downstream of the bridge within the right of way, and improve safety by replacing Meeks Creek Bridge (Bridge No. 25-0019). This project also improves pedestrian and bike facilities by adding Class II bicycle lanes and sidewalks on the replaced bridge.

Need

The existing Meeks Creek channel below the existing bridge is currently experiencing a barrier to fish passage due to a vertical drop caused by a channel incision. The existing bridge creates a hydraulic bottleneck that causes backwater in the meadow and accelerated erosive flows downstream. In addition, the current width and length of the bridge catches debris that contribute to the bottleneck effect. The existing bridge railings are in poor conditions and the bridge requires scour damage repair. The roadway lacks pedestrian/bicycle facilities connecting trails/campgrounds in the vicinity of the project.

This project has one Build Alternative and one No Build alternative.

Build alternative (Preferred Alternative)

The scope of work includes the following:

Vehicular Bridge

- Replacement of Meeks Creek bridge No. 25-0019 with a single span 90.5 foot length bridge to accommodate two 12-foot lanes, two 8-foot standard shoulders, 6-foot concrete sidewalks on each side and concrete bridge railing with painted formliner that closely resembles the existing stone railings. Temporarily diverting Meeks Creek flow for the bridge construction and channel restoration would be required.
- Restoration of Meeks Creek channel within Caltrans right of way.
- Full closure of SR 89 from PM 24.9 to PM 25.3 in order to replace bridge. Detours would be required during the closure period.
- Placement of embankment along roadway approaches to the bridge as needed.
- Restriping of lanes and shoulders with new 6-inch traffic stripes.
- Placement of class II bicycle markings.
- Relocation of overhead and underground utilities that are in conflict with bridge replacement activities.
- Acquire temporary construction easements (TCE) as needed.

Wildlife Crossing Improvement

- Improve wildlife terrestrial crossing by widening the creek channel width beneath the new bridge.

Transportation Management System (TMS)

- Installation of one Closed-Circuit Television (CCTV) pole.
- Installation of one Changeable Message Sign (CMS).
- Installation of MVP with guardrail for access to CCTV and CMS electrical cabinet.
- Placement of maximum number and size of conduits for future use in each bridge rail.

Full Closure/Detour

Most of the project's work will be carried out under standard traffic control, which involves a one-way lane closure, except for the main bridge construction. A full closure of SR 89 from PM 24.9 to PM 25.3 in El Dorado County would be required in order to replace the bridge. The proposed full closure is intended to take place during the off-peak season. This closure is anticipated to last three to seven days and involve continuous twenty-four-hour activities. All abutment cast-in-drilled-hole (CIDH) piles drilling, concrete pouring, and other activities would be conducted under temporary one-way lane closures prior to the main bridge construction activities.

During the full closure, a detour would be established for travelers using SR 28 to SR 50 as the primary alternative routes. The detour route spans 53 miles and requires approximately 1 hour and 35 minutes to traverse (Attachment A).

Temporary Construction Easements

No permanent acquisition or easement would be required for the project. Temporary Construction Easements (TCE) from the United States Department of Agriculture (USDA) Forest Service, Lake Tahoe Basin Management Unit (USDA Forest Service or LTBMU) would be needed on each side of the bridge. The TCE would be for possible construction equipment access, water diversion, and any access needed to conform to the creek during the creek restoration under the bridge.

No Build Alternative

The No-Build Alternative would maintain the facility in its current condition and would not meet the purpose and need of the project. Under the No-Build Alternative, no alterations to the existing conditions would occur and the proposed improvements would not be implemented.

E.3 SECTION 4(F) PROPERTIES

E.3.1 Study Area

The study area for public parks and recreation areas is a 0.5 mile buffer around the project site. There are no wildlife refuges in the study area; therefore, refuges are not discussed further.

E.3.2 Description of Section 4(f) Properties

There are three, publicly owned, officially designated recreational areas identified adjacent to State Route 89 near the project limits: Meeks Bay Trailhead, Meeks Bay Resort, and the Meeks Bay Campground. These areas are considered as Section 4(f) properties because the properties are formally designated, managed, and operated as recreational areas; open to the public; owned by the public; and the properties are considered as "significant" under the terms of the Section 4(f) regulations because the land is managed to serve as an important role to provide the public the opportunity for recreational enjoyment.

