Initial Study/Proposed Mitigated Negative Declaration

Italian Bar Road Bridge Replacement Project

Prepared for:

County of Tuolumne
Community Resources Agency
48 Yaney Avenue, 3rd Floor
Sonora, CA 95370

Prepared by:

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September 2018

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Notice of Intent (NOI) to Adopt a Mitigated Negative Declaration (ND) for the Italian Bar Road Bridge Replacement Project

Tuolumne County finds that this project would not have a significant effect on the environment. This finding is based on the criteria established in California Environmental Quality Act (CEQA) Guidelines Sections 15064 (Determining Significant Effects), 15065 (Mandatory Findings of Significance) and 15070 (Decision to Prepare a Negative Declaration), and the findings presented in the attached Initial Study Environmental Checklist.

Project Location: Tuolumne County. Approximately 10.6 miles northeast of the intersection of Italian Bar Road and Yankee Hill Road in the community of Columbia, California on Italian Bar Road (or Forest Route 4N26) at the Rose Creek crossing.

Project Description: Tuolumne County (County) is proposing to replace the Italian Bar Road Bridge over Rose Creek (Bridge No. 32C0037). Italian Bar Road Bridge is located in an unincorporated mountainous area of Tuolumne County, within the Stanislaus National Forest. There are no developed land uses at or near the project. The project site encompasses approximately 0.72 acre.

The existing bridge was constructed in 1925 and is a concrete, two-span bridge with one travel lane aligned in a general east-west direction at the creek. The bridge is approximately 34 feet long and 18.5 feet wide with concrete open railings. The bridge has been classified as structurally deficient due to defects in the concrete deck and superstructure, showing signs of efflorescence and inadequate load ratings, qualifying the bridge for replacement. Although there are no residences in the immediate vicinity of the project, the bridge serves residential traffic from the regional area as well as U.S. Forest Service (USFS) vehicles. It also provides needed access in the event of forest fires. Improvements are necessary to provide a structurally sound bridge for the safety of drivers. To replace the bridge in the same approximate location, the project would install an adjacent temporary creek crossing over Rose Creek, demolish the existing bridge, and build the new bridge before removing the temporary crossing. The temporary creek crossing would be constructed of gravel placed over geotextile fabric. Temporary culverts and a temporary cofferdam would be installed to divert creek flow away from the construction area. The new structure would be a 23.5-foot wide cast-in-place reinforced concrete slab bridge with open concrete barriers on both sides. The existing bridge is supported on tall abutments with cantilever wingwalls at each end and a pier wall mid-span, all on concrete spread footings. The replacement structure would be twice as long as the existing bridge, with an approximate elevation increase of 1.3 feet at the bridge soffit over Rose Creek. The new bridge would have a 20-foot wide single lane with no striped shoulders. The maximum depth of excavation will be determined by a geotechnical report but is anticipated to be 8-feet or less. A rock surface is present at depths less than 5 feet below existing grade. The bridge will utilize concrete spread footings founded approximately 1 foot into the rock surface.

It is anticipated that the entire project would be constructed in a single construction season (April through October), with some construction potentially occurring outside of this window including non-channel work, final paving, and punch list items.

Public Comment Period and Availability of Documents: The Initial Study and NOI to Adopt the MND was released for public review April 16, 2018 and the 30 day public review period for this NOI closed on May 16, 2018. The Initial Study will be available for review on the County web site (http://www.tuolumnecounty.ca.gov) and at the following location(s):

County of Tuolumne Community Resources Agency
48 Yaney Avenue, 3rd Floor
Sonora, CA 95370

Pubic and agency comments, as well as reponses from the County are provided in AppendixB.

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Abbreviated Terms

µPa	Micropascals
ACCM	Asbestos Containing Building Materials
ADL	Aerially Deposited Lead
ALUC	Airport Land Use Commission
APCD	(Tuolumne County) Air Pollution Control District
APE	Area Of Potential Effect
BA	Biological Assessment
BLM	Bureau Of Land Management
BMP	Best Management Practices
BP	Blooming Period
BSA	Biological Study Area
CAC	Certified Asbestos Consultant
CA Inc	Crawford And Associates Inc.
Cal Fire	California Department Of Forestry And Fire Protection
Caltrans	California Department Of Transportation
CCIC	Central California Information Center
CDFG	California Department Of Fish And Game
CDFW	California Department Of Fish And Wildlife
CDWR	California Department Of Water Resources
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code Of Federal Regulations
CH_4	Methane
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO_2	Carbon Dioxide
CRPR	California Rare Plant Rank
CWA	(Federal) Clean Water Act
dB	Decibel
dBA	A-Weighted Decibels
dbh	Diameter At Breast Height
DOC	California Department of Conservation
DPP	Design Pollution Prevention
EIR	Environmental Impact Report

EPA	Environmental Protection Agency
FE	Federal Endangered
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Federal Insurance Rate Map
FP	Fully Protected
FT	Federal Threatened
GHG	Greenhouse Gas Emissions
Hz	Hertz
IS/MND	Initial Study/ Mitigated Negative Declaration
ISA	Initial Site Assessment
LBP	Lead Based Paint
L_{dn}	Day-Night Average Noise Level
L_{eq}	Equivalent Sound Level
L_n	Percentile-Exceeded Sound Level
L_{max}	Maximum Sound Level
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendants
MRDS	Mine Resource Data System
MRDS	Noise Abatement Criteria
NAC	Native American Heritage Commission
NAL	National Analytical Laboratory, Inc.
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHPA	National Historic Preservation Act
NOA	Naturally Occurring Asbestos
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Services
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
OHP	Office Of Historic Preservation
OHWM	Ordinary High Water Mark
PM	Particulate Matter
project	Italian Bar Road Bridge Replacement Project
RWQCB	Regional Water Quality Control Board
SE	State Endangered
SMZ	Streamside Management Zones

SPL	Sound Pressure Level
SSC	California Species Of Special Concern
ST	State Threatened
SWPPP	Storm Water Pollution Prevention Plan
TCAPCD	Tuolumne County Air Pollution Control District
TCFD	Tuolumne County Fire Department
TCR	Tribal Cultural Resources
TUD	Tuolumne Utilities District
USACE	United States Army Corps Of Engineers
USC	United States Code
USFS	United States Forest Service
USFWS	United States Fish And Wildlife Service
USGS	United States Geological Survey
VMT	Vehicle Miles Traveled
WBWG	Western Bat Working Group
WDR	Waste Discharge Requirement
WPCP	Water Pollution Control Plan

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1 INTRODUCTION

1.1 REGULATORY REQUIREMENTS

This Initial Study/Proposed Mitigated Negative Declaration (IS/Proposed MND) for the proposed Italian Bar Road Bridge Replacement Project (proposed project) has been prepared by the County of Tuolumne Community Resources Agency to evaluate the potential environmental effects of the proposed project. This document has been prepared in accordance with the CEQA (Public Resources Code Section 21000 *et seq*.) and the State CEQA Guidelines (California Code of Regulations [CCR] Section 15000 *et seq*.).

An IS is prepared by a lead agency to determine if a project may have a significant effect on the environment and to determine the appropriate environmental document for CEQA compliance. In accordance with State CEQA Guidelines Section 15070, a public agency shall prepare a proposed negative declaration or mitigated negative declaration when the Initial Study shows that there is no substantial evidence that the proposed project may have a significant effect on the environment or the initial study identifies potentially significant effects but revisions in the project plans or proposals made by, or agreed to by, the applicant would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur. In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed project would not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). This IS/MND conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

1.2 PURPOSE OF THIS DOCUMENT

The County of Tuolumne is the lead agency for the proposed project and has determined that an IS/MND is the appropriate document for compliance with CEQA. The purpose of this document is to present to the public and reviewing agencies the environmental consequences of implementing the proposed project. This disclosure document was made available to the public for review and comment. The IS/MND was available for a 30-day public review period from April 16, 2018 to May 16, 2018..

Comments received from the public and reviewing agencies were considered by the County in the project decision. Five comment letters were received. The comments did not change the conclusions presented in the Draft IS/MND. Pubic and agency comments, as well as reponses from the County are provided in Appendix B. Prior to approving the project, the Board of Supervisors as the lead agency must consider the proposed MND together with any comments received during the public review process. The Board may adopt the proposed MND only if it finds on the basis of the whole record before it (including the Initial Study and any comments received), that there is no substantial evidence that the project will have a significant effect on the environment and that the MND reflects the lead agency's independent judgment and analysis

This IS/MND is available for public review on the County web site (http://www.tuolumnecounty.ca.gov) and at the County of Tuolumne Community Resources Agency office, located at 48 Yaney Avenue, Sonora, CA from 8:00 AM to 4:00 PM, Monday through Friday.

1.3 SUMMARY OF FINDINGS

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts resulting from implementation of the proposed project. Based on the issues evaluated in that chapter, it was determined that the proposed project would have no impact on the following issue areas:

- Aesthetics
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation

Impacts of the proposed project were determined to be less than significant for the following issue areas:

- Agricultural and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Transportation/Traffic
- Utilities and Service Systems

1.4 DOCUMENT ORGANIZATION

This IS/MND is organized as follows:

Chapter 1 — Introduction provides a brief overview of the environmental review process and describes the purpose and organization of this document.

Chapter 2 — Project Description describes the proposed project location, project elements, construction details, required permits and approvals for the project.

Chapter 3 — Environmental Checklist presents an analysis of environmental issues identified in the Environmental Checklist, taken from Appendix G of the State CEQA Guidelines, and determines for each topical area whether the proposed project would result in no impact, a potentially significant impact, or a less-than-significant impact. If any impacts were determined to be significant, an EIR would be required. For this project, however, the environmental protection measures that have been incorporated into the project, where needed, reduce all potentially significant impacts to less than significant.

2 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

Tuolumne County (County) is proposing to replace Italian Bar Road Bridge over Rose Creek (Bridge No. 32C0037). The proposed project site is located within the Stanislaus National Forest in unincorporated Tuolumne County on Italian Bar Road (also called Forest Rte. 4N26) at Rose Creek. Italian Bar Road is an unpaved, low volume rural road. Italian Bar Bridge over Rose Creek is a concrete, two-span bridge with one travel lane aligned in the general east-west direction at the creek. The existing bridge is approximately 34 feet long and 18.5 feet wide with open concrete railings. There are no residences in the immediate vicinity of the project, but the bridge serves residential traffic from the regional area as well as U.S. Forest Service (USFS) vehicles, and provides needed access in the event of forest fires. The site is located within a relatively steep canyon. The creek and bridge are at 1927 feet and 1938 feet in elevation, respectively, and the creek canyon slopes rise to the range of 2500 feet in elevation to 2700 feet in elevation (based on U.S. Geological Survey [USGS] topographic mapping). Rose Creek is a meandering intermittent stream that flows in a northwesterly direction at the bridge crossing. Rose Creek is part of the Upper Stanislaus River watershed. Rose Creek merges with Eagle Creek 2.25 miles west of the proposed project area, which flows into the Stanislaus River 1.75 miles downstream and ultimately New Melones Lake. The proposed project site encompasses approximately 0.72 acre.

2.2 PROJECT ELEMENTS

To replace the bridge in the approximate same location, the proposed project would construct an adjacent temporary single-lane creek crossing at Rose Creek immediately south of the existing bridge to maintain traffic on Italian Bar Road, demolish the existing bridge, and build the new bridge before removing the temporary crossing. The temporary creek crossing would be constructed of gravel placed over geotextile fabric. Temporary culverts and a temporary cofferdam would be part of the design to divert creek flow away from the construction area. The replacement structure would be a 23.5-foot wide cast-in-place reinforced concrete slab bridge with open concrete barriers on both sides of the bridge. The bridge is supported on tall abutments on each end and a mid-span pier wall, all on concrete spread footings. The replacement structure would be twice as long as the existing bridge, with an approximate elevation increase of 1.3 feet at the bridge soffit over Rose Creek. The new bridge would have a 20-foot wide single lane with no striped shoulders. The maximum depth of excavation will be determined by a geotechnical report but is anticipated to be 8-feet or less. A rock surface is present at depths less than 5-feet below existing grade. The bridge will utilize concrete spread footings founded approximately 1 foot into rock surface.

Staging will occur within the USFS right-of-way under a temporary construction easement. Minimal tree removal and tree trimming will be required to facilitate placement of the new bridge structure and temporary creek crossing. Project construction is anticipated to occur between April and October of 2019. Construction will occur during the dry season (April 15th to October 15th) when no flows in the Rose Creek channel are likely, which will minimize the potential for impacts to downstream water quality and amphibians that may use the creek for breeding. In the event of rain and temporary flow during construction, dewatering may be required. If dewatering is necessary, a diversion or isolation plan would be used to dewater the construction area.

Construction work that may occur outside the dry season includes non-channel work, final paving, and punch list items.

General bridge construction equipment expected to be used includes, but is not limited to: off-highway trucks, off- highway tractors, cranes, excavators, crawler tractors, graders, rough terrain forklifts, pavers, backhoes, rollers, and cement and mortar mixers.

After the new bridge has been completed, traffic will be routed onto the new bridge and demolition of the existing bridge would occur. For a short time, traffic handling and staged approach work would be required until all traffic is diverted to the new structure. Demolition would include removal of the roadway approaches, the bridge superstructure and the substructure where removal is required.

The project is entirely on rural USFS land in parcel number 022-160-12-00 and is zoned as public land. There is no development or improvements at or in the vicinity of this project other than the road and bridge.

Italian Bar Road Bridge Replacement Project
Natural Environment Study

FIGURE 2-1
Project Vicinity

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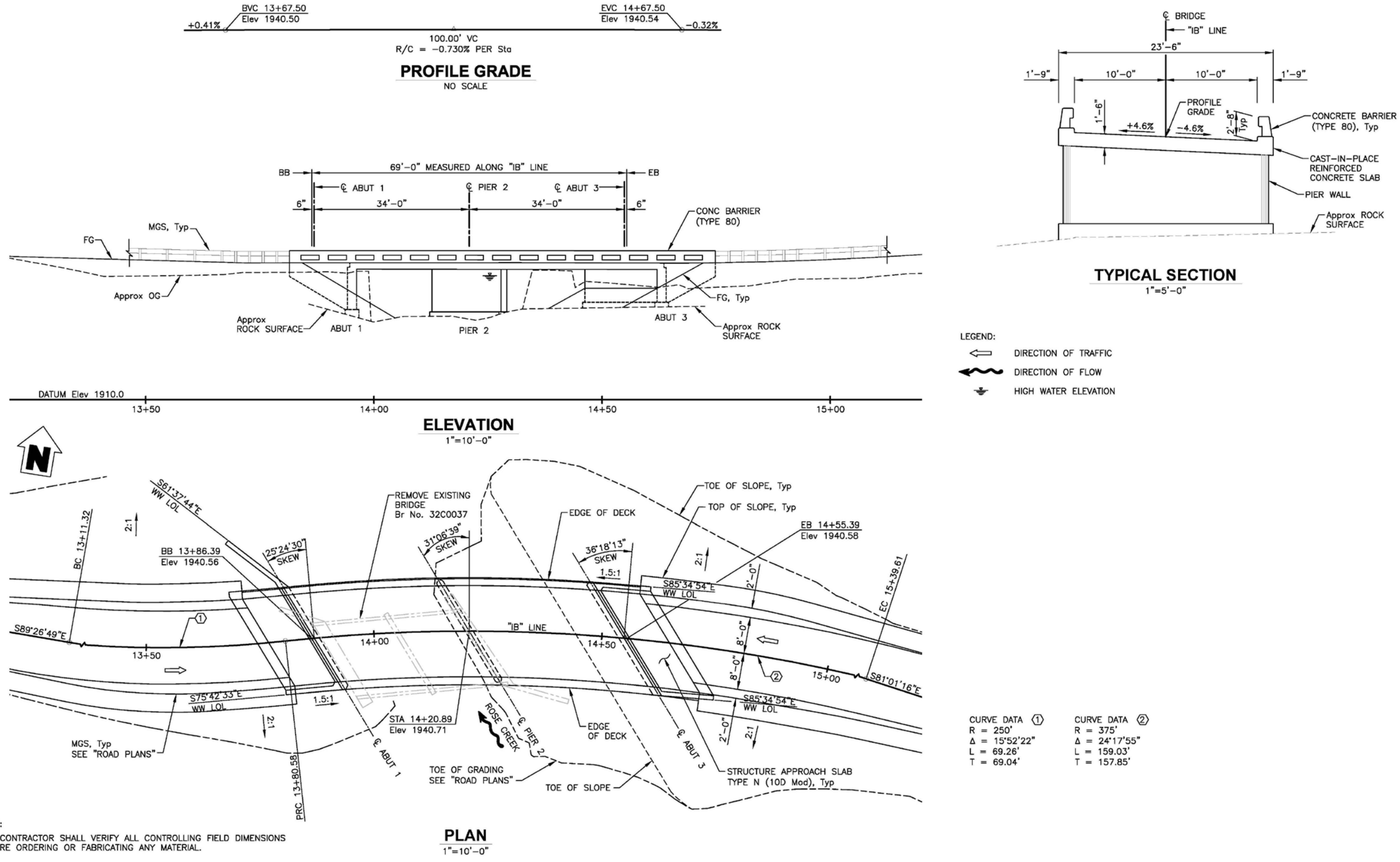

FIGURE 2-2 Project Overview

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2.3 REQUIRED PERMITS AND APPROVALS

The proposed project would require review and approval by Tuolumne County Board of Supervisors, and pursuant to Section 15074 of the State CEQA Guidelines, the Board will consider the findings of this IS/ND together with comments received during the public review process in its decision on whether to adopt the proposed ND. Pubic and agency comments, as well as reponses from the County are provided in AppendixB.

The proposed project would also be required to comply with the following federal and state regulations and permit requirements:

- National Environmental Policy Act (NEPA). Because the project would be financed in part by federal transportation funds, it is subject to compliance with NEPA. Caltrans has assumed assignment of NEPA responsibilities and functions as the NEPA Lead Agency, as well as most associated consultation requirements. Caltrans completed a Categorical Exclusion (CE), dated July 10, 2018. The proposed project's compliance with NEPA is separate from compliance with CEQA and is not discussed further in this IS/MND.

- Section 7 of the federal Endangered Species Act (ESA). Federal agencies must consult with the National Marine Fisheries Service for marine and anadromous species, or the USFWS for fresh-water and upland wildlife, if they are authorizing, funding, or carrying out an action that may affect federally listed species or their designated habitat. Because the project would be financed in part by federal transportation funds, it is also subject to compliance with Section 7 of the ESA as administered by Caltrans.

- Section 106 of the National Historic Preservation Act (NHPA). Section 106 of the NHPA requires federal agencies to take into account the effects on historic properties resulting from actions they are authorizing, funding, or carrying out. Because the project would be financed in part by federal transportation funds, it is subject to compliance with Section 106 of the NHPA as administered by Caltrans on behalf of FHWA.

- Section 404 of the federal Clean Water Act (CWA). Section 404 establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. Responsibility for administering and enforcing Section 404 is shared by the U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA). General permits are often issued by USACE for categories of activities that are similar in nature and would have only minimal individual or cumulative adverse environmental effects. General permits can be issued on a nationwide ("Nationwide Permit") or regional ("Regional General Permit") basis. It is anticipated that the proposed project's compliance with Section 404 of the CWA would be authorized under Nationwide Permit 33 — Temporary Construction, Access, and Dewatering.

- Section 401 of the Clean Water Act. Section 401 specifies that any applicant for a federal license or permit to conduct any activity, including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters, shall provide the federal licensing or permitting agency a certification from the state in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable water at the point where the

discharge originates or will originate and that any such discharge will comply with the applicable provisions of the Clean Water Act. It is anticipated that the proposed project will be required to obtain a water quality certification from the Central Valley Regional Water Quality Control Board (CVRWQB).

- If construction requires dewatering and discharge to waters of the U.S., an National Pollutant Discharge Elimination System (NPDES) permit may be required by the contractor. This may only be required if the discharge is to a water body or groundwater, which is not anticipated with construction during the dry season.

- Fish and Game Code Section 1602. Section 1602 requires any person, state or local governmental agency, or public utility to notify the California Department of Fish and Wildlife (CDFW) before beginning any activity that will substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. Fish and Game Code section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state. It is anticipated that the proposed project will be required to obtain Streambed Alteration Agreement from CDFW to comply with Section 1602.

3 ENVIRONMENTAL CHECKLIST

1.	Project Title:	Italian Bar Road Bridge Replacement Project
2.	Lead Agency Name and Address:	County of Tuolumne Community Resources Agency 48 Yaney Avenue Sonora, CA 95370
3.	Contact and Phone Number:	David Ruby, Junior Engineer / DBE Liaison Officer County of Tuolumne Community Resources Agency (209) 533-6629
4.	Project Location:	Tuolumne County
5.	Project Sponsor's Name and Address:	Same as above
6.	General Plan Designation:	Public
7.	Zoning:	Public
8.	Description of Project:	See Chapter 2, Project Description
9.	Surrounding Land Uses and Setting:	See Chapter 2, Project Description
10:	Other public agencies whose approval is required:	See Chapter 2, Project Description

3.1 AESTHETICS

ENVIRONMENTAL ISSUES		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
I.	**Aesthetics. Would the project:**				
	a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
	b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
	c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
	d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

3.1.1 ENVIRONMENTAL SETTING

The project site is located along Rose Creek on Italian Bar Road, an unpaved USFS road in a remote part of the Stanislaus National Forest between State Route 4 and State Route 108. The proposed project would replace the existing Italian Bar Road Bridge, constructed in 1925, that carries traffic over Rose Creek.

The project site predominantly consists of Italian Bar Road and Rose Creek and areas adjacent to the roadway that could potentially be affected by project construction (e.g., staging areas). The project site is in a valley at an elevation of approximately 1,960 feet above sea level. The visual landscape in the project area is primarily undeveloped but also includes some areas of development. Developed areas include the existing roadway and bridge structure. No other developed uses are located in the project vicinity.

Within the project vicinity, Rose Creek is an intermittent, low-gradient stream comprised of a series of braided channels within a relatively narrow floodplain, and has an established riparian corridor in some locations. The low-water channels are characterized by large cobble substrates and are sparsely vegetated. The higher areas between the low-flow channels and the channel banks support wetland and upland vegetation.

Forest Route 4N26 is not considered a scenic road by the County or State. There are no scenic vistas in the project vicinity, and no residences within sight of the bridge.