The Meeks Bay Trailhead, Meeks Bay Resort and Meeks Bay Campground are located on the western shore of Lake Tahoe. Attachment B shows where the recreational areas are in relation to the proposed project. Table 1 describes the potential Section 4(f) properties.

Table 1. Potential Section 4(f) Properties

Name	Description	Distance from Project Footprint	Section 4(f) Resource?
Meeks Bay Trailhead	**Feature:** Parking, picnic tables, trail to Meek Creek Falls, and access to federally designated wilderness area Desolation Wilderness. **Agency with Jurisdiction:** LTBMU	Adjacent	Yes
Meeks Bay Resort	**Feature:** Campsites, RV sites, cabins, accessible sites, parking, picnic area, grills, restrooms, showers, water spigots, beach, and venue for private events. **Agency with Jurisdiction:** LTBMU	Adjacent	Yes
Meeks Bay Campground	**Feature:** Campsites, picnic area with grills, parking, restrooms, and beach. **Agency with Jurisdiction:** LTBMU	Adjacent	Yes

E3.3 Section 4(f) De Minimis Determination

Table 2 demonstrates the proposed project would result in a Section 4(f) use of the Meeks Bay Trailhead, Meeks Bay Resort, and Meeks Bay Campground. These resources are discussed further below.

Table 2. Section 4(f) Properties Use Determination Summary

Name	Use	Constructive Use?	Temporary Occupancy?
Meeks Bay Trailhead	Yes	No	No
Meeks Bay Resort	Yes	No	No
Meeks Bay Campground	Yes	No	No

E3.3.1 Meeks Bay Trailhead

The Meeks Bay Trailhead is located on Forest Service land, adjacent to SR 89. There is a small dirt parking lot on entrance road Forest Route 14N42 where hikers can park. Depending on how long hikers plan on hiking the trail, they must acquire a wilderness permit and/or an overnight permit.

Once on the trail after the trailhead entrance, hikers have the following options:

- Hike to Meeks Creek Falls. This part of the trail passes a small spring, parallels Meeks Creek and continues upward into a forested valley. This hike is approximately 4 miles out-and-back.

- Hike to federally designated wilderness area Desolation Wilderness, which includes trails to:
    - Lake Genevieve – 4.6 miles one way
    - Crag Lake – 4.9 miles one way
    - Hidden Lake – 5.7 miles one way
    - Shadow Lake – 5.9 miles one way
    - Stony Ridge Lake – 6.3 miles one way; and
    - Rubicon Lake – 8.1 miles one way.

Use of Meeks Bay Trailhead

No permanent or temporary acquisitions or easements from the resource would be necessary. The stage construction area for three to seven day closure needed to replace the bridge deck would end immediately before the road entrance to the trailhead and its parking lot (Attachment C). Visitors that typically travel from the southern end, or by the northbound lane of SR 89, would need to utilize the temporary detour route around Lake Tahoe to access the trailhead. Though there would be a detour in place, the trailhead entrance and parking lot would not be blocked at any time during construction of the proposed project. Hikers accessing the Meeks Bay Trailhead also park adjacent to SR 89. The road closure would block some on-highway parking, though it would be temporary. Visitors would not experience any loss of access or use of active recreational or parking facilities after construction of the proposed project.

De Minimis Determination for Meeks Bay Trailhead

Although the proposed road closure on SR 89 stops adjacent to the entrance road of the trailhead and would block some on-highway parking, the impact would be minor. Access to the trailhead and its parking lot would be maintained during construction. The transportation use of the Section 4(f) resource, together with any impact avoidance or minimization measures incorporated into the project, would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) and would quality as a *de minimis* impact.

Measures to Minimize Harm for Meeks Bay Trailhead

Measures necessary to minimize harm (such as any avoidance or minimization measures) are considered prior to determining an impact to be *de minimis*. The

project includes the following elements to reduce impacts on the Meeks Bay Trailhead.

- Maintain safe access to Meeks Bay Trailhead at all times.
- Coordinate SR 89 closure with the LTMBU throughout project development and in advance of start of construction.
- Post notices at the trailhead and/or online regarding upcoming construction activities.
- Return construction staging or any nearby areas disturbed by construction activities to preconstruction or better conditions.