3.1.2 DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

No Impact. The proposed project would have no impact on scenic vistas. The project site is located in a relatively flat area surrounded by valley slopes, resulting in a limited viewshed. Construction of the proposed project would occur within and adjacent to the existing river channel. Upon completion of construction, the new bridge would replace the existing bridge. The new bridge would be slightly higher and larger than the existing bridge, but would not include features that would result in the obstruction of scenic vistas. The closest residential areas are

1.25 miles southwest and 1.25 miles northeast, and are not within line-of-sight of the bridge. Therefore there would be no impact on scenic resources.

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

No Impact. The proposed project would not affect views to or from a state scenic highway. There are no designated state scenic highways in the project vicinity (Tuolumne County 1996). There would be no impact on scenic resources.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact. As discussed above, the project site is largely undeveloped with the exception of Italian Bar Road and the existing bridge structure. The area surrounding the project site is undeveloped.

Construction activities would include construction of a temporary creek crossing, removal of the existing bridge, construction of the new bridge and roadway approaches, and construction staging. These impacts would be temporary in nature and would not extend beyond the anticipated single season of construction activities. Some construction activities that may occur after bridge construction include final paving and punch list items.

The replacement bridge would be slightly higher, longer and wider than the existing bridge, but would be constructed from materials similar to the existing bridge. Because the replacement bridge and surrounding area would look essentially similar to the existing conditions, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. Therefore, there would be no impact.

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

No Impact. Existing sources of light and glare in the project area include vehicle head and tail lights and reflections from the existing bridge structure. The new bridge structure would replace the existing bridge structure and the roadway alignment would stay approximately the same. No light fixtures would be installed as part of the proposed project. Replacement of the bridge structure would not generate any additional traffic (e.g., additional vehicle headlight) or light or glare. Therefore, the proposed project would have no impact related to creating a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

3.2 AGRICULTURAL AND FOREST RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
II. Agricultural and Forest Resources.				
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
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?	☐	☐	☐	☒

3.2.1 ENVIRONMENTAL SETTING

The proposed project would be constructed largely within the footprint of the existing bridge and roadway approaches (Figure 3-1), with the exception of staging areas. The project site is zoned Public under the Tuolumne County Ordinance Code. The nearest agricultural lands are located approximately 1 mile west of the project site. The nearest timberland zone is located approximately 1.25 miles north of the project site. The project site and immediate area are not identified as "Public, Trust, and Conservation Land" under the Williamson Act program.

AECOM
Italian Bar Road Bridge Replacement Project

FIGURE 3-1
Project Footprint

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3.2.2 DISCUSSION

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?

No Impact. The project site is not designated by the Farmland Mapping and Monitoring Program as Prime Farmland, Farmland of Statewide or Local Importance, or Unique Farmland. Therefore, there would be no impact.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No Impact. The project site is on land that is not currently used for agricultural purposes, is not designated on the County's general plan for agricultural use, and is not zoned for agricultural use. Therefore, there would be no impact.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No impact. The project site does not contain land zoned as timberland or other forest land. Therefore, there would be no impact.

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

Less than Significant Impact. The proposed project would replace an existing bridge on a public roadway. The proposed project would not result in a significant loss of forest land or conversion of forest land to non-forest use as the project site is already substantially developed with the existing bridge and roadway. Some minimal vegetation removal, including tree pruning or removal, would be required for staging and construction of the new bridge. A total of 19 native trees were found within or immediately adjacent to the project footprint (the area that may be temporarily or permanently impacted by project activities). These trees have the potential to be permanently impacted (through removal, thinning of over 30% of the crown, or compaction or removal of over 30% of the rootzone) or temporarily impacted (light pruning, staging of equipment over the root zone) by project activities. As part of the site restoration, hydroseeding will be done to stabilize the temporarily impacted areas. Tuolumne County is proposing to reestablish the patches of riparian woodland habitat impacted by construction onsite through salvage cuttings from riparian trees and shrubs that would be removed in areas where grading or construction will occur. This is discussed further in Section 3.4. Therefore, the proposed project would have a less than significant impact to the loss or conversion of forest land.

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. See responses a) and d) above.

3.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
III. Air Quality.				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

3.3.1 ENVIRONMENTAL SETTING

The proposed project is located within unincorporated Tuolumne County where air quality is regulated by the Tuolumne County Air Pollution Control District (APCD).

The U.S. Environmental Protection Agency (EPA) designated Tuolumne County as "attainment/unclassified" for the 2008 8-hour federal ozone standard on July 20, 2012. On April 6, 2015 the EPA revoked the 1997 8-hour ozone standard for all purposes (80 FR 12264). Tuolumne County is "attainment/unclassified" for all other federal ambient air quality standards. With respect to State ambient air quality standards, Tuolumne County is classified as "nonattainment" for ozone and "attainment/unclassified" for all other State standards. The State ozone "nonattainment" status is due to overwhelming transport of ozone precursors from upwind, urban areas. The Mountain Counties Air Basin and Tuolumne County attainment status for all criteria pollutants is listed in Table 3-3.1.

Table 3.3-1 Federal and State Ambient Air Quality Attainment Status		
Pollutant	**California Attainment Status**	**National Attainment Status**
O_3	Non-attainment	Non-attainment (Former Subpart 1)
PM_{10}	Unclassified	Unclassified
$PM_{2.5}$	Unclassified	Unclassified/Attainment
CO	Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified
O_3	Non-attainment	Non-attainment (Former Subpart 1)
Notes: CO = carbon monoxide NO_2 = nitrogen dioxide O_3 = ozone $PM_{2.5}$ = Fine particulate matter, measuring less than 2.5 microns PM_{10} = Respirable particulate matter, measuring less than 10 microns SO_2 = sulfur dioxide		

The APCD has developed thresholds of significance for criteria pollutants for CEQA purposes. Significance thresholds applicable to construction and operations are 1,000 pounds per day or 100 tons per year of reactive organic gasses (ROG), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM10).

The project falls within the Sierra Nevada Foothills sub-region, which has a Mediterranean climate, with over 90 percent of annual precipitation occurring between October and May. The average annual precipitation at the Sonora weather station (approximately 10 miles southwest of the project) is 32.48 inches (National Oceanic and Atmospheric Administration [NOAA 2016]). Summers are hot and dry, while winters are cold and relatively wet, though snow is not common. The mean annual summer temperature is 73 degrees Fahrenheit, while the mean annual winter minimum temperature is 44 degrees Fahrenheit (NOAA 2016).

3.3.2 DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The proposed project is not a residential, commercial, or industrial land use that would affect local or regional population or jobs. Rather, the proposed project would replace the existing Italian Bar Road Bridge. The proposed project would not increase the bridge's capacity and therefore would not allow substantial additional trips or vehicle miles traveled (VMT). Therefore, the proposed project would not conflict with any of the assumptions in the applicable general plan and would not exceed any VMT estimates accounted for in the air

quality plan. Thus, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. Therefore, there would be no impact.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant Impact. The proposed project would generate emissions associated with the construction of the new bridge, both from vehicle trips, from workers, and from construction equipment Construction emissions would be considered short-term and temporary emissions because all construction emissions would cease following completion of the proposed project. Following construction activities, operational emissions associated with vehicles traveling on the Italian Bar Road Bridge would continue in a manner similar to before the implementation of the project. However, because the proposed project is neither a capacity-increasing project nor a land use development project, it is not anticipated that implementation of the project would result in a net increase in VMT in the region, resulting in increased emissions. Therefore, no net increase in long-term operational emissions is anticipated to occur, and impacts would be less than significant.

c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact. Both short-term construction and long-term operational emissions associated with the proposed project are not anticipated to result in project-level impacts. Construction emissions would cease following completion of the proposed project. Operational emissions would not result in a net increase in emissions beyond existing conditions. In addition, as described in response a) above, the proposed project would not conflict with the local general plan or applicable air quality plan. Due to the remote location, no residences will be impacted by construction emissions, as the nearest residence is over one mile away. Therefore, the proposed project would not generate a cumulatively considerable contribution of regional air quality pollutants in the project area for which the region is nonattainment under a state or federal ambient air quality standard. Therefore, the project would not result in a cumulatively considerable significant impact, Impacts would be less than significant..

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact with Mitigation Incorporated. Construction of the proposed project has the potential to generate dust. In order to minimize the project's fugitive PM dust emissions, implementation of the following requirement would reduce dust emissions associated with construction.

> **Measure AIR-1**: The construction contractor will be required to minimize and control fugitive dust during construction through the use of a watering truck or other dust suppressant device as required by Section 12.20.370 of the County Grading Ordinance.

Gravel used for the temporary creek crossing may be derived from serpentine rock. Serpentine gravel often contains asbestos fibers; asbestos fibers have been linked to lung cancer. Vehicles driving over serpentine gravels bearing asbestos fibers can cause these fibers to become airborne, thereby creating a health risk. The proposed project will be conditioned to prohibit the use of serpentine gravel unless it is sealed with an unrestricted material

to prevent the asbestos fibers from becoming airborne, as required by Section 93106 of the California Health and Safety Code.

Naturally Occurring Asbestos

Crawford and Associates, Inc. (CA Inc) reviewed the potential for Naturally Occurring Asbestos (NOA) in the study area by performing field reconnaissance and reviewing published geologic mapping (California Division of Mines and Geology 2000, CA Inc 2016a). The geologic mapping reviewed as part of this study does not indicate ultramafic rocks or rocks suspected to contain NOA are present within the study area. CA Inc did not observe rock outcrops or rock fragments that are suspected to contain NOA in the study area during field investigations. Although NOA can be associated with faults, no mapped faults are depicted within the study area (California Department of Conservation [DOC] 2017). The potential for NOA in the study area is considered generally low and no further study is recommended. Therefore, there are no potential NOA-related impacts.

e) Create objectionable odors affecting a substantial number of people?

No Impact. The occurrence and severity of odor impacts depends on numerous factors including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of any receptors. Offensive odors can be very unpleasant, leading to considerable distress among the public and cause citizens to submit complaints to local governments and regulatory agencies. Projects with the potential to frequently expose individuals to objectionable odors are deemed to have a significant impact. Typical facilities that generate odors include wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, and food processing facilities.

Project construction emissions would not be constantly generating odorous emissions, and would not be in proximity to any residential uses or other sensitive receptors. Construction activities would temporarily generate diesel PM exhaust from heavy-duty trucks and off-road construction equipment, which can be considered offensive by some individuals. As described above, the project site is located 1.25 miles away from residential areas. Any odors generated would be temporary, short-term, and would occur only in the immediate vicinity of the construction site. Therefore, the intermittent and temporary construction activities are not expected to cause an odor impact to sensitive receptors.

3.4 BIOLOGICAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IV. Biological Resources. 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 Game or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
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?	☐	☐	☐	☒

3.4.1 ENVIRONMENTAL SETTING

The biological resources setting for the proposed project is described in detail in the Natural Environment Study (NES) being prepared for the proposed project (AECOM 2017a). Field surveys were conducted on June 24, 2014, April 15, 2015, and August 26, 2016. The findings of that study are summarized below.

Habitat Types in the Project Area

For this analysis, the project area consists of the project footprint and an area just beyond the project footprint that could potentially be affected by project construction and/or were determined necessary to inventory in order to perform an adequate analysis of project impacts (termed 'Biological Study Area' or BSA in the NES and Preliminary Jurisdictional Delineation). This area includes a variable buffer deemed to be of sufficient width to

incorporate any indirect impacts to biological resources outside of the project footprint. This includes the entire proposed bridge replacement project footprint, as well as the potential staging area, and three hundred feet up and down stream of the bridge. The BSA includes intermittent riverine, interior live oak woodland, red willow thickets, and California annual grassland habitat/vegetation communities. Other areas within the BSA include rock outcrops, and disturbed dirt and paved road. The extent of the habitats and other areas and the limits of the BSA are shown in Figure 3-2.

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AECOM
Italian Bar Road Bridge Replacement Project

FIGURE 3-2

Habitat and Land Cover Map

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The project is located in the western Sierra Nevada Foothills, a floristic sub-region of the California Floristic Province's Sierra Nevada region. The sub-region occupies the lower elevations of the western Sierra Nevada Region, and contains a diverse assemblage of plant communities and wildlife habitat types.

Based on observations during site visits and from historic aerial imagery, it was determined that Rose Creek is an intermittent channel that flows during winter into spring. Flowing water was observed in the creek during the survey conducted in April 2015. Although no flowing water was present during the June 2014 survey, some water remained in deeper pools in the creek channel. No water was observed in the creek channel during the August 2016 survey. The creek is characterized by gradual to steep earthen and rock banks that show signs of scouring (exposed tree roots on the banks of the channel). The creek bed is predominantly rock, with some large gravel and cobbles, and few sandbars. The small sandbars have formed within the banks of the channel where larger size material settles out during storm events. The width of the channel at the ordinary high water mark (OHWM) varies between 11 feet to 43 feet within the BSA, as mapped during the wetland delineation conducted on during the April 2015 and August 2016 surveys. On the south east side of the BSA, a side channel branches off the main creek and flows around a small (approximately 3500 square feet) island covered in upland grass species and California grape (*Vitis californica*). Some areas of Rose Creek hosted small patches of fringing wetland located below the OHWM. Bunch grasses and shrubs were observed growing in patches where soils or sand has accumulated in the channel bed. Species common to freshwater emergent wetlands or riparian areas that were observed within the creek or along the banks include mint (*Mentha* sp.), deer grass (*Muhlenbergia rigens*), mugwort (*Artemisia douglasiana*), water sedge (*Carex aquatilis*), toad rush (*Juncus bufonius*), curly dock (*Rumex crispus*), seep monkey flower (*Mimulus guttatus*), miner's lettuce (*Claytonia parviflora*), and California buttercup (*Ranunculus californicus*). These areas of wetland vegetation were not delineated as wetlands separately from the creek extent due to their small size, patchy distribution, and position below the OHWM.

The majority of the BSA is composed of interior live oak woodland. In the BSA, interior live oak (*Quercus wislizeni*) is co-dominant with foothill pine (*Pinus sabiniana*). Other tree species include black oak (*Quercus kelloggii*), California buckeye (*Aesculus californica*), canyon live oak (*Quercus chrysolepis*), and ponderosa pine (*Pinus ponderosa*). The canopy is dense on the west side of the BSA, and sparser on the east side of the BSA, where patches of grassland occur between tree canopies. Where there is shrub understory, it is dense with poison oak (*Toxicodendron diversilobum*) and manzanita (*Arctostaphylos* sp.), as well as the occasional California coffeeberry (*Frangula californica)*. This vegetation community is largely undisturbed within the BSA.

Small red willow thickets are located in patches along the edge of Rose Creek. These areas are dominated by red willow (*Salix laevigata*), as well as smaller willow species, such as arroyo willow (*Salix lasiolepis*) and Goodding's willow (*Salix gooddingii*). These areas do not extend beyond the margins of the creek. Other tree species observed along the edge of the creek edge include white alder (*Alnus rhombifolia*) and buckeye. Shrub and forb species include mugwort, sedges (*Carex* sp.), mule fat (*Baccharis salicifolia*), and deer grass, which occur along the creek edge. California grape (*Vitis californica*) is dense in the understory.

California annual grassland occurs in areas between trees, in patches along the banks of the creek, on the roadside, and on the pull-out area east of the bridge. These areas are dominated by non-native annual grasses including ripgut brome (*Bromus diandrus*) and wild oats (*Avena* sp.). Various annual forbs including broad leaf filaree (*Erodium botrys*), clover (*Trifolium* sp.), and turkey mullein (*Croton setiger*) co-occur with these dominant grasses. This habitat is disturbed along shoulders of Italian Bar Road.

Barren areas include paved road, heavily disturbed and compact soils, and rock outcrops. The northeast bank of Rose Creek is composed of a steep slope of mostly barren rock. Small patches of grasses, lichens and mosses, and the occasional canyon dudleya *(Dudleya cymosa*) occur where soil has accumulated on rocky outcrops.

Sensitive Natural Communities

Sensitive natural communities are those communities that are of special concern to resource agencies and conservation organizations for a variety of reasons, including their local or regional decline, or because they provide important habitat to common and special-status species. Many of these communities are tracked in CDFW's California Natural Diversity Database (CNDDB), a statewide inventory of the locations and conditions of the state's rarest plant and animal taxa and vegetation types. Elimination or substantial degradation of these communities would constitute a significant impact under CEQA.

The sensitive natural communities within the BSA are red willow thickets and intermittent creek. The intermittent creek is subject to USACE jurisdiction under Section 404 of the CWA (Clean Water Act) because it qualifies as an "other water of the U.S." A wetland delineation for the project has been conducted and is included in the NES (AECOM 2017b). The scattered riparian woodland habitat (red willow thickets) along Rose Creek is subject to CDFW jurisdiction under Section 1602 of the California Fish and Game Code.

Special-Status Plants

Special-status plant species include those listed as endangered, threatened, or rare, and species proposed for listing by the U.S. Fish & Wildlife Service (USFWS) or CDFW sensitive species. Special-status plant species also include those deemed rare by the California Native Plant Society (CNPS) in its California Rare Plant Rank (CRPR) system (CRPR 1A, 1B, 2, 3, and 4) (CNPS 2016). The USFS provides its own list of special-status species, some of which are not USFWS, CDFW, or CNPS list species. The project is located in the Stanislaus National Forest, so species deemed sensitive by the USFS were also considered.

During initial screening for special-status plants with potential to occur in or within the vicinity of the project area, 45 special-status plant species were identified. A complete list of these species is included in Appendix A. Based on the background review, 35 special-status plant species were determined to have no potential to occur because (1) there is a lack of specific edaphic requirements such as serpentine soils within the BSA, (2) the elevation of the BSA is outside the elevation range within which the species occurs, (3) specific habitat or microhabitat requirements for the species are not present, (4) the BSA is outside the highly endemic range of the species in question, or (5) the species is considered extirpated from Tuolumne County.

The remaining ten species were found to have at least low potential to occur based on potentially suitable habitat and proximity of occurrences in CNPS and CNDDB, and were identified for closer review. These species are listed in Table 3.4-1 below along with their status, habitat description, and the rationale to include them in the final analysis.

Table 3.4-1 Special-status Plant Species with Potential to Occur within the BSA				
Scientific Name	**Common Name**	**Status**	**Habitat Description/Blooming Period**	**Potential for Occurrence and Rationale**
Clarkia virgata	Sierra clarkia	CRPR List 4.3	Cismontane woodland and lower montane coniferous forest. BP: May – Aug.	Low. This species has the potential to occur in the oak woodland that occurs in the BSA. However, species not observed during surveys.
Claytonia parviflora ssp. *grandiflora*	streambank spring beauty	CRPR List 4.2	Rocky areas in cismontane woodland. BP: Feb. – May.	Low. This species has the potential to occur in the oak woodland that occurs in the BSA. However, species not observed during surveys.
Cypripedium montanum	mountain lady's-slipper	CRPR List 4.2 / FS	Broadleaved upland forest, cismontane woodland, lower montane coniferous forest, North Coast coniferous forest. BP: March – Aug.	Low. Suitable habitat occurs in the BSA. However, species not observed during surveys.
Delphinium hansenii ssp. *ewanianum*	Ewan's larkspur	CRPR List 4.2	Rocky areas in cismontane woodland and valley and foothill grassland. BP: March – May	Low. Suitable habitat occurs in the BSA. However, species not observed during surveys.
Erythranthe marmorata	Stanislaus monkeyflower	CRPR List 1B.1	Cismontane woodland, lower montane coniferous forest. BP: March – May.	Low. Suitable habitat occurs in the BSA. There are CNDDB records within 5 miles of the BSA. However, species not observed during surveys.
Erythronium tuolumnense	Tuolumne fawn lily	CRPR List 1B.2 / FS	A perennial herb (bulb) inhabiting open woodlands, broadleaved upland forest, chaparral, cismontane woodland and lower montane coniferous forest communities. BP: March – June.	Low. BSA contains suitable habitat. CNDDB occurrences within 800 feet of the BSA. However, surveys conducted during the spring blooming season found no presence of Tuolumne fawn lily and is presumed absent.
Horkelia parryi	Parry's horkelia	CRPR List 1B.2 / FS	A perennial herb inhabiting openings within chaparral and cismontane woodland. Species is especially known within Ione soil formations, but occurs on other soils. BP: March – Aug.	Low. There is a CNDDB record of this species within 1-mile of the BSA. However, species not observed during surveys.

Table 3.4-1
Special-status Plant Species with Potential to Occur within the BSA

Scientific Name	Common Name	Status	Habitat Description/Blooming Period	Potential for Occurrence and Rationale
Iris hartwegii ssp. *columbiana*	Tuolumne iris	CRPR List 1B.2 / FS	A perennial rhizomatous herb inhabiting dry slopes of cismontane woodland and lower montane coniferous forest communities. Species is known only from a small geographic area in the high Sierra Mountains in Tuolumne County near the community of Columbia. BP: May – June.	Low. Suitable habitat exists within the BSA. There is a CNDDB record of this species within 1-mile of the BSA. However, species not observed during surveys.
Lilium humboldtii ssp. *humboldtii*	Humboldt lily	CRPR List 4.2	Openings in chaparral, cismontane woodland, and lower montane coniferous forest. BP: May – Aug.	Low. The BSA contains openings in woodland and coniferous forest within the elevation range of this species. However, species not observed during surveys.
Piperia michaelii	Michael's rein orchid	CRPR List 4.2	Coastal bluff scrub, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest. BP: April – Aug.	Low. The BSA contains woodland and coniferous forest within the elevation range of this species. However, species not observed during surveys.

Status:
California Rare Plant Ranks:
CRPR 1B = Plants rare, threatened or endangered in California and elsewhere, eligible for State listing, CEQA review is mandatory
CRPR 2 = Plants rare, threatened or endangered in California but more common elsewhere, eligible for State listing, CEQA review is mandatory;
CRPR 4 = Plants of limited distribution – A watch list, few if any are eligible for State listing, CEQA review is not required but is strongly recommended
CRPR Suffixes (.1, .2., .3) for all rankings = .1 = Seriously endangered in California, .2 = Fairly endangered in California, .3 = Not very threatened in California
FS = Forest service sensitive species (USFS)

Notes:
BP – Blooming period

Source: CDFW 2017, CNPS 2016, USFWS 2018, Baldwin 2012

Spring and summer special-status species plant surveys conducted on the project site to date have resulted in negative findings for all target species; therefore special-status plant species are assumed to be absent in the project area at this time. Results of these surveys have been documented in the NES.