Additional minimization measures may be added in coordination with the LTBMU.

Coordination for Meeks Bay Trailhead

Prior to making Section 4(f) approvals, coordination with the LTBMU is required regarding activities, features, and attributes that qualify Meeks Bay Trailhead as a Section 4(f) resource. Caltrans will request LTBMU concurrence on the *de minimis* finding under Section 4(f) after an opportunity for public review and comment concerning the effects of the project has occurred.

Conclusion for Meeks Bay Trailhead

The proposed road closure on SR 89 that would block some on-highway parking would not adversely affect the activities, features, and attributes that qualify this trailhead for protection under Section 4(f). Accordingly, the project would have a *de minimis* impact on Meeks Bay Trailhead. The final determination will be made following the Initial Study/Negative Declaration (IS/ND) public comment period.

E3.3.2 Meeks Bay Resort

The Meeks Bay Resort is north of Meeks Creek. The resort is located on Forest Service Land and is managed by the Washoe Tribe of California and Nevada. The resort is a Tahoe Regional Planning Agency (TRPA)-designated scenic recreation area and qualifies as a Section 4(f) property. The following recreational facilities are available within the resort:

- Cabins
- Special events area
- Campsites (for tents, small trailers, and RVs)
- Bicycling

- Day use area (grills and picnic tables)
- Parking
- Beach
- Fishing
- Kayak and paddle board rentals
- Swimming

The Meeks Bay Resort typically open around Mid-May through Mid-October and can be accessed through entrance road Forest Road 1418. There are 36 campsites, along with showers and public restrooms. Lodging facilities include the Kehlet Mansion, the Washoe House, lodges, and cabins. The Kehlet Mansion has a private deck and a full event area for special events, like weddings or reunions.

Impacts on Meeks Bay Resort

No permanent or temporary acquisitions or easements from the resource would be necessary. Visitors that typically travel from the southern end, or by the northbound lane of SR 89, would need to utilize the temporary detour route around Lake Tahoe to visit the resort (Attachment A). The full closure/detour would not result in any loss of access to the resort. However, the road closure would block some on-highway parking that visitors of Meeks Bay could use. The closure would be temporary as it would last three to seven days of the total anticipated 200 working days to construct the full project. After construction of the proposed project, visitors would not experience any loss of access or use of recreational or parking facilities.

De Minimis Determination for Meeks Bay Resort

Although the proposed road closure would block some on-highway parking that visitors could use, the impact would be minor as this would be temporary. Complete access to the resort would be maintained during construction. The transportation use of the Section 4(f) resource, together with any impact avoidance or minimization measures incorporated into the project, would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) and would quality as a *de minimis* impact.

Measures to Minimize Harm for Meeks Bay Resort

Measures necessary to minimize harm (such as any avoidance and minimization measures) are considered prior to determining an impact to be *de minimis*. The project includes the following elements to reduce impacts on the Meeks Bay Resort.

- Maintain safe access to Meeks Bay Resort and its facilities at all times.

- Coordinate SR 89 closure with the LTMBU throughout project development and in advance of start of construction.
- Post notices in the Meeks Bay Resort and/or online regarding construction activities.
- Implement Caltrans Standard Specification Section 14-8.02, “Noise Control,” which states the following: (1) Control and monitor noise from work activities and, (2) Do not exceed 86 A-weighted decibels (dBA) maximum sound level (LMax) at 50 feet from the job site activities from 9 p.m. to 6 a.m.

Additional minimization measures may be added in coordination with the LTBMU.

Coordination for Meeks Bay Resort

Prior to making Section 4(f) approvals, coordination with the LTBMU is required regarding activities, features, and attributes that qualify Meeks Bay Resort as a Section 4(f) resource. Caltrans will request LTBMU concurrence on the *de minimis* finding under Section 4(f) after an opportunity for public review and comment concerning the effects of the project has occurred.

Conclusion for Meeks Bay Resort

The proposed road closure on SR 89 that would block some on-highway parking adjacent to the resort would not adversely affect the activities, features, and attributes that qualify the resort for protection under Section 4(f). Accordingly, the project would have a *de minimis* impact on Meeks Bay Resort. The final determination will be made following the IS/ND public comment period.