Special Status Wildlife

Special-status wildlife species include those listed by USFWS under the federal Environmental Species Act and by the CDFW under the California Endangered Species Act. Additional species receive federal protection under the Migratory Bird Treaty Act (MBTA) and state protection under CEQA Section 15380(d) and sections of the Fish and Game Code related to 'fully protected species'. Based on a literature review and the fauna within the project region, 46 special-status wildlife species were initially considered to have at least some potential to occur within the larger geographic region or have been recorded historically in the project vicinity (Appendix A). This list was narrowed down significantly based on the results of the site reconnaissance surveys and habitat types present on the project site and vicinity. Twenty-four special-status wildlife species a were determined to have some potential to occur based on suitable habitat being present within the BSA.

Table 3.4-2 below contains information on the status of those special-status wildlife species determined to have the potential to occur on the project site. Potential impacts on these species resulting from project implementation are discussed in detail in the NES and are summarized in the impact discussion below.

Table 3.4-2
Special-status Wildlife Species with Potential to Occur within the BSA

Scientific Name	Common Name	Status	Habitat Description	Potential for Occurrence and Rationale
Invertebrates				
Bombus occidentalis	western bumble bee	FS	Occurs in many habitats. Listed as imperiled by the Xerces Society. Historically known from the Pacific coast to the Rocky Mountains.	Moderate. Known to occur in Tuolumne County. Undisturbed, suitable habitat present in BSA.
Fish				
Cottus gulosus	riffle sculpin	SSC	Sand and gravel riffles of headwaters and creeks and sand-gravel runs and backwaters of rivers.	Low. Marginal habitat is present in Rose Creek, but it is unlikely to occur in the BSA, as it lacks sand-gravel riffles.
Lavinia exilicauda exilicauda	Sacramento hitch	SSC	Warm lowland waters, including clear streams, turbid sloughs, and lakes and reservoirs.	Low. Marginal habitat is present in Rose Creek but the species is unlikely to occur in the BSA, as the BSA is located outside of current known range of species.
Lavinia symmetricus	San Joaquin roach	SSC	Small streams and intermittent watercourses. Most abundant in mid-elevation streams in the Sierra Nevada foothills.	Low. Marginal habitat is present within the BSA.
Amphibians				

Table 3.4-2
Special-status Wildlife Species with Potential to Occur within the BSA

Scientific Name	Common Name	Status	Habitat Description	Potential for Occurrence and Rationale
Rana boylii	foothill yellow-legged frog	SC / FS	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg laying.	Presumed Present. Rose Creek contains suitable aquatic breeding habitat. There is a CNDDB occurrence of the species from the Italian Bar Road Bridge from 2003, and additional occurrences downstream of the BSA.
Rana draytonii	California red-legged frog	FT / SSC	Occurs in a variety of ponds, sloughs, low-gradient streams, and low-salinity lagoons. Adults may forage in, and migrate through, terrestrial grasslands, riparian woodlands, and forests, but require weedy, slow moving or standing water that persists through most of the dry season for successful reproduction.	None. Marginal upland and aestivation habitat may be available. However, pools in Rose Creek in the BSA are not a suitable depth and do not provide the vegetative recover required for breeding. There are very few nearby CNDDB occurrences (the closest is from over 5 miles away). The species is considered extirpated from Tuolumne County and has not been observed in Stanislaus National Forest in over 30 years. (USFWS 2017, USFS 2017a, USFS 2017b, USFS 2017c).
Reptiles				
Actinemys marmorata	western pond turtle	SSC / FS	Ponds, marshes rivers, streams, and irrigation ditches that have emergent or riparian vegetation and sunny basking sites. Upland nesting habitat consists of friable soil exposed to full sun.	High. Suitable aquatic habitat is present in the BSA. There are CNDDB records of the species throughout Rose Creek and within the BSA.
Phrynosoma blainvillii	coast horned lizard	SSC	Found in a wide variety of habitats; most common in lowlands along sandy washes with scattered shrubs. Prefers open areas for sunning.	Low. Marginal habitat is present in the BSA. Few sandy areas present along creek edge.

Table 3.4-2
Special-status Wildlife Species with Potential to Occur within the BSA

Scientific Name	Common Name	Status	Habitat Description	Potential for Occurrence and Rationale
Birds				
Accipiter cooperii	Cooper's hawk	WL	Breeding habitat includes mature broadleaf or coniferous forest, as well as open woodland, forest edge, and riparian forests.	Moderate. Suitable nesting and foraging habitat is present in and adjacent to the BSA.
Accipiter gentilis	northern goshawk	SSC / FS	Species inhabits dense, mature conifer and deciduous forest, with meadows, other openings, and riparian areas of north coast coniferous forest, subalpine coniferous forest and upper montane coniferous forest communities. Nesting habitat includes north facing slopes near water; prefers middle and higher elevations. Breeding occurs in June. Occurs at mid to high elevations.	Low. Marginal nesting and foraging habitat is present in and adjacent to the BSA. However, there are no large or old growth trees within the BSA.
Aquila chrysaetos	golden eagle	FP / BCC	Rolling foothills, mountain areas, sage-juniper flats and deserts. Cliff-walled canyons provide nesting habitat in most parts of range; also large trees in open areas.	Low. Marginal nesting habitat is present in the BSA. There are no cliff-walled canyons or large trees in open areas in the BSA or nearby.
Asio otus	long-eared owl	SSC	Nests in conifer, oak, riparian, pinyon-juniper, and desert woodlands that are either open or are adjacent to grasslands, meadows, or shrublands. Key habitat components are some dense cover for nesting and roosting, suitable nest platforms, and open foraging areas.	Low. Marginal nesting and foraging habitat is present in the BSA.
Lanius ludovicianus	loggerhead shrike	BCC / SSC	In California, loggerhead shrikes breed mainly in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground.	Low. Marginal nesting and foraging habitat is present in the BSA.

Table 3.4-2
Special-status Wildlife Species with Potential to Occur within the BSA

Scientific Name	Common Name	Status	Habitat Description	Potential for Occurrence and Rationale
Picoides albolarvatus	white-headed woodpecker	BCC	Montane coniferous forest. Primarily occurs in pine and fir forest. Generally closely associated with Ponderosa pines.	Low. Marginal habitat is present. Although the BSA is not dominated by ponderosa pine, a large ponderosa pine occurs in the BSA and others are scattered throughout the area.
Psiloscops flammeolus	flammulated owl	BCC	Montane forest, generally open conifer forests with pine. In CA tends to breed from ponderosa pine to red fir forests. Has a strong preference for ponderosa and Jeffrey pines (*Pinus jeffreyi*).	Low. Marginal habitat is present. Although the BSA is not dominated by ponderosa pine, a large ponderosa pine occurs in the BSA and others are scattered throughout the area.
Mammals				
Antrozous pallidus	pallid bat	SSC / FS	Roosts in caves, mine tunnels, crevices in rocks, bridges, buildings, and hollowed trees.	Moderate. Mature trees adjacent to the BSA may provide marginal roost habitat for this species. No suitable crevices in bridge for day roosting. Bridge structure offers suitable night roosting habitat. No signs of bat roosting (guano or urine stains) observed during surveys.
Corynorhinus townsendii	Townsend's big-eared bat	SC / FS	Species occurs throughout California in all habitats except subalpine and alpine communities. Requires caves, mines tunnels, buildings or man-made structures for day and night roosts. Young born May-June.	Low. Bridge structure offers suitable night roosting habitat. No signs of bat roosting (guano or urine stains) observed during surveys.

Table 3.4-2
Special-status Wildlife Species with Potential to Occur within the BSA

Scientific Name	Common Name	Status	Habitat Description	Potential for Occurrence and Rationale
Euderma maculatum	spotted bat	- /-/SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Prefers rock crevices in cliffs for roosting but will occasionally utilize caves or buildings. Solitary; may forage with other species. Mates in autumn, births before mid-June (Sea level - 10,000 feet).	Low. Bridge structure offers suitable night roosting habitat.
Eumops perotis californicus	western mastiff bat	SSC	Primarily a cliff dwelling species with maternity roosts under exfoliating rock slabs, and crevices in large boulders and buildings. Foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland and agricultural areas (Siders 2005).	Low. Marginal roost habitat is present in rocky outcrops adjacent to project. Bridge structure offers suitable night roosting habitat.
Lasiurus blossevillii	western red bat	SSC	Roosts primarily in trees, 2-40 feet above ground. Prefers habitat mosaics and edges with open areas for foraging. Associated with riparian habitats in California.	Moderate. Suitable habitat is present in trees in the BSA.
Lasiurus cinereus	hoary bat	WBWG: Medium Priority	Prefers open habitats or habitat mosaics with cover. Roosts in dense foliage of medium to large trees. Requires water.	Moderate. Suitable habitat is present in trees in the BSA
Myotis ciliolabrum	western small-footed myotis	WBWG: Medium Priority	Dry wooded and brushy uplands near water. Seeks cover in caves, buildings, mines and crevices.	Moderate. Bridge structure offers suitable night roosting habitat.
Myotis evotis	long-eared myotis	WBWG: Medium Priority	Prefers coniferous forests and woodlands from sea level to 10,000 feet. Nursery colonies roost in buildings, crevices, under bark, and snags.	Moderate. Bridge structure offers suitable night roosting habitat.

Table 3.4-2
Special-status Wildlife Species with Potential to Occur within the BSA

Scientific Name	Common Name	Status	Habitat Description	Potential for Occurrence and Rationale
Myotis yumanensis	yuma myotis	WBWG: Medium Priority	Occurs in open forests with sources of water. Maternity colonies in caves, mines, buildings or crevices.	Moderate. Bridge structure offers suitable night roosting habitat.

Status:
FT = Federal threatened
FC = Federal candidate for listing
SC = State candidate for listing
SSC = Species of Special Concern (CDFW)
FS = Forest sensitive species (USFS)
BCC = Bird of Conservation Concern (USFWS)
FP = Fully protected species
WL = Watch list species

Notes:
WBWG - Western Bat Working Group

Source: CDFW 2017, USFWS 2018

3.4.2 DISCUSSION

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 Game or the U.S. Fish and Wildlife Service?

Potential Impacts on Special-status Plant Species

Less than Significant Impact with Mitigation Incorporated. Based on database searches and literature review, ten special status plant species: Sierra clarkia (*Clarkia virgata*), Streambank springtime beauty (*Claytonia parviflora* ssp. *grandiflora*), Mountain lady's slipper (*Cypripedium montanum*), Ewan's larkspur (*Delphinium hansenii* ssp. *ewanianum*), Stanislaus monkeyflower (*Erythranthe marmorata*), Tuolumne fawn lily (*Erythronium tuolumnense*), Parry's horkelia (*Horkelia parryi*), Tuolumne iris (*Iris hartwegii* ssp. *columbiana*), Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*), and Michael's rein orchid (*Piperia michaelii*) have the potential to occur within or adjacent to the BSA. None of these targeted species was documented during the three plant surveys that were conducted for the proposed project. Therefore these species were determined to be absent from the project site at this time. However, annual plants populations are ephemeral and do not always germinate each year, especially during drought conditions. With the implementation of avoidance and minimization measures discussed in this IS/MND, potential indirect effects such as dust, spread of invasive species, or downstream changes in hydrology or sedimentation will be avoided, and the impacts to these special-status species would be less-than-significant. In addition, the following avoidance measure would be implemented:

Measure BIO-1: Prior to initiation of the proposed action, the qualifications of the biological monitor(s) will be submitted to CDFW for approval. Such approved biologists are hereafter referred to as the "approved biologist(s)." The approved biologist will implement the following measures:

- Prior to the commencement of construction activities, the approved biologist shall conduct appropriately timed surveys for the potentially occurring plant species. If special-status plant species are found during the survey, all such plants shall be numbered, mapped, and identified in the field with pin flags. Special-status plant occurrences shall be avoided to the maximum extent possible. If special-status plant species cannot be avoided, a relocation plan will be prepared and the species shall be hand-excavated, removed from within the construction area, and replanted at a suitable location within the BSA. Appropriate agency coordination and protective measures will be established.

- In order to combat the introduction or spread of invasive species in the project area, the landscaping and erosion control included in the project will not use species listed as invasive. Management measures will be implemented to prevent the spread of weeds during construction and disturbed areas will be revegetated with native species appropriate to the area. Management measures may include (but are not limited to) the following, as feasible:
  - Use only certified, weed-free straw or rice straw mulch.
  - Use native, non-invasive species or non-persistent hybrids in erosion control plantings to stabilize site conditions and prevent invasive species from colonizing.
  - Minimize ground disturbance to the greatest extent possible.
  - Ensure construction equipment is cleaned to remove debris that could contain invasive species or their seeds prior to transport to and from the construction area.
  - Restrict washing of construction vehicles and equipment to approved maintenance facilities or staging areas.

Potential Impacts on Western Bumble Bee

Less than Significant Impact with Mitigation Incorporated. Western bumble bee (*Bombus occidentalis*) is a USFS sensitive species and listed as imperiled[1] by the Xerces Society (CDFW 2017). Western bumble bee was historically known from the Pacific coast to the Rocky Mountains, but its populations are now in decline. Select plant genera include *Melilotus*, *Cirsium*, *Trifolium*, *Centaurea*, *Chrysothamnus*, and *Eriogonum* (Koch et al. 2012). Similar to other bumble bees, the western bumble bee nests underground in cavities or random burrows left behind by rodents or other animals. No western bumble bees or their nests were observed during surveys of the BSA. Suitable habitat for western bumble bee exists in the upland areas surrounding Rose Creek, where it may forage among forbs in open areas. The project is unlikely to directly or indirectly impact western bumblebee individuals or nests. Construction activities will largely take place in previously disturbed areas that largely lack flowering forbs and suitable nesting areas such as rodent burrows and dead wood. Impacts to western bumble bees potentially occurring in vegetated areas will be minimized to less-than- significant levels through avoidance and Measures BIO-2 to Bio-4 (discussed in detail under Potential Impacts on Foothill Yellow-legged Frog). Any observed nesting areas (as indicated by bee activity) will be flagged for avoidance by construction personnel.

[1] Defined as those species at high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.

Potential Impacts on Fish

No Impact. The BSA does not include any streams where anadromous fish may occur, and no species subject to any fisheries management plans are known to be present in Rose Creek. In addition, no essential fish habitat is present within the BSA. The project will not create a barrier to fish passage from its implementation, as it will be constructed during the dry season, and once completed it will not block channel flow.

Two fish species have low potential to occur within the project area. These include riffle sculpin (*Cottus gulosus*) and San Joaquin roach (*Lavinia symmetricus*), both of which are State species of special concern. Habitats for these species are detailed in Table 3.4-2. Rose Creek provides marginal habitat for these three species.

The project would be implemented in the summer months during the dry season (April 15-October 15) when Rose Creek is likely to be dry (or at least without sufficient levels of flowing water to support fish), and is therefore unlikely to directly impact any fish species. Areas of ponded water in the creek in the summer months are not of sufficient size to support fish populations. Project-related indirect impacts could include increased erosion, sedimentation, or changes in hydrology, any of which could occur either during or after construction. The disturbance to the area surrounding the project, and associated removal of vegetation, has the potential for increased erosion and sedimentation of soils, affecting fish habitats outside the proposed project footprint. However, these indirect impacts will be avoided through implementation of avoidance and minimization measures for water quality, erosion control, species protection, and construction site (best management practices (BMPs) (discussed in more detail in the Hydrology and Water Quality section).

Potential Impacts on Foothill Yellow-legged Frog

Less than Significant Impact with Mitigation Incorporated. Foothill yellow-legged frog is a State species of special concern and is currently proposed for listing as Threatened under the California Endangered Species Act (CESA). It occurs in shallow, flowing streams with rocky substrate, at elevations below 6,000 ft. (Stebbins 2003, Hayes and Jennings 1988). Tadpoles are primarily herbivores, grazing on algae and diatoms, and adults feed on aquatic and terrestrial invertebrates.

Foothill yellow-legged frogs mate and lays eggs exclusively in streams and rivers (not in ponds or lakes). The timing and duration of breeding varies geographically and across populations, though generally occurs from April until early July, after streams have slowed from winter runoff. Clusters of eggs are laid on the downstream side of rocks in shallow slow-moving water where they are attached to submerged rocks and pebbles (California Herps 2016). On occasion, egg masses may be attached to aquatic vegetation, woody debris, and gravel. Eggs generally hatch within 5 to 37 days, depending on temperature, and tadpoles complete metamorphous within 3 to 4 months after hatching (California Herps 2016). Adult foothill yellow-legged frogs are highly aquatic and most commonly found in or near rocky perennial streams with at least some cobble-sized rocks and riffle areas and stream depth rarely greater than 1 meter (Van Wagner 1996). Adult migration appears to be limited to modest movement along stream corridors. Breeding occurs in pools within streams, and eggs are usually attached to gravel or rocks near pool or stream edges. In northern California, eggs have been found attached to cobbles and boulders at lower than ambient flow velocities near confluences of tributary drainages in wide, shallow reaches. Breeding sites are often used repeatedly.

There are a number of known occurrences within Tuolumne County including Hatch Lake, Second Lake, Rose Creek (within the BSA of the project), Hunter Creek, Bull Meadow, confluence of Big Jackass Creek and Moccasin Creek, south of Table Mountain, and tributaries to the South Fork Stanislaus River (CDFW 2016). There is a CNDDB record (#255) within the BSA from 2003 (CDFW 2017). The BSA does not contain critical habitat for foothill yellow-legged frog. No foothill yellow-legged frogs were observed during surveys of the BSA. Suitable habitat for foothill yellow-legged frog occurs the BSA, within and adjacent to Rose Creek. The species is assumed present due to the abundance and proximity of known occurrences.

Implementation of the proposed project could result in both direct and indirect impacts to foothill yellow-legged frog individuals. Construction will be limited to the summer and fall dry season to lessen potential impacts to water quality and biological resources including special-status species, nesting birds, and amphibians. Although the project would take place during the dry season when it is unlikely for there to be running water in Rose Creek, or flow would be greatly reduced, foothill yellow-legged frog has the potential to occur in the project area if any water persists in pools or damp areas, or if precipitation causes flow within Rose Creek. Direct impacts to foothill yellow-legged frog individuals from construction actions will be limited to the project footprint and staging areas. Direct impacts include those generated by construction noise, lights, vibration, and by human and vehicle traffic on the road and staging areas. If foothill yellow-legged frog were to be present in the BSA during construction, direct impacts on foothill yellow-legged frog individuals may occur in the form of harm, harassment, injury, and mortality to adult foothill yellow-legged frog. However, these impacts are expected to be minimal, but potentially significant because of the seasonal restriction, the small proposed action footprint, and the proposed avoidance and minimization measures.

Project-related indirect impacts could include increased erosion, sedimentation, or changes in hydrology, any of which could occur either during or after construction. The disturbance to upland areas and removal of vegetation could lead to increased potential for erosion and sedimentation of soils, affecting foothill yellow-legged frog habitats outside the proposed project footprint. Therefore, the entire reach of Rose Creek within the BSA is considered potential habitat. Implementation of avoidance and minimization measures for water quality, erosion control, species protection, and construction site BMPs (discussed in more detail in the Hydrology and Water Quality section), in addition to the measures below would reduce impacts to foothill yellow-legged frog to a to a less-than-significant level.

> **Measure BIO-2:** The approved biologist will implement the following measures to protect wildlife species:
>
> - The approved biologist(s) (knowledgeable about sensitive species and habitats in the action area) or designee(s) will conduct pre-construction surveys within two weeks before the start of construction activities to examine the BSA for occurrences of special-status wildlife species. In the event that individual special-status species, occupied nests, or other habitats are found, the approved biologist(s) will adhere to the measures set forth by the CDFW. Surveys should include the aquatic habitat within Rose Creek and upland habitat with the project footprint.
>
> - An additional survey for foothill yellow-legged frogs will be conducted by an approved biologist forty-eight hours prior to construction activities in Rose Creek and the adjacent upland habitat. The biologist will be familiar with the foothill yellow-legged frog life cycle and will conduct appropriate

surveys for the applicable life stage (eggs, larvae, adults). This survey will occur during daytime hours and will involve walking upstream along the channel edge at a starting point 50 feet downstream the project footprint, and extending 50 feet upstream. The total length of survey is estimated at 100 feet surrounding the work area (including uplands). The surveyor will visually scan upstream areas of the channel and banks with binoculars looking for basking adults and then proceed upstream looking down into the channel for larvae and eggs (depending on the time of year). All observed amphibians will be identified and recorded to species and, where possible, photographs taken.

- If no foothill yellow-legged frogs are found, the results of the survey shall be documented in a report to the County and no further action is required. If foothill yellow-legged frogs, tadpoles, or eggs are found, project acitvities will be delayed until the County determines, in consultation with CDFW, if the frogs need to be moved or protected in other ways (e.g., fencing, flagging, floats, etc.) from the nearby construction activity.

- If dewatering of standing pools is required, these pools will be surveyed for amphibian egg masses, tadpoles, and adults. An approved biologist will monitor construction activities during initial ground disturbance for impacts to foothill yellow-legged frog and other special-status species and bird nests in the vicinity of the project (discussed in further detail below under special-status species and migratory birds). Once ground clearance has been completed and the exclusionary fencing is in place (see below), monitoring would be limited to periodic checking of the integrity of the exclusion fence.

- Temporary exclusionary fencing (designed to prevent frogs from entering the work area) will be installed under the guidance of the approved biologist to prevent frog(s) from entering the work site. The exclusion fencing shall be similar to sediment fencing or be made of a material that does not allow foothill yellow -legged frog to pass through; plastic monofilament netting should not be used to prevent entanglement of individuals. The fencing shall be constructed around a defined work area around the stream, connecting to the diversion dam upstream and the pipeline outlet downstream and extending at least 20 feet from the stream in the upland areas (or up to the edge of the roadway). The fencing shall be buried a minimum of six inches into the ground. The integrity of the animal exclusion fencing shall be checked or verified once per week to identify weaknesses, and all compromised portions shall be repaired or replaced immediately.

- Onsite Construction Personnel Education Program: Before the onset of construction an approved biologist(s) will conduct an education program for all construction personnel. At a minimum, the training will include a description of foothill yellow-legged frog and other listed species and their habitats; the potential occurrence of these species within the project footprint; an explanation of the status of these species and protection under the Federal Endangered Species Act (FESA), CESA, and all other federal, state, and local regulatory requirements; the measures to be implemented to conserve listed species and their habitats as they relate to the work site; boundaries within which construction may occur, and instructions that construction activities must be halted if a foothill yellow-legged frog is observed in the construction area and the biologist notified immediately. A fact sheet conveying this information will be prepared and distributed to all construction crews and project personnel

entering the project footprint. Upon completion of the program, personnel will sign a form stating that they attended the program and understand all of the avoidance and minimization measures and implications of the FESA, CESA, and all other federal, state, and local regulatory requirements.

Measure BIO-3: Construction Work, Access, and Staging Areas: All proposed construction will be limited to the designated proposed impact areas. Bright-colored fencing shall be installed along the edge of the work limits, including staging areas. Fencing shall consist of orange construction fencing (or equivalent) and shall be maintained in good condition until construction is complete. Signage shall identify and restrict construction within environmentally sensitive areas.

Measure BIO-4: Wildlife encountered during the course of project activities shall be allowed to leave the area unharmed and on their own volition. During construction, if wildlife are observed in the active construction zone, construction will cease and a qualified biologist will be notified. Construction will resume when it is determined that the individual(s) has moved away from the construction zone.

Potential Impacts on California red-legged frog

No impact. California red-legged frog (*Rana draytonii*) is listed as a threatened species under FESA and is also a State species of special concern. California red-legged frogs are generally pond frogs that breed from late November to early April. Adult California red-legged frogs appear to prefer dense, shrubby or emergent riparian vegetation closely associated with deep (>2.3 feet), still, or slow-moving water (Hayes and Jennings 1988).

This species is known to disperse during periods of wet weather, typically starting with the first rains of fall (Stebbins 2003). These long-distance movements are straight-line, point-to-point migrations through all terrain, and not necessarily through riparian or other topographic corridors (Bulger et al. 2003).

There are four occurrences of California red-legged frog within Tuolumne County (CDFW 2017). The closest occurrences are from approximately six miles southwest of the BSA at Parrotts Ferry Road (#570) from 1975, which is the only historic occurrence in CNDDB within the Upper Stanislaus River watershed(which Rose Creek falls within) and approximately 4.25 miles southwest of the BSA at Woods Creek (#571) from 1950. Two additional occurrences in Tuolumne County were from Camp Mather (#1359) in 1922 and at Swamp Lake (#1360) in 1940, both of which are over 28 miles from the BSA. The Recovery Plan for the California Red-legged Frog notes occurrences within the vicinity of the Stanislaus National Forest, in San Antonio Creek (Calaveras County) in 1975, and in Jordon Creek in 1967 (USFWS 2002). All of these occurrences are considered possibly extirpated. The Mather and Swamp Lake occurrences are within the Tuolumne River watershed, in which California red-legged frogs are considered to be extirpated (USFWS 2002).

California red-legged frogs were not observed during surveys of the BSA. USFWS protocol level surveys were not conducted. However, the AECOM biologist conducted a focused California red-legged habitat assessment within the BSA, which included pedestrian surveys 400 feet upstream and 400 feet downstream of the bridge along Rose Creek (USFWS 2005). No suitable breeding habitat (deep pools with slow moving waters and emergent vegetation) was observed within the BSA along Rose Creek. Although there are patches of wetland vegetation on sandbars within the OHWM of the creek, shallow pools were devoid of vegetation such as cattails (*Typha* sp.), bulrushes (*Schoenoplectus* sp.), or shrubby willows within which California red-legged frog would

attach egg masses. Although the surrounding adjacent California grassland habitat provides marginal upland dispersal and refugia habitat, no burrows suitable for aestivation were observed in the immediate vicinity of the project area. The lack of recent records in the project vicinity, Tuolumne County, Stanislaus National Forest, and adjacent counties decreases the likelihood that an unknown population of California red-legged frog occurs nearby. Populations of California red-legged from within five miles of the project area considered extirpated and the BSA is not located within any California red-legged frog designated critical habitat units. Additionally, the BSA is not located within a core area for future recovery or reestablishment (USFWS 2002).Foothill yellow legged frog is known to occur on site, and there is limited overlap in habitat use between each frog species and introduced aquatic macrofaunal predators (Hayes and Jennings 1988). The project footprint presents suitable breeding habitat for foothill yellow legged frog, with shallow, slow-moving water and a cobble and pebble substrate that is used to anchor egg masses. However, no deeper pools (greater than 2.5 feet), with still water containing emergent vegetation suitable for attachment of California red-legged frog egg masses were observed.

There is no suitable breeding habitat for California red-legged frog within the BSA. The closest historic records, which are considered likely extirpated, are from nearly five miles away. In addition, the e species is believed to be extirpated from Stanislaus National Forest. Therefore, California red-legged frogs are not expected to occur within the project area. Therefore, there would be no impact to California red-legged frog. No specific avoidance and minimization measures for reducing impacts to California red-legged frog are required, since the species is not expected to occur in the project area.

Potential Impacts on Western Pond Turtle

Less than Significant Impact with Mitigation Incorporated. Western pond turtle (*Actinemys marmorata*) is a State species of special concern, as well as a USFS sensitive species. Northern western pond turtle inhabits ponds, marshes, rivers, streams, and irrigation ditches that have emergent or riparian vegetation and sunny basking sites. Upland nesting habitat consists of friable soil exposed to full sun. Both aquatic and upland nesting habitat occur in the BSA. There are CNDDB records of western pond turtle within the BSA, along the Rose Creek channel (CDFW 2017).

Western pond turtles were not observed during surveys of the BSA. Suitable habitat for the species exists within the BSA, in and along Rose Creek. The species is assumed present due to the proximity of known occurrences.

There is a potential for impacts to western pond turtle. These include a low potential for affecting the species during the summer month if individuals were to bask in moist areas of the Rose Creek channel or along the shoreline, to disperse or nest in upland areas adjacent to the project, or from construction noise, lights, vibration, or the presence of human and vehicle traffic at the construction area. There is also a potential that habitat could be degraded from construction activities and erosion or sedimentation.

Implementation of general BMPs (discussed in the Hydrology and Water Quality Section), Measures BIO-2 to BIO-4 for foothill yellow legged frog, and Measure BIO-5 below would reduce impacts to western pond turtle to a less-than-significant level.

> **Measure BIO-5:** Concurrent with surveys for foothill yellow-legged frog, an approved biologist shall survey the BSA for signs of western pond turtle nesting activity (i.e. recently excavated nests, nest plugs)

or nest depredation (partially to fully excavated nest chambers, nest plugs, scattered egg shell remains, egg shell fragments). Preconstruction surveys to detect western pond turtles in aquatic habitats should focus on suitable aerial and aquatic basking habitat such as logs, branches, rootwads, and rip-rap, as well as the shoreline and adjacent warm, shallow waters where pond turtles have the potential to be present below the water surface beneath algal mats or other surface vegetation. Preconstruction surveys to detect western pond turtle nesting activity should be concentrated within 100 feet of suitable aquatic habitat and should focus on areas along south- or west-facing slopes with bare hard-packed clay or silt soils or a sparse vegetation of short grasses or forbs. If western pond turtles or their nest sites are found, the biologist shall contact the CDFW to determine whether relocation and/or exclusion buffers and nest exclosures are appropriate. If CDFW approves of moving the animal, the biologist shall be allowed sufficient time to move the western pond turtle(s) from the work site before work activities begin.

Potential Impacts to Coast Horned Lizard

Less than Significant Impact with Mitigation Incorporated. Coast horned lizard (*Phrynosoma blainvillii*) is a State species of special concern. Coast horned lizard is found in a wide variety of habitats, including grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. It is most commonly found in lowlands along sandy washes with scattered shrubs in valleys, foothills and semiarid mountains (NatureServe 2016). The species prefers open areas for sunning. Suitable habitat exists with the BSA open grasslands along Rose Creek. No coast horned lizards were observed during surveys of the BSA, and the project is located along the far eastern edge of the species California range. However, there is marginally suitable sandy habitat on the banks of Rose Creek.

There is a potential for impacts to coast horned lizard individuals. These include a low potential for affecting the species if it were to be present in the BSA during construction, through injury from construction-related disturbance and modifications to behavior as a result of disturbances (e.g., noise or vibrations). However, these impacts are expected to be minimal because of the low likelihood of coast horned lizard occurring in the BSA, and the small footprint of the project. Implementation of general BMPs (discussed in the Hydrology and Water Quality Section) and Measures BIO-2 to BIO-4 for foothill yellow legged frog, would reduce impacts to coast horned lizard to a less-than-significant level.

Potential Impacts to Special-Status and Common Migratory Birds

Less than Significant Impact with Mitigation Incorporated. All migratory birds, including feathers or other parts, nests, eggs, or products are protected under the MBTA of 1918 (16 United States Code [USC] 703–712). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, except as allowed by implementing regulations (50 CFR 21). Disturbance that causes nest abandonment or loss of nest productivity (e.g., killing or abandonment of eggs or young) may be considered a "take" and is potentially punishable by fines and imprisonment. Incidental take permits are not issued for this act. Any proposed project must take measures to avoid the take of any migratory birds, nests, or eggs. All nesting birds protected under this law would need to be avoided during construction of the proposed project. Active nests of most birds are also protected under Section 3503 of the California Fish and Game Code. Raptor nests are also protected under Section 3503.5.

Species of migratory birds, some listed as special-status species, could use riparian habitat within the BSA for foraging and possibly nesting. Five special-status raptors have the potential to occur in the BSA; Cooper's hawk (*Accipiter cooperii*), northern goshawk (*Accipiter gentilis*), golden eagle (*Aquila chrysaetos*), long-eared owl (*Asio otus*), and flammulated owl (*Psiloscops flammeolus*). Two special-status passerine birds have a low potential to occur in open interior live oak woodland within the BSA; loggerhead shrike (*Lanius ludovicianus*) and white-headed woodpecker (*Picoides albolarvatus*).

During surveys, a single cliff swallow (*Petrochelidon pyrrhonota*) nest was observed attached to the underside of the existing bridge. Other migratory birds and raptors could nest within interior live oak woodland and red willow scrub habitats present in and adjacent to the BSA, as well as under the bridge. Larger trees, more suitable for nesting by raptors were observed adjacent to the BSA. Construction activities could result direct impacts on nesting migratory birds and special-status bird species. Direct impacts potentially include those generated by construction noise, lights, vibration, and by human and vehicle traffic on the road and staging areas. If nesting birds were to be present in the BSA during construction, direct impacts on individuals may occur in the form of harm, harassment, injury, nest abandonment and mortality. Indirect impacts include loss of habitat due to vegetation and tree removal. Trees immediately adjacent to the BSA offer potential raptor nesting habitat, and may be impacted by construction noise.

Implementation of general BMPs (discussed in the Hydrology and Water Quality Section), Measures BIO-2 to BIO-4 for foothill yellow legged frog, and Measures BIO-6 and BIO-7 below would reduce impacts to special-status and common migratory birds to a less-than-significant level.

> **Measure BIO-6:** Bird exclusionary netting would be installed at the beginning of the nesting season to deter birds from nesting underneath the existing bridge. Nest starts may also need to be removed by an approved biologist prior to the start of construction. If nests are found, coordination would be made with the applicable agency depending on the protection status of the species.
>
> **Measure BIO-7:** Preconstruction nesting bird surveys should be conducted by an approved biologist concurrent with surveys for foothill yellow-legged frog and western pond turtle (no more than two weeks prior to the start of construction) for activities (including vegetation clearing or cutting) occurring during the breeding season (February 15 to September 1).This should include surveys for tree, ground, and structure (bridge) nesting birds. Surveys for raptors should include an area within 500 feet of the construction zone.
>
> If nests are located, impacts shall be avoided by establishing 250-foot or other appropriate buffers (300 feet or more for raptors) around active nest sites and no new project activity shall occur within the buffer areas until the young have fledged, until the nest is no longer active, or until a qualified biologist has determined in consultation with CDFW that reducing the buffer would not result in nest abandonment. Monitoring of the nest by an approved biologist during construction activities shall be required to ensure that nests are not jeopardized.
>
> If rescheduling work around active raptor nests/roosts is infeasible, a qualified biologist should monitor nests for signs of disturbance. If it is determined that project activities are resulting in nest/roost disturbance, work should cease immediately, and the CDFW should be contacted**.**

Potential Impacts on Bats

Less than Significant Impact with Mitigation Incorporated. Nine bat species have potential to occur within the project area. These bat species and their habitats are detailed in Table 3.4-2. Pallid bat (*Antrozous pallidus*), spotted bat (*Euderma maculatum*), western mastiff bat (*Eumops perotis californicus*), and western red bat (*Lasiurus cinereus*) are CDFW species of special concern. Townsend's big-eared bat (*Corynorhinus townsendii*) is listed as a candidate threatened species by CDFW. Townsend's big-eared bat and pallid bat are USFS sensitive species. Western small-footed myotis (*Myotis ciliolabrum*), long-eared myotis (*Myotis evotis*), hoary bat (*Lasiurus cinereus*), and yuma myotis (*Myotis yumanensis*) are listed as medium priority by the Western Bat Working Group (WBWG) (CDFW 2017). The WBWG defines "Medium priority" bat species as species of concern that warrant further evaluation, research, and conservation actions of both the species and potential threats (WBWG 2013). Three bat species are USFS sensitive species. These bat species are generally widespread throughout many regions of California, and are commonly found in association with open forests and woodlands where there is a source of water over which to feed and find suitable roosting areas.

No roosting bats or signs of roosting bats (including bat guano or urine staining) were observed during surveys of the BSA. However, suitable roosting habitat occurs in the BSA, and includes tree cavities and the existing Italian Bar Road Bridge. Construction activities have the potential to disturb roosting sites for special-status and "medium priority" bat species that may be roosting during the day in tree cavities in or around the project area. While maternal roosting is unlikely due to regular motor vehicles driving over the bridge, daytime or nocturnal roosting could occur from spring through fall when the species is active. Disturbance of bats is of particular concern during the maternity roosting season (April 15 through August 31), when bats are likely to be raising young. Nocturnal roosting, which occurs in short intervals between feeding and usually at sites different than daytime and hibernaculum roosting sites, would not be adversely affected by the project since construction would only occur during daytime hours. The bridge structure does not offer suitable daytime roosting habitat, due to lack of crevices within the abutments. General construction activities are not likely to disturb bats roosting in nearby trees. However, removal of suitable tree roosting sites within the project footprint (including larger trees with cavities) would potentially have temporary negative impacts on bats. Disturbance or removal of a roost crevice could cause abandonment of a site.

Implementation of general BMPs (discussed in the Hydrology and Water Quality Section),Measures BIO-2 to BIO-4 for foothill yellow legged frog, and Measures BIO-8 and BIO-9 below would reduce impacts to bats to a to a less-than-significant level.

> **Measure BIO-8:** Preconstruction surveys should be conducted for all areas that provide suitable bat roosting habitat including man-made structures, snags, rotten stumps, mature trees with broken limbs, exfoliating bark, dense foliage, etc. Preconstruction surveys should focus on roosting bats and signs of roosting bats (e.g. bat guano) in and around tree crevices. If bat roosts are located during preconstruction surveys, the roosts will be flagged for avoidance during construction.
>
> **Measure BIO-9:** If potential roost sites (trees, snags, etc.) cannot be avoided during construction and are to be removed or trimmed, limbs smaller than 3 inches in diameter shall be cut and the tree shall be left overnight to allow for any bats using the tree/snag for roosting time to leave and find another roost. A biological monitor shall be present during the trimming or removal of trees/snags.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

Potential Impacts to Rose Creek (Intermittent Stream)

Less than Significant with Mitigation Incorporated. Rose Creek is an intermittent drainage that flows through the BSA from south to north. Rose Creek is a tributary to the Stanislaus River, a traditional navigable waterway subject to USACE jurisdiction under Section 404 of the CWA and CDFW regulation under Section 1602 of the Fish and Game Code.

Approximately 0.50 acre of the Rose Creek intermittent channel was mapped within the BSA, and 0.07 acre within the impact area. Within the BSA, the width of the channel at the ordinary high water mark (OHWM) varies between 11 feet to 43 feet. Construction activities will result in temporary placement of fill materials into Rose Creek, a jurisdictional water of the U.S. Permanent impacts would result from the shading of Rose Creek by the new bridge. Although the new bridge would be wider and longer, the placement of the new abutments and pier would not result in any additional fill in the creek bed, as these project components will be located outside the mapped boundary of Rose Creek (as delineated by the OHWM). In addition, the removal of the old bridge concrete piers would open up and widen the channel to increased flow. Therefore, there would be no permanent removal of waters. The placement of gravel in the creek to construct the temporary access route would result in temporary fill to the creek. This gravel will be removed and the creekbed restored once construction is complete. Earthmoving, excavation, placement of rock and fill, pile drilling, and blasting needed to construct the new bridge and the new approach roads could result in a temporary increase in sediment loads, turbidity, and siltation in Rose Creek. Creekbed disturbance during construction of the bridge pier and abutments could result in temporary increase in turbidity. Bridge demolition could potentially cause debris and dust to fall into the creek, degrading water quality. The bridge demolition would be phased in segments and BMPs utilized to minimize debris and dust from entering the water body. Implementation of avoidance and minimization measure BIO-10 below and the BMPs discussed in the Hydrology and Water Quality section would reduce impacts to Rose Creek to a less-than-significant level.

> **Mitigation Measure BIO-10:** To avoid and minimize potential impacts to Rose Creek, the County shall submit a Notice of Intent (NOI) to the Regional Water Quality Control Board (RWQCB) to determine if a Stormwater Pollution Prevention Plan (SWPPP) and/or other water quality control plans are required and comply with all conditions required as a result of the permitting process in accordance with the regulatory agency guidance for protecting water quality. In addition, the County shall obtain the following permits and abide by all permit conditions:
>
> - Section 404 Permit, USACE Nationwide Permit #33 Permit (Temporary Construction, Access, and Dewatering), for potential temporary impacts to waters of the United States.
> - Water quality certification from the RWQCB, Central Valley Region, pursuant to Section 401 of the CWA to ensure the project is consistent with the state's water quality standards and criteria.
> - Streambed Alteration Agreement from CDFW, Region 2, for all modifications to the bed and bank of Rose Creek and implement all measures outlined in the agreement.

Potential Impacts to Riparian Habitat or Sensitive Natural Communities

Less than Significant Impact with Mitigation Incorporated. The interior live oak woodland and red willow thickets in the BSA are considered communities of special concern by CDFW. The red willow thickets that occur in narrow patches along Rose Creek are considered riparian woodland and is subject to CDFW jurisdiction under Section 1602 of the California Fish and Game Code.

Approximately 2.70 acres of interior live oak woodland and 0.15 acre of red willow thickets occurs within the BSA. Based on the current project design, approximately 0.17 acre of interior live oak woodland would be impacted (0.09 acre of permanently impacts and 0.08 acre of temporary impacts), and 0.06 acre of red willow thickets (0.03 acre of permanent impacts and 0.03 acre of temporary impacts) by project construction. Project implementation would result in impacts to natural communities as a result of grading, removal of the existing bridge, construction of the replacement bridge, and the installation and use of the temporary bridge crossing structure to cross Rose Creek. Impacts include the removal of vegetation and conversion to disturbed habitat, or staging within the root zones of trees. Implementation of the general avoidance and minimization measures and BMPs (as discussed in the Hydrology and Water Quality Section) as well as measure BIO-11 below would reduce impacts to communities of special concern resulting from project construction to a less-than-significant level.

> **Measure BIO-11:** Temporarily impacted vegetation communities will be reseeded with native species that are typical to that habitat. Where possible, the contractor shall cut the above-ground portion of trees and shrubs, leaving the root systems intact to encourage rapid re-vegetation and re-growth during the growing season following construction. The footprint of the temporary bridge over of Rose Creek shall be returned to pre-construction conditions following the removal of the temporary bridge and this area shall be revegetated with suitable vegetation salvaged on-site site wherever possible. Where woody species (i.e., trees and large shrubs) are removed, these areas would be replanted with comparable native vegetation. ESA fencing will be placed around protected trees to avoid damage during construction. The topography of temporarily disturbed areas and the location of the existing bridge shall be contoured to blend with the surrounding area.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. Although some patches of wetland vegetation were observed within Rose Creek, these were mapped below the OHWM and are not considered separate wetlands, due to their small size. No wetlands were observed within the BSA. Therefore, there would be no impacts to wetlands.

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?

Less than Significant Impact. The BSA is located in the northern Sierra Nevada mountain range, which is an important wildlife migration corridor for a variety of common and special-status species. Within the BSA, the interior live oak woodland and Rose Creek function as a migration corridor. The creek is an important water source and provides nesting and foraging habitat for a variety of wildlife species including raptors, songbirds, and mammals. While some local disturbance would occur in the BSA as a result of project construction, these

activities would be limited to a small area and would be temporary in nature. They are not expected to interfere with any movement corridors or the movement of any wildlife or native resident or migratory fish species through the area. Upon completion of construction, the new bridge would be similar to the existing condition and Rose Creek will continue to function as an important water source and movement corridor. Impacts would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact. Three interior live oaks observed in the project footprint have a diameter at breast height (dbh) of over 24 inches, making them old growth oaks according to the Tuolumne County Oak Tree Ordinance (Tuolumne County Ordinance Code Chapter 9.24). With the implementation of Measure Bio-11 and the following measure, the project will have a less than significant impact on old growth oak trees and oak woodland habitat. However, under Section 9.24.040.B. of this ordinance, there is an exemption for "Removal of native oak trees as part of a construction project for which a permit has been issued by a state agency, such as Caltrans or the Department of Fish and Game". Because the removal of these trees would not be a great impact on a large scale to the surrounding woodland, the impacts would be less than significant. Tuolumne County may choose to pay in-lieu fees for each impacted old growth oak tree removed from the site.

Replacement of the bridge would not conflict with any other local ordinances, plans or policies protecting biological resources.

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

No Impact. The site is not subject to any local, regional or state habitat conservation plans. No impacts would occur.

3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
V. Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐
d) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?	☐	☐	☐	☒

3.5.1 ENVIRONMENTAL SETTING

CULTURAL RESOURCES INVESTIGATION

A Historic Property Survey Report and Archaeological Survey Report were completed by AECOM for the proposed project (AECOM 2016a and AECOM 2016b). These reports document the methods and results of the cultural resources investigations conducted for the project. The purpose of the investigations was to identify any historic properties or historical resources located within the proposed project's Area of Potential Effects (APE), which corresponds with the project footprint (Figure 3-1).

The investigation included a record and literature search conducted at the Central California Information Center (CCIC) of the California Historical Resources Information System, California State University, Stanislaus. The CCIC, an affiliate of the State of California Office of Historic Preservation (OHP), is the official state repository of cultural resource records and studies for Tuolumne County. The records search and the literature reviewed identified one built environment resource in the APE, the Italian Bar Road Bridge over Rose Creek (Bridge No. 32C0037). This bridge has been previously evaluated by Caltrans and was designated a Category 5 bridge – ineligible for National Register of Historic Places listing. No additional built environment resources were identified in or adjacent to the APE.