E3.3.3 Meeks Bay Campground

The Meeks Bay Campground is a TRPA-designated scenic recreation area and qualifies as a Section 4(f) property. The campground is located south of the Meeks Creek. It is on Forest Service Land and is managed by the Washoe Tribe of California and Nevada. The following recreational facilities are available within the campground:

- Beach
- Bicycling
- Campsites
- Picnic area
- Parking
- Hiking
- Water activities (non-motorized boating, swimming, windsurfing)

The campground is open to visitors Mid-May through Mid-October. The campground has 40 sites that can be accessed through the entrance road known as Forest Service Road or Manicina. The day use or picnic area at the campground has picnic tables, grills, parking, and restrooms.

Use of Meeks Bay Campground

Based on preliminary design for this project, no permanent acquisition or easement would be required. Temporary Construction Easements (TCE) would be needed on each side of the bridge near the campground. The TCE would be for possible construction equipment access, water diversion, and any access needed to conform to the creek during the creek restoration under the bridge. Caltrans will obtain permission from the USDA Forest Service for these easements. The TCE areas are not near the camping sites within the campground, and as such, the campground visitors would not have any direct views of the project area.

Additionally, there would be extended periods of one-way traffic control on State Route 89 in front of the campground driveway. During the three to seven day full highway closure period for the new bridge deck placement, the campground driveway would be reduced to two 11-foot lanes, one in each direction (Attachment C). The reduction in the roadway entrance to the campground would be a minor impact as the campground driveway would remain open throughout the project construction. Visitors would not experience any loss of access or use of recreational facilities after construction of the proposed project.

De Minimis Determination for Meeks Bay Campground

Although a TCE would be needed and the campground driveway would be reduced during a portion of the project, the impact would be minor. Access to the campground and its recreational facilities would all be maintained during construction. The transportation use of the Section 4(f) resource, together with any impact avoidance or minimization measures incorporated into the project, would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) and would quality as a *de minimis* impact.

Measures to Minimize Harm for Meeks Bay Campground

Measures necessary to minimize harm (such as any avoidance or minimization measures) are considered prior to determining an impact to be *de minimis*. The

following avoidance and minimization measures would be implemented to reduce impacts on the Meeks Bay Campground.

- Maintain safe access to Meeks Bay Campground and its facilities at all times. A traffic control flagger would be used to control and direct traffic at the campground driveway to SR 89 as needed.
- Coordinate SR 89 closure with the LTMBU throughout project development and in advance of start of construction.
- Post notices in the Meeks Bay Campground and/or online regarding construction activities.
- Implement Caltrans Standard Specification Section 14- 8.02, “Noise Control,” which states the following: (1) Control and monitor noise from work activities and, (2) Do not exceed 86 dBA LMax at 50 feet from the job site activities from 9 p.m. to 6 a.m.
- Prepare a noise control plan to minimize construction noise including back up alarms.
- Conduct noise monitoring the first time each construction activity is performed and to investigate noise complaints that are attributed to a particular construction operation.
- If feasible, schedule operation of hoe ram, concrete saw, pneumatic tools and other demolition equipment to daytime hours. If demolition occurs during nighttime hours provide shielding between the demolition operation and campground.
- Unnecessary idling of internal combustion engines should be prohibited.
- Stationary equipment, such as compressors and generators, should be shielded and located as far away from residential and campground uses as practical.
- Locate equipment and materials storage sites as far away from residential and campground uses as practicable.
- Notify residents within 500 feet of the project area at least two weeks prior to the start of nighttime construction.

Additional minimization measures may be added in coordination with the LTBMU.

Coordination for Meeks Bay Campground

Prior to making Section 4(f) approvals, coordination with the LTBMU is required regarding activities, features, and attributes that qualify Meeks Bay Campground as a Section 4(f) resource. Caltrans will request of LTMBU concurrence on the *de minimis* finding under Section 4(f) after an opportunity for public review and comment concerning the effects of the project has occurred.

Conclusion for Meeks Bay Campground

The temporary construction easement and reduction in the campground entrance road for the bridge deck replacement would not adversely affect the activities, features, and attributes that qualify this park for protection under Section 4(f). Accordingly, the project would have a *de minimis* impact on Meeks Bay Campground. The final determination will be made following the IS/ND public comment period.

E3.4 REFERENCES

Meeks Bay Resort on Recreation.gov. 2024. https://www.recreation.gov/camping/campgrounds/10220612?tab=info.

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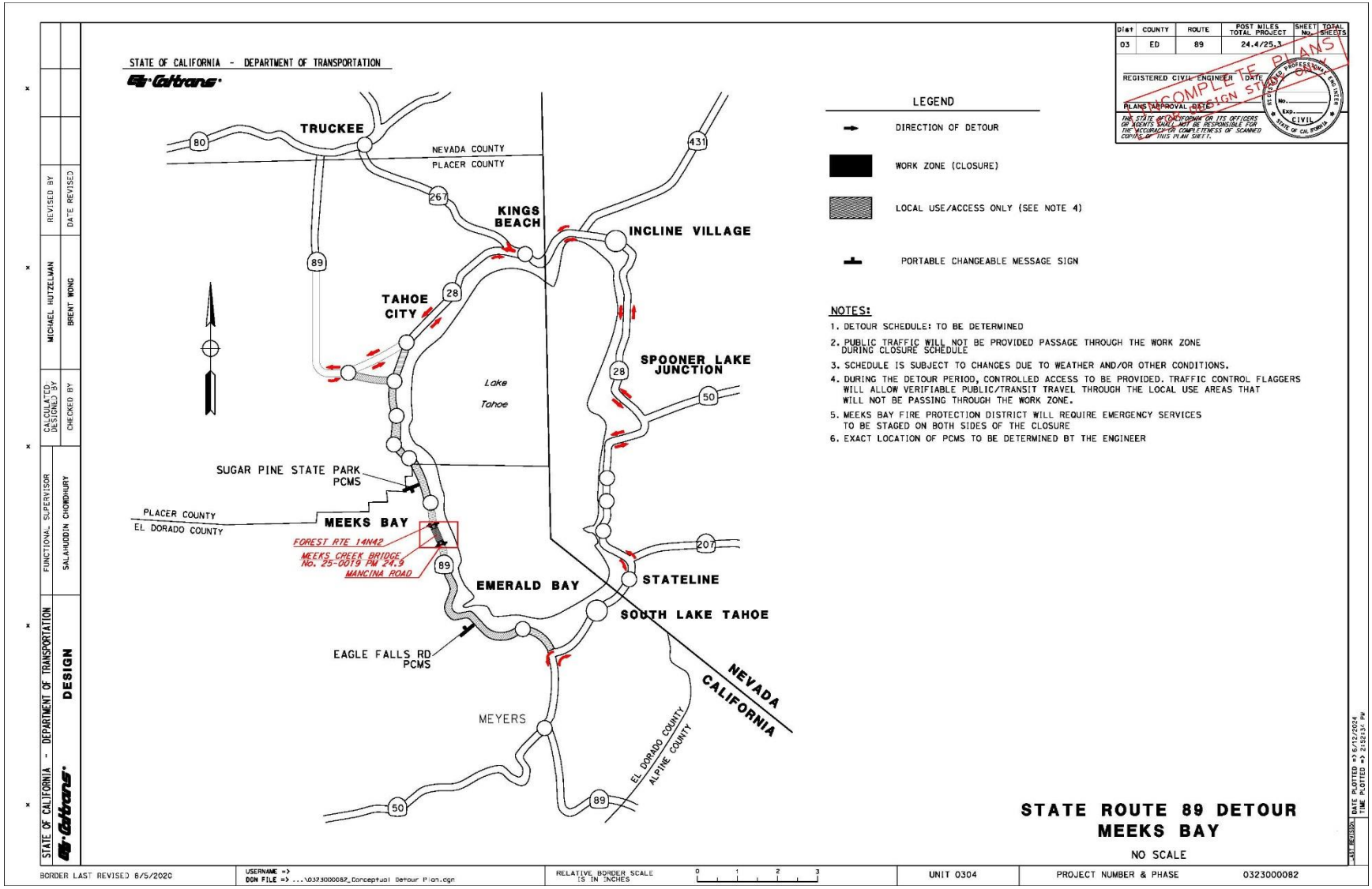
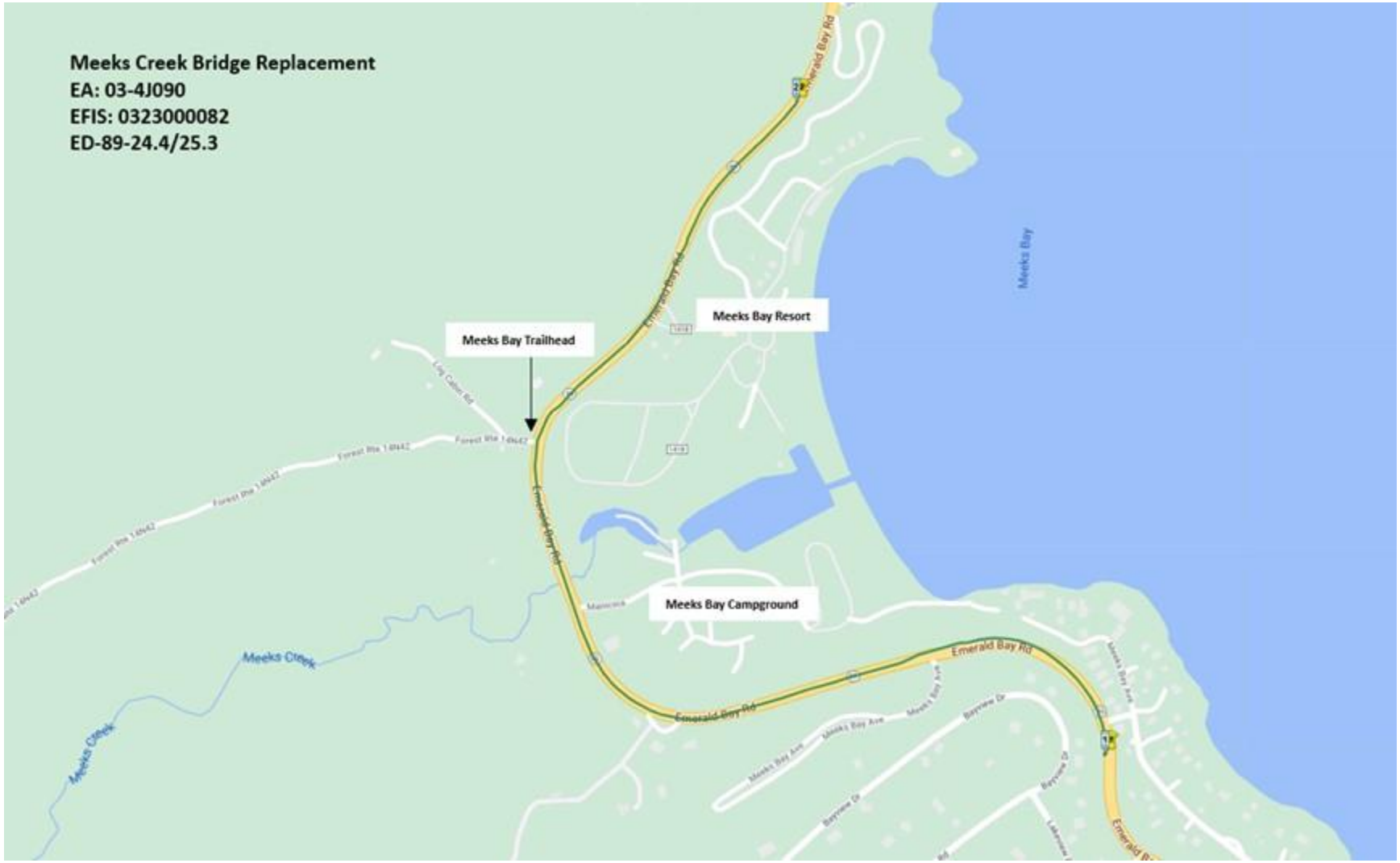
Board (Lahontan RWQCB). 2024. Meeks Bay Restoration Project Final EIS/EIS/EIR. https://www.trpa.gov/major-projects/#meeks.

Tahoe Regional Planning Agency (TRPA). 2023. Tahoe Regional Trails Strategy. Dated May 2023. https://trpa.maps.arcgis.com/apps/MapSeries/index.html?appid=6e4f0768e0a34454818d3b0427c0cd6f.

Attachment A: State Route 89 Detour Map



Attachment B: Vicinity Map



Attachment C: Preliminary Stage Construction Exhibit