The records search and the literature reviewed did not identify any archaeological cultural resources within the APE. However, two previously identified archaeological resources (P-55-004101 and P-55-004102) are located within one mile of the APE. Resource P-55-004101 consists of a historic-period ditch that conveyed water from Rose Creek above Star Mine and delivered it to two mines around American Camp (Conners 1992). The ditch is approximately 22 feet long, approximately 3 feet wide, and varies from 1 to 4 feet in depth (Conners 1992). Resource P-55-004102 is a multicomponent site consisting of a historic-period mining related resource and prehistoric midden with a sparse lithic deposit (Shapiro 1992). The historic period resource includes an arrastra

(i.e., a stone mill used for processing gold ore), a brick concentration, deposit of historic-period debris, and prospect pits. The prehistoric lithic deposit includes three chert flakes, one obsidian flake, and one obsidian biface fragment (Shapiro 1992).

The County's consultant, AECOM, sent a letter briefly describing the project with a map depicting the APE to the Native American Heritage Commission (NAHC) in Sacramento asking the Commission to review their Sacred Lands File for any Native American cultural resources that might be affected by the proposed project. Also requested were the names of Native Americans who might have information or concerns about the APE. The NAHC responded on November 16, 2016 stating that a search of the Sacred Lands File yielded negative results. The NAHC also provided a list of two individuals who should be contacted. On November 28, 2016 AECOM sent emails describing the project with a map depicting the APE to the Native American individuals specified by the NAHC, requesting any information or concerns they might have regarding the APE. No responses to the emails AECOM sent were received, and AECOM made follow-up telephone calls to the individuals. A summary of these efforts is documented below:

- Melissa Powel, Chairperson, Chicken Ranch Rancheria of Me-Wuk Indians: On December 12, 2016 AECOM spoke with the Chicken Ranch Rancheria of Me-Wuk Indians tribal office. The tribe confirmed that they received the letter, and that it was forwarded on to tribal council. The tribal council did not have any questions or concerns at the time of the AECOM follow up phone call.

- Kevin Day, Chairperson, Tuolumne Band of Me-Wuk Indians: On December 12, 2016 AECOM spoke with Vicki Stone, Tuolumne Band of Me-Wuk Indians Cultural Coordinator, who confirmed receipt of the correspondence. Ms. Stone indicated that the tribe had no concerns at this time; however, in the event of an inadvertent discovery, the tribe should be contacted.

An intensive pedestrian survey of the archaeological APE was conducted on April 15, 2015 by an AECOM archaeologist. No archaeological cultural resources were identified in the project's APE as a result of the archaeological survey effort.

CULTURAL RESOURCES ENVIRONMENT

Prior to the advent of Euro-American settlement during the Gold Rush, the Central and Southern Sierra Miwok occupied the general region of the project area. The Southern Sierra Miwok occupied the foothills and mountains of the Sierra Nevada as far south as the Fresno River, including the drainages of the Merced and Chowchilla rivers. Their territory encompassed the Stanislaus River drainage and extended south to the divide between the Tuolumne and Merced rivers.

The historic period for interior central California began in the early nineteenth century. While Spanish Californians never attempted to settle inland, several exploring parties did penetrate the interior, while other groups of soldiers entered the Central Valley and surrounding hills in pursuit of runaway mission Indians. Serious investigation of the interior began in 1806, a year that saw four separate expeditions head inland. The most important of these originated in San Juan Bautista under the command of Gabriel Moraga. Moraga journeyed through much of the San Joaquin Valley, following the Kern and Kings rivers as far east as the foothills of the Sierra Nevada (AECOM 2016a). In 1808, Moraga again set off, leaving from San Jose and following the

Calaveras, Mokelumne, and Cosumnes rivers into the Sierra to their sources. He then examined portions of the lower American, Feather, and Sacramento rivers, and concluded his expedition with explorations of the foothill regions of the Tuolumne and Merced rivers.

In March 1850, miners camped for the night within the vicinity of what is now the community of Columbia, located gold in a nearby gulch. As a result the party remained encamped at the location, which is where the bridge now at the foot of Main Street where it crosses Columbia Gulch. The city would grow to be one of the largest mining camps in California with a population of several thousand (Kyle et al. 2002). Families began to settle in the area of Columbia as early as 1851. The town was often known as the "Gem of the Southern Mines" because of the great extent of its rich placer deposits. However, after the boom of the Gold Rush and with the decline of mining, its population shrank to a few hundred. Unlike other California mining towns, though, the city has remained and escaped the fate of becoming a ghost town (Kyle et al. 2002).

The Project area is located six miles northeast of Columbia near the historic-period location of the Star Mine (USGS 1891). Italian Bar Road originates in Columbia and travels up the steep western flank of the Sierra through the former settlements of Italian Bar and American Camp Station before reaching the Italian Bar Bridge over Rose Creek (USGS 1891, 1949). The gold mining district in the area was known as American Camp and included Italian Bar, French Camp, Star Ridge, and Grant Ridge (Clark 1970). Although scant information is known about the settlement of Italian Bar during the historic-period, it is known that it had a "6-stamp steam-driven mill" (Gudde 2007) and it is likely the area was settled by Italian miners. The location of Italian Bar Bridge is depicted on an 1879 map (Gudde 2007).

3.5.2 DISCUSSION

a and b) Cause a substantial adverse change in the significance of a historical resource or archaeological resource as defined in Section 15064.5?

Less than Significant Impact with Mitigation Incorporated. No historic or archaeological impacts were identified through the records and field reviews. Impacts are unlikely, but cannot be ruled out in the event of undiscovered buried resources if encountered during construction. In the event previously unknown resources are encountered, the following measure would apply.

> **Measure CUL-1:** If deposits of prehistoric or historical archaeological materials are discovered during non-monitored project activities, all work within 25 feet of the discovery shall cease and a qualified archaeologist contacted to assess the situation. The construction contractor shall consult with Tuolumne County Community Resources Agency as appropriate to make recommendations for the treatment of the discovery. Project personnel shall not collect or move any archaeological materials.
>
> It is recommended that adverse effects to the finds be avoided by project activities. If avoidance is not feasible, the archaeological deposits shall be evaluated by a qualified archaeologist, in consultation with the lead agency, to determine if the resource qualifies as a historical resource or unique archaeological resource, or as historic property. If the deposits do not so qualify, avoidance is not necessary. If the deposits qualify, adverse effects on the deposits shall be avoided, or effects shall be mitigated. Mitigation may consist of, but is not limited to, recovery and analysis of the archaeological deposit; recording of the

resource; preparation of a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological deposits discovered. The report shall be submitted to the County of Tuolumne Community Resources Agency for filing.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact with Mitigation Incorporated. Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined whether or not the remains are subject to the coroner's authority. There is no indication that human remains are present within the proposed project site. However, should human remains be encountered during project construction, the implementation of the following measure would ensure that potential impacts would be reduced to a less-than-significant level.

> **Measure CUL-2**: In the event that human remains are encountered during project construction, work within 50 feet of the discovery shall cease and the County Coroner shall be notified immediately. At the same time, a qualified archaeologist shall be contacted, in consultation with the lead agency, to assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission shall identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the County of Tuolumne Community Resources Agency.

d) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?

No Impact. With the recent adoption of AB 52, impacts on tribal cultural resources (TCR) must be addressed under CEQA. As defined in PRC Section 21074, a TCR is a site, feature, place, cultural landscape, sacred place, or object with cultural value to a "California Native American tribe," that is either on, or eligible for inclusion in, the CRHR or a local historic register, or is a resource that the lead agency, at its discretion and supported by substantial evidence, determines should be treated as a TCR.

No known prehistoric archaeological sites are within 0.25 mile of the project area. Such prehistoric resources also may be considered TCRs and can include sites, features, and objects that are CRHR-listed, eligible to be listed, or in a local register of historical resources as defined in PRC Section 5020.1(k). In addition, the Sacred Lands File maintained by the NAHC did not reveal the presence of sacred lands in the project vicinity. Therefore, no impact on a TCR would occur.

3.6 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VI. Geology and Soils. Would the project:				
a) Expose people or structures to 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 California Geological Survey Special Publication 42.)	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

3.6.1 ENVIRONMENTAL SETTING

The project site is located within the Sierra Nevada geomorphic province of California, which starts at Lassen Peak in the Cascade Range and extends southward toward the Tehachapi Mountains. The Natural Resources Conservation Service (NRCS) Soil Survey for Tuolumne County, California, describes surface soils across the project site as Josephine family, 35 to 70 percent slopes (NRCS 2016). The Josephine series consists of deep, well drained soils with moderately slow permeability. These soils formed in colluvium and residuum weathered from altered sedimentary and extrusive igneous rocks. Josephine soils are found on broad ridgetops, toeslopes, footslopes, and side slopes of mountains (NRCS 1964). This soil type does not contain hydric inclusions (NRCS

2015). Published geologic mapping shows the site as underlain by the Paleozoic Age Calaveras Complex. This unit is described as chert, argillite, greenstone, schist and slate.

A Foundation Report was produced by CA Inc (CA Inc 2016a). Based on the site analysis, the site is considered adequately stable with bridge foundation support available within intact metamorphic rock. No over-riding geologic hazards (e.g., faulting, landslides, subsidence, etc.) were identified by either published geologic mapping or site reconnaissance.

3.6.2 DISCUSSION

a) Expose people or structures to 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 California Geological Survey Special Publication 42.)

Less than Significant Impact. The project site is not located within a designated Alquist-Priolo Earthquake Fault Zone (DOC 2010, CA Inc 2016a) No evidence of surface rupture was observed during field exploration, and no active or potentially active faults have been mapped on the project site (CA Inc 2016a). Therefore, potential for fault rupture at the project site is low and this impact would be less than significant.

ii) Strong seismic ground shaking?

Less than Significant Impact. Tuolumne County and the entire Northern California region are located in a seismically active region subject to strong seismic ground shaking. While Tuolumne County is not within an Alquist-Priolo Earthquake Fault Zone, there are potentially active faults within Tuolumne County. However, the County has low seismic hazard potential; Tuolumne County lies within the portion of the State that has had no record of damaging shaking events since 1800. Historically, earthquake activity in Tuolumne County is substantially below the California State average (Rincon Consultants 2015). The proposed project would be designed and constructed consistent with County and Caltrans standards which are required to adhere to State seismic design parameters identified in the California Building Code. Moreover, the existing bridge is structurally deficient and would possibly be impacted by seismic shaking. The proposed project would result in an improvement to the existing structurally deficient bridge. Therefore, impacts related to seismic ground shaking would be less than significant and no mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact. The soils at the project site have been identified as Josephine family, 35 to 70 percent slopes, which do not exhibit characteristics of soils most susceptible to liquefaction. Rock is present at the surface and at shallow depths throughout the project area; therefore the area is not at substantial risk of liquefaction. Based on the presence of shallow metamorphic rock and with new bridge foundations installed with spread footings achieving bearing on/in the rock unit, liquefaction will not occur (CA Inc 2016a).

iv) Landslides?

Less than Significant Impact. The project location is not identified in the County's General Plan as an area susceptible to slumps and slide, debris slides, talus, or an area with unconsolidated debris. Landslide hazard risk.in Tuolumne County is generally low, while moderate in some areas (Rincon Consultants 2015). No evidence of faulting, springs, seeps or landslides was observed during the site visits conducted for the foundation studies (CA Inc 2016a) . The proposed project involves replacement of an existing bridge and would not alter slopes in the project area such that the project would create increased risk of landslides. Because the project site is not located in an area of known landslides or on steep terrain that would be prone to landslide activity and the proposed project would not increase landslide risk, this impact would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. The erosion potential of the Josephine soils can be classified as moderate to high. The proposed project would be designed to avoid potential for substantial erosion as a result of stream flows. Furthermore, the project would be required to comply with all applicable water quality and erosion control regulations, as well as applicable building codes. Because the proposed project would be designed to avoid erosion and constructed in compliance with all applicable codes and regulations, the risks of substantial soil erosion or loss of top soil would be minimal. With the implementation of BMPs discussed in the Hydrology and Water Quality section, this impact would be less than significant.

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?

Less than Significant Impact. As described above, the potential for hazard from landslide and liquefaction in the project area is low. Therefore, the potential for liquefaction induced lateral spreading is also low. Causes of soil instability include, but are not limited to, withdrawal of groundwater, pumping of oil and gas from underground, liquefaction, and hydro-compaction. The proposed project does not include the on-site withdrawal of groundwater. The project site is not located in an area that has been subjected to activities that might cause soil instability. Because the project site has not been subject to activities that may cause soil instability, the risk of subsidence or collapse is expected to be low. Therefore, this impact would be less than significant.

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

Less than Significant Impact. Project site soils have not been identified as expansive (NRCS 1964). Therefore, this impact would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed project would not generate wastewater requiring disposal. No septic tanks or alternative waste water disposal systems are included in the proposed project. Therefore, the proposed project would not result in impacts to soils associated with the use of septic tanks or alternative waste water disposal systems.

a) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact with Mitigation Incorporated. No paleontological resources (i.e., fossil remains of animals or plants) or unique geologic features are known to exist within the APE. However, should paleontological resources be discovered during project construction, implementation of the following measure would reduce potential impacts to paleontological resources to a less-than-significant level.

> **Measure GEO-1**: If paleontological resources are encountered during project construction, all ground-disturbing activities shall cease within 50 feet of the find until a qualified paleontologist can be contacted to evaluate the find and make recommendations in consultation with the lead agency. If the professional paleontologist determines that the paleontological resource is significant and project activities cannot avoid the resource, a paleontological evaluation and monitoring plan shall be implemented. The plan shall include measures to mitigate adverse effects to paleontological resources, which may include monitoring, data recovery and analysis, reporting, and the curation of all fossil material in a paleontological repository. Upon completion of project ground-disturbing activities, a report documenting methods, findings, and recommendations shall be prepared and submitted to the paleontological repository and a copy provided to County of Tuolumne Community Resources Agency.

3.7 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VII. Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.7.1 ENVIRONMENTAL SETTING

Most of the energy that affects the earth's climate comes from the sun. Some solar radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected by the atmosphere back toward space. As the earth absorbs high-frequency solar radiation, its surface gains heat and then re-radiates lower frequency infrared radiation back into the atmosphere. Most solar radiation passes through gases in the atmosphere that are classified as greenhouse gases (GHGs); however, infrared radiation is selectively absorbed by GHGs. GHGs in the atmosphere play a critical role in maintaining the balance between earth's absorbed and radiated energy, earth's radiation budget, by trapping some of the infrared radiation emitted from the earth's surface that otherwise would have escaped to space. Specifically, GHGs affect the radiative forcing of the atmosphere, which in turn affects the earth's average surface temperature. This phenomenon, the greenhouse effect, keeps the earth's atmosphere near the surface warmer than it would be otherwise and allows successful habitation by humans and other forms of life.

The combustion of fossil fuels and deforestation releases carbon that historically has been stored underground in sediments or in surface vegetation into the atmosphere, thus exchanging carbon from the geosphere and biosphere to the atmosphere within the carbon cycle. With the accelerated increase of fossil fuel combustion and deforestation since the Industrial Revolution of the nineteenth century, concentrations of GHGs have increased exponentially in the atmosphere. Such emissions of GHGs in excess of natural ambient concentrations contribute to the enhancement of the natural greenhouse effect. This enhanced greenhouse effect has contributed to global warming, an increased rate of warming of the earth's average surface temperature. Specifically, increases in GHGs lead to increased absorption of infrared radiation by the earth's atmosphere and warm the lower atmosphere further, thereby increasing temperatures and evaporation rates near the surface. Variations in natural phenomena, such as volcanoes and solar activity, produced most of the global temperature increase during preindustrial times; however, increasing atmospheric GHG concentrations resulting from human activity have been responsible for most of the observed global temperature increase in recent times.

GLOBAL CLIMATE CHANGE ISSUE

Climate change is a global problem because GHGs are global pollutants, unlike criteria air pollutants and hazardous air pollutants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes

(several years to several thousand years). GHGs persist in the atmosphere for a long enough time to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule depends on multiple variables and cannot be pinpointed, more carbon dioxide (CO_2) is currently emitted into the atmosphere than is sequestered. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through photosynthesis and dissolution, respectively. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; the quantity is enormous, and no single project would be expected to measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or microclimate.

3.7.2 DISCUSSION

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. The proposed project would generate exhaust-related GHG emissions during construction resulting from operation of construction equipment, material haul and delivery trucks, and trips by construction worker vehicles. Construction-related GHG emissions would occur for approximately six months and would cease following completion of the project. Operational emissions associated with vehicle traveling across the bridge would occur during construction and continue following completion of the proposed project. However, construction of the proposed project is not anticipated to result in a net increase in VMT. The proposed project is not a land-use development project that would generate vehicle trips and is not a roadway capacity increasing project that could carry additional VMT. Therefore, the proposed project would not result in a net increase in operational GHG emissions and thus operational-related GHG emissions would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. As discussed above, the proposed project would not generate a net increase in long-term operational VMT or GHG emissions following construction of the proposed project. Thus, it is not anticipated that the proposed project would interfere or obstruct implementation of an applicable GHG emissions reduction plan. The proposed project would be consistent with all applicable local plans, policies, and regulations for reducing GHG emissions and this impact would be less than significant.

3.8 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. Hazards and Hazardous Materials. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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 for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

3.8.1 ENVIRONMENTAL SETTING

An Initial Site Assessment (ISA) was prepared for the proposed bridge replacement by CA Inc in December 2016 (CA Inc 2016b). The following information is derived from that document.

INITIAL SITE ASSESSMENT (ISA)

The ISA included evaluations of historical records, agency records, and site visit observations. The ISA report prepared for the proposed project discussed the potential for heavy metals in mine tailings, NOA, and lead based

paint (LBP) . The analysis included laboratory analysis of soil samples which revealed that the samples showed no hazardous waste metals concentrations. Based upon the sampling performed and laboratory data, no further assessment was recommended.

CA Inc's site visit observations and historical research identified the presence of historic mining activities along the creek. No mine tailings were noted along the creek bed and banks upstream and downstream of the existing Italian Bar Road Bridge.

National Analytical Laboratory, Inc. (NAL) collected lead suspect samples according to the Housing and Urban Development Guidelines, the EPA and California Public Health Department. Yellow paint was found on concrete in various areas and red paint was found on the southeast concrete paneled railing. The analytical results indicated these surfaces contained an undetectable amount of lead based on OSHA's Limit of Detection.

CA Inc reviewed the potential for Naturally Occurring Asbestos (NOA) in the study area by performing field reconnaissance and reviewing published geologic mapping. The geologic mapping reviewed as part of this study does not indicate ultramafic rocks or rocks suspected to contain NOA are present within the study area. CA Inc did not observe rock outcrops or rock fragments that are suspected to contain NOA in the study area during field investigations. Although NOA can be associated with faults, no mapped faults are depicted within the study area. The potential for NOA in the study area is considered generally low and no further study was recommended.

DISCUSSION

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

Less than Significant Impact. The proposed project includes the replacement of the existing Italian Bar Road Bridge. No net increase in VMT is anticipated. Due to the remoteness of the location and the condition of the road, hazardous materials are not generally transported along Italian Bar Road. At the conclusion of project construction, there would be no routine transport, use, or disposal of hazardous materials associated with the proposed project. As discussed above, no hazardous materials were noted on site, including within bridge materials. The bridge and APE were examined for indications of materials that may be considered hazardous, including components of the concrete structure and guard rails. It was observed that the bridge and guard rails are constructed of concrete and are not painted, except for some graffiti on the abutments. No treated wood or metal components were observed. There were no structures or other development observed on surrounding land.

Existing structures that will be impacted by project demolition are constructed of materials having the potential to contain asbestos. Concrete bridge components (piers, footings, abutments, deck) could potentially contain asbestos. Asbestos Containing Building Materials (ACCM), as defined in the California Code of Regulations, Title 8, Section 1529 of the Construction Safety Orders, can be present in construction materials such as bridge joint seals, bearing pads, shims, deck drains or other less obvious materials such as pipe conduits for utilities. Federal regulations require a Certified Asbestos Consultant (CAC) make definitive conclusions regarding the presence of ACCM. Under the federal asbestos National Emissions Standards for Hazardous Air Pollutants regulations (NESHAP, 40 CFR Part 61, Subpart M), a CAC must make definitive conclusions regarding the presence of ACCM. Prior to demolition, the existing structures are required to have an asbestos survey completed to determine the appropriate method of handling and disposal. Written notification to the Tuolumne County Air

Pollution Control District (TCAPCD) of demolition or renovation operations on structures is required at least 10 business days prior to conducting the work, regardless of the presence or absence of asbestos in building materials.

A bridge inspection was completed by NAL in conformance with the EPA's Asbestos Containing Building Materials (ACCM) In-Schools Rule and 40 CFR 763.85 (Inspection and Re-Inspection). Suspect asbestos bulk sample materials were collected in accordance with EPA and OSHA protocols. MicroTest Laboratories, Inc. analyzed the samples. The bridge inspection and analytical results indicated that no ACCM is present in the area that will be renovated.

Project construction would include the use of heavy equipment for grading, hauling, and materials handling. Use of heavy equipment inherently includes the use of hazardous substances such as, but not limited to, fuels, solvents, and lubricants. If used properly, these materials would not pose a significant risk to the public or the environment. The project may require a fuel tank be present on site for re-fueling. This fuel tank may require a permit from the Tuolumne County Environmental Health Department. Alternatively, fuel dispensing activities on the national forest would be subject to the Special Use Permit. Potential impacts related to the transport, use, or disposal of hazardous materials would be reduced to less-than-significant with implementation of BMPs (including the preparation of a SWPPP, as discussed in the Hydrology and Water Quality section). No additional measures are required.

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

No Impact. The proposed project includes the replacement of the existing Italian Bar Road Bridge. Operation of the proposed project, once completed, would be essentially identical to existing operations. Therefore, operation of the proposed new bridge would not create a significant impact.

c) 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 schools located within one-quarter mile of the project site. Because there are no schools within one-quarter mile of the project site, the proposed project would not have an impact on existing or proposed schools.

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

No Impact. As discussed in the ISA, the project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (PEI 2012a:25). In addition, the project area does not contain levels of aerially deposited lead (ADL) because of the historically low traffic volumes along this road (i.e., ADL is primarily of concern along heavily traveled highways or urban roads). The Average Daily Traffic on the bridge was reported to be 140 vehicles in 2009 (FHWA 2017). Due to the low historical traffic in the study area, ADL concentrations are expected to be insignificant and an ADL study was not warranted. 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 for people residing or working in the project area?

No Impact. The proposed project is not located within two miles of a public airport. The closest airport to the project site is the Columbia Airport in the unincorporated community of Columbia, approximately 7.25 miles south west of the project site. The project site is not located within the airport's influence area (Shutt Moen Associates 2003). Therefore, the proposed project would have no impact related to exposing people residing or working in the project area to airport safety hazards.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. As discussed in response e) above, the proposed project is not located within the vicinity of an airstrip. Therefore, the proposed project would have no impact related to exposing people residing or working in the project area to airport safety hazards.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The proposed project would not interfere with any adopted emergency response plans or evacuation plans. During construction, a temporary creek crossing constructed immediately west of the existing bridge would maintain traffic on Italian Bar Road. The temporary creek crossing would be installed prior to the closure of the existing bridge. Therefore, because a temporary crossing would be available for the duration of construction activities, the proposed project would have a less than significant impact related to interference with emergency response or evacuations.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less than Significant Impact. The California Department of Forestry and Fire Protection (CAL FIRE) identifies the a large portion of Tuolumne County as having a moderate to very high risk of wildland fire (CAL FIRE 2007). The project is located on federal land, adjacent to parcels labeled by CAL FIRE as very high fire hazard severity. However, the proposed bridge replacement is in a rural area and would not include the development of habitable structures. Construction activities would not present a significant risk to igniting wildland fires, and the one purpose of the project is to improve access for firefighting vehicles Therefore, implementation of the proposed project would result in a less than significant impact related to wildland fires.

3.9 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IX. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?	☐	☐	☒	☐
e) 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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

3.9.1 ENVIRONMENTAL SETTING

A Design Hydraulic Study (Avila & Associates 2016a) and a Water Quality Technical Memorandum (Avila & Associates 2016b) were completed for the proposed project. The information for the following section was based on this study.

The Tuolumne County Water Quality Plan was adopted in February 2007 to establish a watershed-based planning framework. The plan addresses storm water runoff and non-point source pollution impacts on water quality within Tuolumne County's watersheds to improve the quality of the County's water resources over a 20-year planning horizon. The plan establishes conditions and mitigation measures, best management practices, and monitoring programs addressing cumulative impacts to water quality. The Plan focused on three principal non-point sources of water pollution water quality concerns: pathogens and nutrients, urban contaminants (leaking underground storage tanks, disposal practices, and pH uncertainties), and erosion and sedimentation.

The USFS's Stanislaus National Forest Land and Resources Management Plan (1991) directs management activities within the Stanislaus National Forest. The management plan calls for the protection of water quality and establishes a minimum 100-foot influence zone from streams, lakes, and reservoirs. BMPs to protect water quality in riparian areas are prescribed based on the width of Streamside Management Zones (SMZ). SMZ width is determined using the stream class, percent ground cover, and percent side-slope. Additional BMPs are required during construction to minimize water quality impacts (USFS 1991). The USFS describes BMPs in their 2000 *Water Quality Management for Forest System Lands in California: Best Management Practices.* USFS's BMPs for road construction include measures to prevent construction-generated erosion, such as:

- an erosion control plan should be developed and reflected in the contract specifications and provisions outlining methods for preventing construction-generated erosion;
- construction should be completed during minimal runoff periods whenever possible;
- road slope surfaces and spoil disposal areas should be stabilized using bioengineering and other techniques; and
- road drainage should be designed to disperse collected runoff to reduce downstream peak flows and associated scouring of channels and sediment transport (USFS 2000).

The proposed Project is located within the San Joaquin River Hydrologic Region groundwater basin number 5-22 (California Department of Water Resources [CDWR] 2003). The San Joaquin River Hydrologic Region covers approximately 9.7 million acres (15,200 square miles) and includes all of Calaveras, Tuolumne, Mariposa, Madera, San Joaquin, and Stanislaus counties, most of Merced and Amador counties, and parts of Alpine, Fresno, Alameda, Contra Costa, Sacramento, El Dorado, and San Benito counties. Significant geographic features include the northern half of the San Joaquin Valley, the southern portion of the Delta, the Sierra Nevada Mountains, and Diablo Range (CDWR 2003). This unit is not considered an important source of groundwater but may locally yield sufficient supplies for domestic and agricultural use. The project area does not contain Tuolumne Utilities District (TUD) groundwater wells or sewage facilities and does not have the potential for aquifer contamination. There are no existing public storm drainages in the project vicinity.

3.9.2 DISCUSSION

a) Violate any water quality standards or waste discharge requirements?

Less than Significant Impact with Mitigation Incorporated. Project operation would not involve any activities that could contribute to violation of water quality or Waste Discharge Requyirements (WDR). Project construction could cause temporary water quality impacts due to grading, excavation, dewatering, vegetation removal, and bridge construction.

Construction will be limited to the summer and fall dry season to lessen potential impacts to water quality and biological resources including special-status species, nesting birds, and amphibians. Potential short-term water quality effects from project construction would be minimized and reduce through implementation of BMPs and compliance with applicable regulatory requirements. Pursuant to the Federal Clean Water Act, the California Fish and Game Code, and other environmental regulations, the following construction BMPs and avoidance and minimization measures will be incorporated into the proposed project to minimize and/or avoid impacts to sensitive species and habitat as well as to common biological resources. These BMPs will be communicated to the contractor through the use of standard and non-standard special provisions in the bid solicitation package. Implementation of the following measures would ensure compliance with regulatory requirements and reduce potential impacts to less than significant.

The following mitigation measures include measures identified in other reports such as the Water Quality Technical Memorandum (Avila and Associates 2016b):

> **Measure HYDRO-1:** Before any ground-disturbing activities, the County shall prepare and implement a storm water pollution prevention plan (SWPPP) or a water pollution control plan (WPCP), as applicable, that includes erosion control measures and construction waste containment measures to ensure that waters of the U.S. and state are protected during and after project construction. The plan (a SWPPP or WPCP) shall follow guidance in the current version of the Caltrans Stormwater Pollution Prevention Plan and the California Stormwater Quality Association BMP Handbook. The SWPPP shall include site design to minimize offsite storm water runoff that might otherwise affect adjacent creek or stream habitat. The Plan (a SWPPP or WPCP) shall be prepared with the following objectives: (a) to identify pollutant sources, including sources of sediment, that may affect the quality of storm water discharges from the construction of the proposed project; (b) to identify BMPs to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the Project during construction; (c) to outline and provide guidance for BMP monitoring; (d) to identify proposed project discharge points and receiving waters; to address post-construction BMP implementation and monitoring; and (f) to address sedimentation, siltation, and turbidity.
>
> **Measure HYDRO-2:**
>
> **BMPs:**
>
> - Maintenance and refueling areas for equipment would be kept a minimum of 100 feet from the Rose Creek channel, and only on designated disturbed/developed areas where accidental spills can be contained immediately. All equipment shall be refueled with appropriate drip pans, absorbent pads,

and water quality. Equipment and vehicles operating in the project area shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids. Spill containment materials would be maintained onsite at all times during construction operations and/or staging or fueling of equipment.

- No debris, soil, rubbish, cement, concrete or concrete washings or other material from activities related to demolition of the existing bridge shall be allowed to enter into waters. Except for temporary stockpiling of waste generated during demolition operations (generated and removed during the same working day), waste materials shall not be placed where the materials may be washed by rainfall into waters of the U.S. and state.
- All off-road construction equipment should be cleaned of potential noxious weed sources (mud and vegetation) before entering the project footprint and after entering a potentially infested area before moving on to another area. The contractor will employ whatever cleaning methods (typically spraying with a high-pressure water hose) are necessary to ensure that equipment is free of noxious weeds.
- Erosion control: Standard construction BMPs will be installed prior to the start of, and implemented throughout construction, in order to avoid and minimize adverse effects to the water quality within the project site. Appropriate erosion control measures will be used (e.g., hay bales, filter fences, vegetative buffer strips or other accepted equivalents) to reduce siltation and contaminated runoff from the project site. All disturbed soils will undergo erosion control treatment prior to October 15 and/or immediately after construction is terminated. Erosion control blankets will be installed on any disturbed soils steeper than a 2:1 slope.
- To ensure that wildlife are not trapped, tightly woven fiber netting (no monofilament netting) or similar material shall be used for erosion control or other purposes within the project work limits. Coconut coir matting and burlap-contained fiber rolls are an example of acceptable erosion control materials.
- Restoration/revegetation: Immediately after bridge construction is complete, all exposed soil shall be stabilized, and all temporarily disturbed areas will be restored to pre-construction conditions. Soil stabilization may include, but is not limited to, seeding with a native grass seed mix, planting native plants and placement of rock.
- Contingency plan for rain during construction period: If dewatering is necessary, a diversion or isolation plan would be used to dewater the construction area. Intakes will be completely screened with wire mesh not larger than 0.2 inch to minimize the risk of wildlife species, particularly foothill yellow-legged frog, from entering the pump system. Upon completion of construction activities, any barriers to flow will be removed in a manner that will allow flow to resume with the least disturbance to the substrate. Water produced from the dewatering operations would be pumped, treated as necessary, and discharged according to project permits and applicable regulations. All discharge would be tested in accordance with the General Water Discharge Requirements and National Pollution Discharge Elimination System (NPDES) Permit for Dewatering.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Less than Significant Impact. The proposed project includes replacement of an existing bridge across Rose Creek. The proposed project would not add a substantial amount of new impervious surface. Because the proposed project would not include a large amount of new impervious surfaces, the proposed project would not be expected to substantially interfere with groundwater recharge on the project site.

Operation of the proposed project would not require any water supply. A search of the State Water Data Library website revealed no wells within the project vicinity (CDWR 2017). Construction activities would require a minimal amount of water for dust suppression and site housekeeping. Water for construction would be supplied by a water truck from a nearby municipal source. No groundwater would be pumped on the project site. Because the proposed project would not require the use on groundwater on the project site and would only add a negligible amount of impervious surfaces, impacts on groundwater supply and recharge would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?

Less than Significant Impact. During project construction, the existing drainage pattern of the project site would be modified by installation of the temporary creek crossing over temporary culverts, removal of the existing bridge, and construction of the new bridge and roadway approaches. Ttemporary culverts and a temporary cofferdam would be part of the design to divert creek flow away from the construction area. However, the project will take place during the dry season, and the temporary drainage pattern modifications would be minor.

Hydraulic modeling was used to estimate the water surface elevation for the existing and proposed bridges. Model results indicate that discharges from the 50-year and 100-year storm overtop the existing bridge. The water surface elevation at the upstream face of the proposed bridge will be significantly less than for the existing bridge. This is due to the fact that the proposed bridge will be approximately 34 feet longer than the existing bridge and elevated. The removal of the existing bridge abutments and pier wall would open up and widen the channel slightly to allow for increased flow. The proposed bridge will improve the hydraulics significantly because it will be longer and higher than the existing bridge providing increased flow area. However, the existing drainage pattern upstream and downstream of the bridge would not be substantially altered, and the project would not result in substantial on- or off-site erosion or siltation. Because the existing drainage pattern would not be substantially altered, this impact would be less than significant.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?

Less than Significant Impact. See responses b) and c) above.

e) 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?

Less than Significant Impact. See responses b) and c) above.

f) Otherwise substantially degrade water quality?

Less than Significant Impact within Mitigation Incorporated. See response a) above. .

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The project site is located within the FEMA-designated 100-year floodplain (Federal Insurance Rate Map (FIRM) Panel 06109C). The proposed project does not include housing, and would not place structures within a 100-year flood hazard area.

h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

No Impact. See response g) above.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. As discussed in response above, the proposed project would not impede or redirect flood flows. Moreover, the proposed project would not involve any activities near a levee or dam. The proposed bridge would not modify hydraulics significantly and would reduce the likelihood of flows overtopping the bridge. Therefore, there would be no impact from the proposed project which would increase the risk of flooding, and the proposed project would have no impact related to failure of a levee or dam.

j) Result in inundation by seiche, tsunami, or mudflow?

No Impact. The project site is not adjacent to the ocean or any other large body of water that could result in inundation by seiche or tsunami. While the project site is located in a mountainous area, the project site is not located in an area that is at risk of or prone to mudflows.

3.10 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
X. Land Use and Planning. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

3.10.1 ENVIRONMENTAL SETTING

The project site is located in an unincorporated area approximately 10.6 miles northeast of the intersection of Italian Bar Road and Yankee Hill Road in the community of Columbia, within the Stanislaus National Forest within Tuolumne County. The project site is zoned 'Public' under the Tuolumne County Code of Ordinances.

3.10.2 DISCUSSION

a) Physically divide an established community?

No Impact. The proposed project would replace an existing bridge. The existing bridge provides a general east-west connection over Rose Creek. Rose Creek is an existing natural feature that currently separates the public land to the east from the west. During construction, a temporary creek crossing would be constructed so there would be minimal disruption to traffic on Italian Bar Road. The new bridge would maintain the existing connection between areas east and west of Rose Creek. No division of an existing established community would occur. Therefore, the proposed project would have no impact on an established community.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed project does not involve a change in land use and the project is planned consistent with the County General Plan. The project will not conflict with applicable land use plans, policies, or regulations. Therefore, the proposed project would have no impact related to any applicable land use plan, policy, or regulation.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The proposed project site is not located in or covered by a habitat conservation plan or natural community conservation plan. Therefore, there would be no impact related to a habitat conservation plan or natural community conservation plan.

3.11 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XI. Mineral Resources. 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.11.1 ENVIRONMENTAL SETTING

The area surrounding the bridge site is historically known for gold and other mineral resource deposits. Two hard rock mines are located upstream from the project site approximately 1.5 miles on Rose Creek: Indian Girl Mine and Star Mine. Both mines are known as coarse gold bearing and the Star Mine also has sulfide mineral resources such as Galena, Pyrite and Sphalerite.

A nearby site (listed as Kamoi, 270 feet south of the project site) was found in the Mine Resource Data System (MRDS), and listed as a gold mine. Upon further research through the Hudson Institute of Mineralogy, CA Inc found a record of a reported placer Au (gold) claim in the vicinity of the project site (CA Inc 2016a). A claim monument was found during a field reconnaissance on November 14, 2016, however, no evidence of mining was observed; mine waste or evidence of mine tailings, etc. was not observed at the site. A recorded notice of the claim dated June 5, 2015 was found in the claim post.

3.11.2 DISCUSSION

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?

No Impact. The project construction would not impact mineral resources located on or near the project site through the removal of potentially economically important land. Therefore, the proposed project would have no impact related to the loss of availability of a mineral resource.

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. See response a) above.

3.12 NOISE

ENVIRONMENTAL ISSUES		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XII.	**Noise. Would the project result in:**				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☒	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without 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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

3.12.1 ACOUSTICS FUNDAMENTALS AND TERMINOLOGY

Sound levels in this analysis are described as "A-weighted" or dBA. Under controlled conditions in a laboratory setting, the trained, healthy human ear is able to discern 1 dB changes in sound levels. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Furthermore, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy that would result in a 3 dB increase in sound pressure level would generally be perceived as barely detectable.

Noise in our daily environments fluctuates over time. Some fluctuations are minor, but some are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors used in this analysis:

- **Maximum Sound Level (Lmax)**: The Lmax is the highest instantaneous sound level measured during a specified period.

- **Day-Night Average Level (Ldn)**: The Ldn is the energy-average of A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours (10 p.m.-7 a.m.).

Sound from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern; therefore, this type of propagation is called *spherical spreading*. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point/stationary source as its energy is continuously spread out over a spherical surface (i.e., a doubling of distance from the source of sound represents a spherical surface area increase of 4 times. 10log (4) is approximately 6 dB).

3.12.2 ENVIRONMENTAL SETTING

The primary existing noise source in the project area is occasional vehicle traffic (reported as 140 vehicles per day in a 2009 study [FHWA 2017] discussed in the Hazards and Hazardous Materials section) on Italian Bar Road. The level of vehicular noise generally varies with the volume of the traffic, the percentage of truck traffic, the speed of the traffic, and the distance from the roadway.

The proposed project would replace an existing structurally deficient bridge structure in an area that is undeveloped (Stanislaus National Forest), with sparse rural residences in the area. The closest identified noise-sensitive receptors (residences) to the project site are on the outskirts of the small unincorporated community of Jupiter approximately 1.25 miles (as the crow flies) to the northeast.

3.12.3 DISCUSSION

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less than Significant Impact. The short-term construction and long-term operational noise impacts of the proposed project are described below.

Short-Term (Construction) Impacts. Construction operations would be allowed during the hours of 7 a.m. and 7 p.m., Monday through Friday, and between the hours of 8 a.m. and 5 p.m. on weekends or on federally recognized holidays. Construction of the proposed project would add short-term, intermittent noise from use of equipment and vehicles. Within 50 feet of the noisiest construction source, maximum noise levels could be in the range of 81-88 dBA (L_{max}) (cranes, rollers, haul trucks), with variations in construction noise levels on a day-to-day basis depending on the specific activities occurring at the site. Construction activities would be required to comply with the Tuolumne County General Plan (Chapter 5, Noise Element) (Tuolumne County 1996). For the closest sensitive receptors, the maximum allowable noise level would be 75 dBA L_{max} during the specified construction hours. Because of the distance to the nearest receptors (at least 1.25 miles), these noise levels would never be exceeded. At the nearest noise-sensitive uses (residential) approximately 1.25 miles (or 6600 feet distant), the sound level from haul trucks on the project site would be attenuated to no more than approximately 46 dBA L_{max}. This is well below the assumed noise level limit of 65 dBA L_{max}. It is unlikely that project construction activities would be audible at existing noise-sensitive uses in the project vicinity, and the noise levels

produced would not be considered significant with respect to the established jurisdictional noise level criterion. Therefore, this impact would be considered less than significant and no mitigation would be required.

It is expected that Italian Bar Road between the project site and the Community of Columba would be utilized as the primary project access route for workers and the delivery and removal of project equipment and materials. It is expected that this short-term traffic addition would be minimal relative to existing traffic operations, and would not result in an overall traffic noise level in excess of the noise compatibility standard for existing residences along the affected roadway segment. Therefore, this impact would be considered less than significant.

Long-Term (Operational) Impacts. The proposed project would entail the replacement of an existing bridge over Rose Creek. Long-term (post-construction) traffic volumes would not be changed by the project. Operation of the proposed project would not result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, as no additional vehicular traffic or other operational noise would be generated. No significant long-term noise impacts would occur. Therefore, this impact would be considered less than significant.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. Development of the proposed project would not result in excessive ground borne vibration or noise levels. Ground vibration and noise levels would be produced from the use of pile drivers, trucks, and other construction equipment during construction activities. However, this ground borne vibration and noise would be relatively minor, intermittent, short-term, and restricted to daytime hours. Furthermore, because sensitive receptors are located approximately 1.25 miles away from the project construction site, it is not expected that ground borne vibration or noise from construction of the proposed project would be discernible at these receptor locations. Therefore, this impact would be considered less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. As previously stated, the project would not be expected to generate any permanent increases in traffic on local area roadways. Therefore, the project would not be expected to produce any permanent traffic noise level increases relative to the ambient condition. This impact would be considered less than significant.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. Temporary, intermittent noise from construction activities associated with the development of the project would be expected. This noise would result from the temporary use of earth-moving and building equipment during the project construction period. As presented above, noise exposure associated with worst-case project construction operations would be no higher than 46 dBA L_{max} at the closest noise-sensitive uses to the northeast and southwest. This noise exposure would be a result of haul truck operations, which would be expected to produce the highest project construction noise levels. Worst-case project construction noise levels (46 dBA L_{max}) would be consistent with existing ambient noise levels measured in the rural residential setting, and would not be considered a significant increase in noise levels relative to the ambient

condition. Likewise, temporary construction traffic on Italian Bar Road would not be expected to add more than 1 dB to the day-night average traffic noise levels (L_{dn}) currently experienced at the closest noise-sensitive uses. This noise level increase would be considered less than significant.

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 expose people residing or working in the project area to excessive noise levels?

No Impact. As previously identified, the proposed project is not located within two miles of a public airport or within the vicinity of a private airstrip and would not expose people working on the project to excessive aircraft noise levels.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project is not located within the vicinity of a private airstrip. See response e) above.

3.13 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. Population and Housing. Would the project:				
a) Induce substantial 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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.13.1 ENVIRONMENTAL SETTING

The project site is located in an unincorporated area approximately 10.6 miles northeast of the intersection of Italian Bar Road and Yankee Hill Road in the community of Columbia, within the Stanislaus National Forest within Tuolumne County. The project site is zoned Public under the Tuolumne County Ordinance Code. The nearest residential uses are approximately 1.25 miles northeast and 1.25 miles southwest of the project site.

3.13.2 DISCUSSION

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

No Impact. The proposed project would replace the existing Italian Bar Road Bridge. The proposed project would not induce population growth in the area. Population growth can be associated with the construction of new housing in an area or by the installation of infrastructure that could support the development of additional housing in an area. The replacement of the existing bridge does not include a residential component. Therefore, the proposed project would not increase the population in the area nor would it contribute to population growth in the area. The project would have no impact on population growth.

b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?

No Impact. There are no homes located on or within the immediate vicinity of the project site. Because there are no homes in the project area, no homes would be displaced as a result of the proposed project and there would be no impact.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. As discussed under response b) above, the proposed project would not displace any homes. Because no homes would be displaced, a substantial number of people would not be displaced and there would be no impact.

3.14 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. Public Services. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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?	☐	☐	☐	☒

3.14.1 ENVIRONMENTAL SETTING

Fire protection in Tuolumne County is provided by Tuolumne County Fire Department (TCFD), which is a cooperative fire department with California Department of Forestry and Fire Protection (CAL FIRE).Within the county TCFD/ CAL FIRE along with eight fire districts provide emergency response. Many of the local fire protection districts are staffed by volunteers. The project site is located in the Columbia Fire Protection District.

The Tuolumne County Sheriff's Office provides law enforcement services for all of Tuolumne County. The main office and nearest station to the project site is located at 100 S Green St, Sonora, CA 95370.

The project site is within the Twain Harte-Long Barn Union Elementary School District.

3.14.2 DISCUSSION

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 including fire protection, police protection, schools, or parks.

No Impact. The proposed project involves the replacement of an existing bridge. The proposed project would not add residents or otherwise increase demand for public services and facilities. There are no public services facilities on the project site or within the immediate vicinity. Therefore, the proposed project would have no impact on public services.

3.15 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XV. Recreation. Would the project:				
a) 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) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.15.1 ENVIRONMENTAL SETTING

Tuolumne County and the project area are primarily rural. Recreational opportunities include the Stanislaus National Forest facilities in Tuolumne county, as well as facilities operated by the Bureau of Land Management (BLM), the State of California, and Tuolumne County.

3.15.2 DISCUSSION

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

No Impact. The proposed project involves the replacement of the bridge structure, installation of RSP, and pavement rehabilitation work on the approach roadways on both sides of the existing bridge. Development of the proposed project would have no adverse effect on existing park facilities and would not generate a demand for additional recreational facilities. No impact would occur and no mitigation is required.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No Impact. The proposed project involves the replacement of an existing bridge and would maintain access within this area of the National Forest. The proposed project does not include any residential development that would require new or expanded recreational facilities. Therefore, the proposed project would have no impact related to adverse physical effects due to construction or expansion of recreational facilities.

3.16 TRANSPORTATION/TRAFFIC

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. Transportation/Traffic. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

3.16.1 ENVIRONMENTAL SETTING

As discussed in Chapter 2, "Project Description," the proposed project involves the replacement of the existing Italian Bar Road Bridge. During construction activities, a temporary creek crossing would be constructed to maintain traffic on Italian Bar Road. Upon completion of the new bridge, the temporary crossing would be removed.

3.16.2 DISCUSSION

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less than Significant Impact. The proposed project consists of replacement of an existing one-lane bridge and approach roadways, and construction and removal of a temporary creek crossing that will maintain access for the duration of construction activities of the permanent structure. The temporary crossing will ensure that Italian Bar Road remains open to traffic for the duration of construction activities.

A small volume of traffic would be generated by project construction vehicles and equipment. However, this additional traffic volume would be relatively small and would consist of employee vehicles travelling to and from the project site, material hauling vehicles, and construction equipment. Given the existing low volume of traffic in the project area, the additional traffic during project construction would not be likely to adversely impact traffic flow in the project area. Furthermore, construction traffic would be temporary and would be eliminated at the end of construction activities.

The replacement structure would be twice as long as the existing bridge. However, capacity will remain the same as the existing bridge with one lane of travel. Due to its unchanged level in vehicular capacity, the new bridge would not be expected to accommodate or generate more traffic than currently or historically experienced by the existing bridge.

Because circulation on the project site (e.g. travel on Italian Bar Road) would be maintained throughout construction activities and the new bridge would not increase traffic demand or capacity, the proposed project would have a less-than-significant impact related to the circulation system.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less than Significant Impact. As discussed under item a) above, the proposed project would maintain traffic access throughout construction, would generate only a temporary increase in traffic volumes, and would not generate additional traffic during operation of the new bridge. While the impacts to area congestion could occur during construction, these impacts would be minor because access would be maintained and the construction traffic volume would be small. The project would not create a conflict with adopted alternative transportation policies, plans, or programs adopted by Tuolumne County. Since there are no known significant impacts on transportation and traffic, the project will not require mitigation measures. and would have a less than significant impact on area congestion.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed project involves a bridge replacement and would not increase air traffic levels. Furthermore, the nearest airport to the project site is approximately 7.25 miles south west of the project site. Because the proposed project would not include air traffic activity and is outside the airport influence area, there would be no impact to air traffic patterns.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed project would replace the existing Italian Bar Road bridge with a structure of same capacity to the existing bridge. The new bridge would be in the approximate same location as the existing bridge, and is designed to improve public safety. The proposed project also includes modifications to the bridge approach roadways. The approach roadway improvements would not increase road hazards. Therefore, the proposed project would have no impact related to substantially increasing roadway hazards.

e) Result in inadequate emergency access?

Less than Significant Impact. As described above, the proposed project would include closure of the existing bridge and use of a temporary creek crossing during construction. The temporary crossing will ensure that Italian Bar Road remains open to traffic, including emergency vehicles. The proposed detour road crossing Rose Creek is designed to accommodate a fire suppression vehicle. In addition, the new bridge will provide improved access in the event of forest fires. As approved by Caltrans Division of Local Assistance District 10, the proposed roadway width is 20 feet to meet Cal Fire requirements for vehicle access. Therefore, the proposed project would have less than significant impacts on emergency access.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. The proposed project involves the replacement of an existing bridge. The project site is in a rural area of Tuolumne County and alternative modes of transportation are not readily available in this area. The proposed project would not interfere with any adopted policies, plans, or programs for alternative transportation methods.

3.17 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. Utilities and Service Systems. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider that 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?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

3.17.1 REGULATORY SETTING

All wastewater must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The policy requires that any discharge of waste to high-quality waters must apply best practicable treatment of control not only to prevent a condition of pollution or nuisance from occurring but also to maintain the highest water quality possible. A mandatory element in the NPDES and WDRs permitting processes is the antidegradation analysis.

3.17.2 ENVIRONMENTAL SETTING

Water quality within Tuolumne County is regulated by the State Regional Water Quality Control Board's Central Valley Region 5. The county's primary water source is public water supplied by private wells and the TUD. There are no TUD maintained water storage facilities within or adjacent to the project area and water mains are not located on Italian Bar Road at the project site. TUD operates and maintains much of the Counties sewer and wastewater system, with some areas being serviced by districts (such as Jamestown Sanitary District in

Groveland). Tuolumne County Solid Waste Division oversees the collection, transportation, and disposal of solid waste within Tuolumne County. A search of the State Water Data Library website revealed no wells within the project vicinity.

3.17.3 DISCUSSION

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than Significant Impact. Operation of the proposed project would not generate any wastewater. Construction activities could generate a very minor amount of wastewater, primarily associated with worker hygiene. Because of the small amount of wastewater that would temporarily be generated, it is unlikely that the proposed project would exceed wastewater treatment requirements. All discharge of wastewater would comply with the Regional Water Quality Control Board's Antidegradation Policy. After construction is complete, the Project would not generate any wastewater and would not exceed wastewater treatment requirements of the RWQCB.Therefore, the proposed project would have a less than significant impact on wastewater treatment requirements.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact. Operation of the proposed project would not generate any demand for water or wastewater treatment. Construction activities would require potable or reclaimed water for dust suppression and housekeeping. However, the amount of water needed would be minimal and would be supplied by water trucks and obtained at a nearby municipal source. Because construction and operation of the proposed project would not require new or expanded water or wastewater facilities, the proposed project would have a less than significant impact related to such facilities.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact. Construction of the project would add negligible new paved surface area compared to existing conditions on the project site. Because the proposed project would not require new or expanded storm water drainage facilities, this impact would be less than significant.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less than Significant Impact. See response b) above.

e) Result in a determination by the wastewater treatment provider that 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?

Less than Significant Impact. See response b) above.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less than Significant Impact. Project construction would generate solid waste, including excess earth from excavation activities, roadway materials, bridge materials, and general waste. Excess earth materials may be transported to the Cal Sierra Disposal, Inc. Transfer Station and Material Recovery Facility, located at 19309 Industrial Drive in East Sonora. All of the solid waste generated within the County is processed at this Station, where solid waste is sorted to remove recyclables and hazardous materials from the waste stream. Non-recyclable materials may be hauled to the Forward Landfill near Stockton, California, or the Merced County Regional Waste Management Authority Landfill, located near Merced, California. These locations have sufficient capacity to serve the proposed project. The solid waste infrastructure of the County is adequate to accommodate the project as proposed. Solid waste generated by construction would be disposed properly in accordance with applicable local, state and federal laws. This impact would be less than significant.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Less than Significant Impact. As discussed above, the proposed project would generate solid waste during construction, but would not generate any solid waste during operation. Construction solid waste would be disposed of in compliance with federal, state, and local statutes and regulation. Therefore, this impact would be less than significant.

3.18 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. 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, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that 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) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

3.18.1 DISCUSSION

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, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that 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) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact with Mitigation Incorporated. As discussed in this Initial Study, the proposed project has the potential for impacts related to air quality, biological resources, cultural resources, geology and soils, and hydrology and water quality. However, these impacts would be avoided or reduced to a less-than-significant level with the incorporation of avoidance and mitigation measures discussed in each section. None of the impacts would be cumulatively considerable, and implementation of the measures would ensure that

substantial adverse effects on humans and the environment, either directly or indirectly, would be less than significant.

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APPENDIX A

Special-Status Species with the Potential to Occur within or near the BSA

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
Invertebrates				
Bombus occidentalis	western bumble bee	USFS-S	Common to many habitats. Listed as imperiled by the Xerces Society. Historically known from the Pacific coast to the Rocky Mountains, populations in decline. Select plant genera include *Melilotus*, *Cirsium*, *Trifolium*, *Centaurea*, *Chrysothamnus*, and *Eriogonum*.	**Moderate.** Suitable habitat is present in the BSA.
Branchinecta lynchi	vernal pool fairy shrimp	FT	Inhabits vernal pools and similar ephemeral wetlands.	**None.** No suitable habitat is present in the BSA.
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT	Primarily riparian woodland and shrubland where elderberries occur. Generally stays among habitats with elderberry, but occasionally disperses several miles.	**None.** No elderberries observed in BSA.
Fish				
Cottus gulosus	riffle sculpin	SSC	Habitat includes sand and gravel riffles of headwaters and creeks and sand-gravel runs and backwaters of rivers.	**Low.** Marginal habitat is present in Rose Creek, but it is unlikely to occur in the BSA, as it lacks sand-gravel riffles.
Hypomesus transpacificus	Delta smelt	FT / ST	Open waters of bays, tidal rivers, channels, and sloughs. Populations are mainly concentrated in the Delta after breeding.	**None.** No suitable habitat is present in the BSA. The BSA is outside of the species range, and there are no nearby records. Project impacts are minimal and would not affect downstream

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
				populations of this species.
Lavinia exilicauda exilicauda	Sacramento hitch	SSC	Warm lowland waters, including clear streams, turbid sloughs, and lakes and reservoirs.	**Low**. Marginal habitat is present in Rose Creek but the species is unlikely to occur in the BSA, as the BSA is located outside of current known range of species.
Lavinia symmetricus	San Joaquin roach	SSC	Small streams and intermittent watercourses. Most abundant in mid-elevation streams in the Sierra Nevada foothills. Known from the Sacramento and San Joaquin River drainages, except Pit River, as well as tributaries to San Francisco Bay.	**Low.** Marginal habitat is present within the BSA.
Mylopharodon conocephalus	hardhead	SSC / USFS-S	Deep rock and sand bottomed pools of small to large rivers.	**None.** No suitable habitat is present in the BSA
Oncorhynchus mykiss	steelhead - Northern California dps	FT	Migrates between freshwater breeding and marine non-breeding habitats. Spawning habitat consists of gravely substrates without excessive silt content.	**None.** The BSA is not within designated critical habitat for this species. Rose Creek is inaccessible to steelhead due to being blocked by anthropogenic barriers.
Amphibians				
Anaxyrus canorus	Yosemite toad	FT / USFS-S	Restricted to vicinities of wet mountain meadows in the central high Sierra; other habitat types include willow thickets, and the	**None.** Outside of known range of species.

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
			borders of forests, usually not more than 300 ft. from permanent water; frequents montane wet meadows, but also occurs in seasonal ponds associated with Lodgepole pine and subalpine conifer forests; 5000 – 11500 ft.	
Rana boylii	foothill yellow-legged frog	SC / FS	Highly aquatic frog that occurs almost exclusively in shallow, rocky, flowing streams in open areas with riffles and cobble-sized stones in coast ranges. From sea level to 5,000 ft in the Sierra Nevada.	**High.** There are CNDDB records of this species within the project footprint.
Rana draytonii	California red-legged frog	FT/ SSC	Inhabits lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development and must have access to estivation habitat; estivation occurs late summer-early winter. Breeds from March-July. Occurs from elevations near sea level to 5,200 ft.	**None**. Marginal upland and aestivation habitat may be available. However, pools in Rose Creek in the BSA are not a suitable depth and do not provide the vegetative recover required for breeding. There are very few nearby CNDDB occurrences (the closest is from over 5 miles away). The species is considered extirpated from Tuolumne County and has not been observed in Stanislaus National Forest in over 30 years. (USFWS 2017,

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
				USFS 2017a, USFS 2017b, USFS 2017c).
Rana sierrae	Sierra Nevada yellow-legged frog	FE / ST/ USFS-S	Distribution north of a ridge dividing the middle and south forks of the Kings River and those east of the Sierra Nevada crest; associated with streams, lakes and ponds in montane riparian, Lodgepole pine, subalpine conifer, and wet meadow habitats; open stream and lake edges with a gentle slope seem to be preferred; waters that do not freeze to the bottom and which do not dry up are required; 4500+ ft.	**None.** Outside of known range of species.
Reptiles				
Actinemys marmorata	western pond turtle	SSC / USFS-S	Ponds, marshes rivers, streams, and irrigation ditches that have emergent or riparian vegetation and sunny basking sites. Upland nesting habitat consists of friable soil exposed to full sun.	**High.** Aquatic habitat is present in the BSA. There are CNDDB records of this species throughout Rose Creek and within the BSA.
Phrynosoma blainvillii	coast horned lizard	SSC	Found in a wide variety of habitats; most common in lowlands along sandy washes with scattered shrubs. Prefers open areas for sunning.	**Low.** Marginal habitat is present in the BSA.

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
Birds				
Accipiter cooperii	cooper's hawk	WL	Breeding habitat includes mature broadleaf or coniferous forest, as well as open woodland, forest edge, and riparian forests.	**Moderate.** Suitable nesting and foraging habitat is present in and adjacent to the BSA.
Accipiter gentilis	northern goshawk	SSC / USFS-S	Nests in a wide variety of forest types including coniferous, hardwood, woodlands, and mixed forests. Nests typically constructed in the largest trees of old stands.	**Low.** Marginal nesting and foraging habitat is present in and adjacent to the BSA. However, there are no large or old growth trees within the BSA.
Agelaius tricolor	tricolored blackbird	SSC / BCC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**None.** No suitable nesting habitat present. BSA is not large enough and does not have enough riparian vegetation to support a nesting colony.
Aquila chrysaetos	golden eagle	FP / BCC	Rolling foothills, mountain areas, sage-juniper flats and deserts. Cliff-walled canyons provide nesting habitat in most parts of range; also large trees in open areas.	**Low.** Marginal nesting habitat is present in the BSA. There are no cliff-walled canyons or large trees in open areas in the BSA or nearby.
Asio otus	long-eared owl	SSC	Nests in conifer, oak, riparian, pinyon-juniper, and desert woodlands that are either open or are adjacent to grasslands, meadows, or shrublands. Key habitat components are	**Low.** Marginal nesting and foraging habitat is present in the BSA.

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
			some dense cover for nesting and roosting, suitable nest platforms, and open foraging areas.	
Athene cunicularia	western burrowing owl	SSC / BCC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**None.** No suitable nesting habitat present.
Cypseloides niger	black swift	ST/ BCC	Nesting habitat is behind or near waterfalls, wet cliffs, and in caves. Forages over forests and in open areas.	**None.** No suitable nesting habitat present.
Dendragapus fuliginosus howardi	mount pinos sooty grouse	SSC	High elevation conifer forest (6000 – 10,000 ft).	**None.** No suitable habitat is present in the BSA. BSA is outside the elevation range of this species.
Empidonax traillii	willow flycatcher	SE / USFS-S	Breeds in riparian habitats in mountains and southern deserts.	**None.** No suitable habitat is present in the BSA.
Falco mexicanus	prairie falcon	WL / BCC	Primarily open habitat in mountains, steppe, plains or prairies. Usually nests in holes or ledges on cliffs or steep embankments.	**None.** No suitable habitat is present in the BSA.
Haliaeetus leucocephalus	bald eagle	FP / BCC / USFS-S	(Nesting & wintering) Ocean shore, lake margins, & rivers for both nesting & wintering. Most nests within 1 mile of water. Nests in large, old-growth,	**None.** No suitable habitat is present in the BSA.

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
			or dominant live tree w/open branches, especially ponderosa pine. Roosts communally in winter.	
Lanius ludovicianus	loggerhead shrike	SSC / BCC	In California, loggerhead shrikes breed mainly in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground.	**Low.** Marginal nesting and foraging habitat is present in the BSA.
Pandion haliaetus	osprey	WL	Forages over open water and wetlands and nests in open, elevated sites such as dead trees and poles. Nests usually near or above water.	**None.** Suitable nesting habitat is not present.
Picoides albolarvatus	white-headed woodpecker	BCC	Montane coniferous forest. Primarily occurs in pine and fir forest. Generally closely associated with Ponderosa pines.	**Low.** Marginal habitat is present. Although the BSA is not dominated by ponderosa pine, a large ponderosa pine occurs in the BSA and others are scattered throughout the area.
Psiloscops flammeolus	flammulated owl	BCC	Montane forest, generally open conifer forests with pine. In CA tends to breed from ponderosa pine to red fir forests. Has a strong preference for ponderosa and Jeffrey pines.	**Low.** Marginal habitat is present. Although the BSA is not dominated by ponderosa pine, a large ponderosa pine occurs in the BSA and others are scattered throughout the area.
Strix nebulosa	great gray owl	SE/ USFS-S	Occurs within old growth red-fir, mixed conifer, and lodgepole pine habitats	**None.** Project is outside of the elevation range of this species.

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
			above 4,500 ft. Most occurrences along the Tuolumne and Merced Rivers in the Yosemite Valley.	
Strix occidentalis caurina	northern spotted owl	FT/ SSC (Candidate Threatened)/ USFS-S	Mixed forest, conifer forest. Prefers to nest in standing snags and tree cavities. Generally found in old growth forest or younger forest with patches of old growth trees.	**None.** No old growth forest, snags, or trees with large cavities are found in the BSA.
Strix occidentalis occidentalis	California spotted owl	BCC/ SSC/ USFS-S	Cliffs, conifer forest, hardwood forests, and mixed forests. Generally prefers dense, multi-layered evergreen forest with some large trees and some open areas, usually on north-facing slopes of canyons near water.	**None.** Typical nesting habitat is not present.
Mammals				
Antrozous pallidus	pallid bat	SSC/ USFS-S	Roosts in caves, mine tunnels, crevices in rocks, bridges, buildings, and hollowed trees.	**Moderate**. Mature trees adjacent to the BSA may provide marginal roost habitat for this species. No suitable crevices in bridge for day roosting. Bridge structure offers suitable night roosting habitat. No signs of bat roosting (guano or urine stains) observed during surveys.

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
Corynorhinus townsendii	Townsend's big-eared bat	SSC (Candidate Threatened)/ USFS-S	Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. May use separate sites for night, day, hibernation, or maternity roosts.	**Low**. Bridge structure offers suitable night roosting habitat. No signs of bat roosting (guano or urine stains) observed during surveys.
Euderma maculatum	spotted bat	SSC	Known from a variety of habitats, from deserts and grasslands to conifer forests. Requires rock crevices in cliffs or caves for roosting. Sea level -10,000 ft.	**Low**. Bridge structure offers suitable night roosting habitat.
Eumops perotis californicus	western mastiff bat	SSC	Primarily a cliff dwelling species with maternity roosts under exfoliating rock slabs, and crevices in large boulders and buildings. Foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland and agricultural areas.	**Low**. Marginal roost habitat is present in rocky outcrops adjacent to project. Bridge structure offers suitable night roosting habitat.
Gulo gulo	California wolverine	ST/ USFS-S	Known from the Sierra Nevada and north coast mountains. Found in a wide variety of high elevation habitats. Uses logs, burrows and caves for cover and den area.	**None.** BSA is too low in elevation.
Lasiurus blossevillii	western red bat	SSC	Roosts primarily in trees, 2-40 ft. above ground. Prefers habitat mosaics and edges with open areas for	**Moderate**. Suitable habitat is present in trees in the BSA.

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
			foraging. Associated with riparian habitats in California.	
Lasiurus cinereus	hoary bat	None	Listed by the Western Bat Working Group as medium priority. Prefers open habitats or habitat mosaics with cover. Roosts in dense foliage of medium to large trees. Requires water.	**Moderate**. Suitable habitat is present in trees in the BSA
Martespennati	pacific fisher	USFS-S	Inhabits mature, dense habitats of north coast coniferous forest and old growth and riparian forest communities with a high percent of canopy closure, large trees and snags with cavities and other deformities, large diameter downed wood and multiple canopy layers (1,970-8,530 ft.).	**None.** No suitable habitat present.
Myotis ciliolabrum	Western small-footed myotis	None	Listed by the Western Bat Working Group as medium priority. Dry wooded and brushy uplands near water. Seeks cover in caves, buildings, mines and crevices.	**Moderate**. Bridge structure offers suitable night roosting habitat.
Myotis evotis	long-eared myotis	None	Listed by the Western Bat Working Group as medium priority. Prefers coniferous forests and woodlands from sea level to 9000 ft. Nursery colonies roost in buildings, crevices, under bark, and	**Moderate**. Bridge structure offers suitable night roosting habitat.

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
			snags.	
Myotis thysanodes	fringed myotis	USFS-S	Widespread in California, occurring in all but the Central Valley and Colorado and Mojave deserts; roosts in caves, mines, buildings, and crevices; requires water; uses open habitats, early successional stages, streams, lakes, and ponds as foraging areas; optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood conifer, generally at 4000 –7000 ft.	**None.** Outside of range of species.
Myotis yumanensis	yuma myotis	None	Listed by the Western Bat Working Group as low-medium priority. Occurs in open forests with sources of water. Maternity colonies in caves, mines, buildings or crevices.	**Moderate.** Habitat is present in the BSA. May use bridge to roost.
Vulpes vulpes necator	Sierra Nevada red fox	ST/ USFS-S	Mixed conifer forest, grasslands, and mixed chaparral	**None.** Common lowland populations could be present near or within the BSA, however the more rare Sierra Nevada populations are generally above 2200 ft.
Plants – vascular				
Allium jepsonii	Jepson's onion	CRPR List 1B.1/ USFS-S	Serpentinite or volcanic soils within chaparral, cismontane woodland and lower montane coniferous forest from 1000 to 4500 ft.	**None.** BSA lacks serpentinite and volcanic soils.

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
			Bloom time: April – August.	
Allium sanbornii var. *congdonii*	Congdon's onion	CRPR List 4.3	Serpentinite or volcanic soils within chaparral and cismontane woodland from 1000 to 3000 ft. Bloom time: April – July.	**None.** BSA lacks serpentinite and volcanic soils.
Allium sanbornii var. *sanbornii*	Sanborn's onion	CRPR List 1B.2	Usually on serpentinite or volcanic soils within chaparral, cismontane woodland and lower montane coniferous forest from 900-5000 ft. Blooms time: May – September.	**None.** BSA lacks serpentinite and volcanic soils.
Allium tribracteatum	three-bracted onion	CRPR List 1B.2/ USFS-S	Volcanic slopes and ridges in chaparral, lower montane coniferous forest, and upper montane coniferous forest from 3,608- 9,842ft. Bloom time: April – August.	**None.** BSA lacks volcanic rocks and soils.
Allium tuolumnense	rawhide hill onion	CRPR List 1B.2	Restricted to serpentine soil, generally in grey pine chaparral. Steep, rocky wouth facing slopes or drainages. 1000 – 2000 ft. Bloom time: March – May.	**None.** BSA lacks serpentinite soils.
Allium yosemitense	Yosemite onion	CRPR 1B.3/ USFS-S	Rocky talus and scree slopes, seeps, and outcrops; chaparral, foothill woodland, and lower and upper montane conifer forest. Bloom time: May – June. 1500- 6900 ft.	**None.** Outside of known range of species.
Arctostaphylos nissenana	Nissenan manzanita	CRPR List 4.2/ USFS-S	Closed-cone coniferous forest, chaparral; usually occurs on metamorphic	**None.** No closed cone coniferous forest or chaparral within BSA.

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Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
			rock. From 1500-3500 ft. Bloom time: Feb. – March.	
Balsamorhiza macrolepis	big-scale balsamroot	CRPR List 1B.2/ USFS-S	Sometimes serpentinite soil in chaparral, cismontane woodland, and valley and foothill grassland. <4200 ft. Bloom time: March – June.	**None.** BSA lacks serpentinite soils and chaparral habitat.
Botrychium ascendens	upswept moonwort	CRPR List 2/ USFS-S	Meadows, marshes, bogs, and fens in lower and upper montane conifer forest. Blooms, July-August (spores) 5000- 9000 ft	**None.** No suitable habitat present in BSA.
Botrychium crenulatum	scalloped moonwort	CRPR List 2/ USFS-S	Meadows, marshes, bogs, and fens in lower and upper montane conifer forest. Blooms: June-July (spores) 4875- 8125 ft	**None.** No suitable habitat present in BSA.
Botrychium lineare	slender moonwort	CRPR List 1B.1/ USFS-S	Rocky/moist sites in subalpine conifer forest. Blooms: August-October (spores) 8000- 9000 ft.	**None.** No suitable habitat present in BSA.
Botrychium lunaria	common moonwort	CRPR List 1B.1/ USFS-S	Meadows, marshes, bogs, and fens in lower and upper montane conifer forest. Blooms: August-October (spores) 8000- 9000 ft.	**None.** No suitable habitat present in BSA.
Botrychium minganese	mingan moonwort	CRPR List 2/ USFS-S	Meadows, marshes, bogs, and fens in lower and upper montane conifer forest. Blooms: June-July (spores), 4900- 7000 ft.	**None.** No suitable habitat present in BSA.
Botrychium montanum	mountain moonwort	CRRS List 2/ USFS-S	Meadows, marshes, bogs, and fens in lower and upper montane conifer forest. Blooms: June-July (spores) 4900- 7000 ft.	**None.** No suitable habitat present in BSA.

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Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
Brodiaea pallida	Chinese Camp brodiaea	FT/ CE/ CRPR List 1B.1	Often in rocky, intermittent streambeds, sometimes on serpentinite soils in valley and foothill grassland, cismontane woodland. Blooms: May-June.	**None.** Streambed of Rose Creek is composed of limestone bedrock; project lacks serpentinite soils.
Bruchia bolanderi	Bolander's candle moss	CRPS List 2/ USFS-S	Endemic to meadows of the Sierra Nevada in the mixed conifer zone; on vertical banks of streams	**None.** No suitable habitat present in BSA and outside of range of species.
Ceanothus fresnensis	Fresno ceanothus	CRPR List 4.3	Openings in cismontane woodland, lower montane coniferous forest. 3000-6500 ft. Bloom time: May – July.	**None.** The BSA is outside of the elevation range of this species.
Chlorogalum grandiflorum	Red Hills soaproot	CRPR List 1B.2	Serpentinite, gabbroic, and other mafic soils. 800-4,067ft. Bloom time: May – June.	**None.** The BSA lacks suitable soil types for this species.
Clarkia australis	Small's southern clarkia	CRPR List 1B.2/ USFS-S	Open rocky sites in coniferous forest or oak woodland. 2,624- 6,807 ft. Bloom time: May – Aug.	**None.** The BSA is outside of the elevation range of this species.
Clarkia biloba ssp. *australis*	Mariposa clarkia	CRPR List 4.2/ USFS-S	Serpentinite soils in chaparral and cismontane woodland. 1000-4500ft. Bloom time: April – July.	**None.** The BSA lacks serpentinite soils.
Clarkia virgata	Sierra clarkia	CRPR List 4.3	Cismontane woodland and lower montane coniferous forest. 1200 – 4500 ft. Bloom time: May – Aug.	**Low.** This species has the potential to occur in the foothill pine – oak woodland that occurs in the BSA. However, species not observed during surveys.
Claytonia parviflora ssp.	streambank spring beauty	CRPR List 4.2	Rocky areas in cismontane woodland. 750 – 3600 ft.	**Low.** This species has the potential to occur in

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Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
grandiflora			Bloom time: Feb. – May.	the foothill pine – oak woodland that occurs in the BSA. However, species not observed during surveys.
Claytonia umbellata	Great Basin claytonia	CRPR List 2B.3	Subalpine coniferous forest (talus). 5500 – 11500 ft. Bloom time: May – Aug.	**None.** The BSA is not within the elevation range of this species.
Cryptantha mariposae	Mariposa cryptantha	CRPR List 1B.3	Chaparral; serpentinite, rocky. 600 – 1800 ft. Bloom time: April – June.	**None.** Chaparral habitat and serpentinite soils are absent from the BSA.
Cryptantha spithamaea	Red Hills cryptantha	CRPR List 1B.3	Streambeds and openings on serpentinite soils in chaparral and cismontane woodland. 900-1200 ft. Bloom time: April – May.	**None.** The BSA lacks chaparral and serpentinite soils.
Cypripedium montanum	mountain lady's-slipper	CRPR List 4.2/ USFS-S	Broadleaved upland forest, cismontane woodland, lower montane coniferous forest, North Coast coniferous forest. 600 – 7000 ft. Bloom time: March – Aug.	**Low.** Suitable habitat occurs in the BSA. However, species not observed during surveys.
Delphinium hansenii ssp. *ewanianum*	Ewan's larkspur	CRPR List 4.2	Rocky areas in cismontane woodland and valley and foothill grassland. 100 – 2000 ft. Bloom time: March – May	**Low.** Suitable habitat occurs in the BSA. However, species not observed during surveys.
Draba asterophora var. *asterophora*	Tahoe draba	CRPR List 1B.2 / USFS-S	Alpine boulder and rock field, subalpine coniferous forest. 8000-11,000 ft. Blooming period July-September;	**None.** Outside of known range of species**.**
Eryngium pinnatisectum	Tuolumne button-celery	CRPR List 1B.2	Mesic areas in cismontane woodland, lower montane coniferous forest, and	**None.** No mesic areas outside of the creek or vernal pools occur in the

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
			vernal pools. 200 to 3000 ft. Bloom time: May - Aug.	BSA.
Erythranthe marmorata	Stanislaus monkeyflower	CRPR List 1B.1	Cismontane woodland, lower montane coniferous forest. 300 – 3000 ft. Bloom time: March – May.	**Low.** Suitable habitat occurs in the BSA. There are CNDDB records within 5-miles of the BSA. However, species not observed during surveys.
Erythronium tuolumnense	Tuolumne fawn lily	CRPR List 1B.2/ USFS-S	Broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest. 1,673-4,478 ft. Bloom time: March – June.	**Low.** Suitable habitat occurs in the BSA. A population occurs approximately 800 ft downstream of the BSA. However, species not observed during surveys.
Fritillaria agrestis	stinkbells	CRPR List 4.2	Chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Mostly found in nonnative grassland or in grassy openings in clay soil, sometimes serpentenite. 30-5000 ft. Bloom time: March – June.	**None.** Serpentinite and clay soils do not occur in the BSA.
Horkelia parryi	Parry's horkelia	CRPR List 1B.2/ USFS-S	Ione formation and other soils in chaparral and cismontane woodland. 262-3,395 ft. Bloom time: March – Aug.	**Low.** There is a CNDDB record of this species within 1-mile of the BSA. However, species not observed during surveys.
Iris hartwegii ssp. *columbiana*	Tuolumne iris	CRPR List 1B.2/ USFS-S	Cismontane woodland, lower montane coniferous forest. 1,394-7,545 ft. Bloom time: May – June.	**Low.** Suitable habitat exists within the BSA. There is a CNDDB record of this species

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
				within 1-mile of the BSA. However, species not observed during surveys.
Jepsonia heterandra	foothill jepsonia	CRPR List 4.3/ USFS-S	Rocky (metamorphic) areas in cismontane and lower montane coniferous forest. 150– 1500 ft. Bloom time: Aug – Dec.	**None.** The BSA is outside the elevation range for this species.
Lewisia congdonii	Congdon's lewisia	CRPR 1B.2/ USFS-S	Rock faces, outcrops, cracks, and ledges; spoil piles of Barite Mine; chaparral and conifer forest. 2000- 7000 ft. Blooms April-June.	**None.** The BSA is outside of the known range for this species.
Lilium humboldtii ssp. *humboldtii*	Humboldt lily	CRPR List 4.2	Openings in chaparral, cismontane woodland, and lower montane coniferous forest. 300- 4000 ft. Bloom time: May – Aug.	**Low.** The BSA contains openings in woodland and coniferous forest within the elevation range of this species. However, species not observed during surveys.
Lomatium congdonii	Congdon's lomatium	CRPR List 1B.2	Serpentinite soil in chaparral and cismontane woodland. 900-6000 ft. Bloom time: March – June.	**None.** No serpentinite soils exist in the BSA.
Lomatium stebbinsii	Stebbins's lomatium	CRPR List 1B.1/ USFS-S	Gravelly volcanic clay in chaparral and lower montane coniferous forest. 4,084-6,430 ft. Bloom time: March – May.	**None.** Gravelly volcanic clay occurs in the BSA. However, the BSA is too low in elevation for this species.
Lupinus spectabilis	shaggyhair lupine	CRPR List 1B.2	Serpentinite in chaparral and cismontane woodland. 1,968- 6,561 ft. Bloom time: April – May.	**None.** No serpentinite within BSA.

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale
Mimulus pulchellus	yellow-lip pansy monkeyflower	CRPR List 1B.2/ USFS-S	Lower montane coniferous forest, meadows and seeps. Vernally mesic, often in disturbed areas, clay. 2000-6500 ft.. Bloom time: April – July.	**None.** No wetlands, meadows or seeps with clay occur in the BSA.
Piperia colemanii	Coleman's rein orchid	CRPR List 4.3	Often found in sandy areas in chaparral and lower montane coniferous forest. 4000– 8000 ft. Bloom time: June – Aug.	**None.** The BSA is too low in elevation to support this species.
Piperia michaelii	Michael's rein orchid	CRPR List 4.2	Coastal bluff scrub, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest. 100-2000 ft. Bloom time: April – Aug.	**Low.** The BSA contains woodland and coniferous forest within the elevation range of this species. However, species not observed during surveys.
Pseudobahia bahiifolia	Hartweg's golden sunburst	FE/SE/ CRPR List 1B.1	Clay soil, often acidic, in cismontane woodland and valley and foothill grassland. 100-500fts. Bloom time March – April.	**None.** No acidic clay soils present and elevation of BSA is too high.
Verbena californica	Red Hills vervain	FT/ ST/ CRPR List 1B.1	Mesic, usually serpentinite seeps or creeks in cismontane woodland and valley and foothill grassland. 900 – 1300 ft. Bloom time : May – Sept.	**None.** No serpentinite seeps or creeks; BSA is too high in elevation.

Table A-1. Special-Status Species Evaluated for the Potential to Occur within or near the BSA

Scientific Name	Common Name	Status	Supporting Habitat / Flowering Period	Potential for Species Presence in the Project footprint / Rationale

Status

BCC USFWS Birds of Conservation Concern
CT Candidate threatened (state)
FC Federal Candidate
FD Federal delisted
FE Federal endangered
FP Fully protected under CA Fish and Game Code
FT Federal threatened
PFT Proposed Federally Threatened
SE State endangered
SSC State species of special concern
ST State threatened
WL CDFW Watch List
USFS –S US Forest Service Sensitive

CRPR California Rare Plant Rank:

List 1B.1= Rare throughout range; over 80 percent of occurrences threatened

List 1B.2 = Rare throughout range; 20 to 80 percent of occurrences threatened

2A = Plants presumed extirpated in California, but common elsewhere

2B = Plants rare, threatened, or endangered in California, but more common elsewhere.

4 = Plants of limited distribution – A watch list, few if any are eligible for State listing, CEQA review is not required but is strongly recommended

Suffixes (.1, .2., .3) for all rankings = .1 = Seriously endangered in California, .2 = Fairly endangered in California, .3 = Not very threatened in California

APPENDIX B

Comments on the Draft Initial Study/ Mitigated Negative Declaration

Appendix B Comments on the Initial Study/ Mitigated Negative Declaration

Introduction

Tuolumne County filed a Notice of Completion for the Initial Study/ Mitigated Negative Declaration (IS/MND) with the State Clearinghouse on April 16, 2018. The filing of the Notice of Completion began a public review and comment period that extended from April 16, 2018, to May 16, 2018. Additional information about the public review and comment period is provided in Section 2.3.

Federal, state, regional and local agencies submitted comments. Each comment letter or e-mail that was received was reviewed and substantive comments were identified. This appendix presents the public comments and the responses to those comments.

Any text changes resulting from the comments are summarized in the responses and have been incorporated into the text of the IS/MDN. Revisions made after the public review period are indicated by a vertical line in the margin of the IS/MND text, similar to the one shown to the left of this paragraph.

Comment Letter 1: Central Sierra Environmental Resource Center

Central Sierra Environmental Resource Center
Box 396, Twain Harte, CA 95383 • (209) 586-7440 • fax (209) 586-4986
Visit our website at: www.cserc.org or contact us at: johnb@cserc.org

April 17, 2018

RECEIVED
APR 23 2018
COUNTY OF TUOLUMNE
Community Resources Agency

Dave Ruby
County of Tuolumne Public Works Department
2 South Green St.
Sonora, CA 95370

To Dave Ruby:

This letter responds to the proposed project to reconstruct the bridge crossing at Rose Creek on Italian Bar Road. CSERC is not aware of any major environmental issue of concern with this project since it will simply replace an existing bridge in a previously disturbed site. The environmental review and resulting mitigation measures appear to be sufficient to offset the relatively minor potential biological impacts. The benefit of having safe access for fire personnel will likely outweigh the minor impacts of the project.

However, it is a concern for our staff that foothill yellow-legged frogs have been documented in the project area in the past. Nevertheless, site specific surveys immediately prior to the start of the project should be sufficient to locate frogs, tadpoles or eggs that may be present at that time. Additionally, the presence of an onsite biologist during initial ground disturbance will also help to limit the potential for any direct or indirect impacts on individual frogs that may possibly move into the area after the initial survey.

1-1 While no sensitive plants were located in the project area, in the initial study/mitigated negative declaration it was not clear if appropriately timed surveys for noxious weeds were completed in the project and staging areas. If surveys have not been completed for noxious weeds we request that the project area be surveyed, and that any populations found be flagged and avoided to the extent feasible during project activities.

1-2 Regarding the three old-growth interior live oaks in the project area, we ask that whenever possible, oaks of this size be retained for their value as wildlife habitat. If it is not possible to retain all the large oaks, CSERC requests that Tuolumne County either mitigate through the normal actions of paying the in-lieu fees or mitigating the loss through replanting the required number of oaks. However, given the significant number of small to mid-size oaks scattered across the general project area and the vicinity, planting oak seedlings will truly not provide much mitigation. We encourage the County to look for an alternative mitigation strategy if, indeed, the project does require the cutting of one or more of the old growth live oaks.

Thank you for the opportunity to review and comment on the Initial Study/Proposed mitigated negative declaration for the reconstruction of the Rose Creek Bridge.

Sincerely,

Elizabeth Gregg
Associate Director/Botanist

Response to Comment Letter 1: Central Sierra Environmental Resource Center

1-1

A full floristic survey was conducted during the site visits, and noxious weeds were noted. The avoidance and minimization measure for impacts to biological resources, specific to impacts to special-status plant species has been revised to include measures to minimize spread of invasive species (Measure BIO-2). This revision does not result in a change to the impact significance made in the Draft IS/MND; no other changes to the Final IS/MND are needed.

1-2

Although the current project design would remove trees and other vegetation, including interior live oaks, the removal would not result in a significant impact or loss of forest land or conversion of forest land to non-forest use, as the project site is already substantially developed with the existing bridge and roadway. Mitigation for tree removal is not required, but on-site planting of native tree species was considered as part of the normal site restoration process. Hydroseeding will be conducted to stabilize the temporarily impacted areas. Where woody species (i.e., trees and large shrubs) are removed, these areas would be replanted with comparable native vegetation. ESA fencing will be placed around protected trees to avoid damage during construction. This revision does not result in a change to the impact significance made in the Draft IS/MND; no other changes to the Final IS/MND are needed.

Comment Letter 2: Caltrans District 10, Office of Rural Planning

From: Kibble, Betty L@DOT
To: David Ruby
Cc: SCH (state.clearinghouse@opr.ca.gov); Schroder, Kevin@DOT; Kibble, Betty L@DOT
Subject: TUO-49-PM 20.392 Italian Bar Road Bridge Replacement Project-IS/Proposed MND-SCH#2018042039
Date: Friday, April 20, 2018 9:14:35 AM
Attachments: image002.png

Dear Mr. Ruby,

2-1 Thank you for the opportunity to review the Initial Study/Proposed Mitigated Negative Declaration (SCH# 2018042039) for TUO-49-Post Mile 20.392 Italian Bar Road Bridge Replacement Project. The proposed project is approximately 10.6 miles northeast of the intersection of Italian Bar Road and Yankee Hill Road in the community of Columbia, California on Italian Bar Road (or Forest Route 4N26) at the Rose Creek crossing in Tuolumne County on Assessor's Parcel Number (APN): 022-160-12-00. The project is to replace the Italian Bar Road Bridge over Rose Creek (Bridge No. 32C0037). Italian Bar Road Bridge is located in an unincorporated mountainous area of Tuolumne County, within the Stanislaus National Forest. There are no developed land uses at or near the project. The project site encompasses approximately 0.72 acre.

Caltrans has completed the review and has no comments or concerns. There is no impact to the State Highway System.

Please let me know if you have any questions or concerns.

Best Regards,

Betty Kibble, Associate Transportation Planner
Office of Rural Planning
Caltrans District 10
Phone: (209) 948-7475
Fax: (209) 948-7164

"District 10 - One Vision, One Team, One Voice"

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Provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability.

Caltrans Vision
A performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation, and teamwork.

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Response to Comment 2: Caltrans District 10, Office of Rural Planning

2-1

Thank you for this information. No additional response is required as the comment does not raise any environmental issues or questions about the adequacy of the Draft IS/MND.

Comment Letter 3: U.S. Army Corps of Engineers

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

April 17, 2018

RECEIVED
APR 23 2018
COUNTY OF TUOLUMNE
Community Resources Agency

Regulatory Division (SPK-2018-00320)

Mr. Dave Ruby
County of Tuolumne Public Works Division
2 South Green Street
Sonora, California 95370

Dear Mr. Ruby:

We are responding to your April 13, 2018, request for comments on the Initial Study/Proposed Mitigated Negative Declaration for the Italian Bar Road Bridge Replacement project, identification number 32C0037. The approximately 0.72-acre project site is located on Rose Creek, Latitude 38.1045°, Longitude -120.3186°, Tuolumne County, California.

The Corps of Engineers' jurisdiction within the study area is under the authority of Section 404 of the Clean Water Act for the discharge of dredged or fill material into waters of the United States. Waters of the United States include, but are not limited to, rivers, streams, lakes, ponds, wetlands, vernal pools, marshes, wet meadows, some canals, and seeps. Project features that result in the discharge of dredged or fill material into waters of the United States will require Department of the Army authorization prior to starting work.

3-1 To ascertain the extent of waters on the project site, the applicant should prepare a wetland delineation, in accordance with the "Minimum Standards for Acceptance of Aquatic Resources Delineation Reports" and "Updated Map and Drawing Standards for the South Pacific Division Regulatory Program" under "Jurisdiction" on our website at the address below, and submit it to this office for verification. You may also find it helpful to review Nationwide Permit No. 14 (Linear Transportation Projects) under "Nationwide Permits" on our website, as well as Nationwide Permit General Condition 32 and our District's Regional Conditions. A list of consultants that prepare wetland delineations and permit application documents is also available on our website at the same location.

The document indicates that Caltrans has assumed the assignment of National Environmental Policy Act (NEPA) responsibilities and functions as NEPA lead agency for any required consultations, to include, the Endangered Species Act, the National Historic Preservation Act, and tribal consultations. Please provide a Caltrans point of

3-2 contact for this project to allow the Corps to designate Caltrans as lead agency to act on our behalf during any required agency coordination.

-2-

3-3 The range of alternatives considered for this project should include alternatives that avoid impacts to wetlands or other waters of the United States. Every effort should be made to avoid project features which require the discharge of dredged or fill material into waters of the United States. In the event it can be clearly demonstrated there are no practicable alternatives to filling waters of the United States, mitigation plans should be developed to compensate for the unavoidable losses resulting from project implementation.

Please refer to identification number SPK-2018-00320 in any correspondence concerning this project. If you have any questions, please contact me at U.S. Army Corps of Engineers, Regulatory Division, California South Section, 1325 J Street, Room 1350, Sacramento, California 95814-2922, by email at Marc.A.Fugler@usace.army.mil, or telephone at (916) 557-5255. For more information regarding our program, please visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

Marc A. Fugler
Senior Project Manager
California South Section

cc:
Mr. Jeff Zimmerman, AECOM; jeff.zimmerman@aecom.com

Response to Comment 3: U.S. Army Corps of Engineers

3-1

This comment concerns the need for preparation of a wetland delineation for submittal to the U.S. Army Corps of Engineers (USACE) as part of a compliance with the Clean Water Act (CWA) and application for a Section 404 Permit for any discharge of dredge or fill material in navigable waters or wetlands. A wetland delineation has been conducted and will be submitted to the USACE along with the draft Section 404 permit application.

Sections 2.3, Required Permits, and Section 3.4, Biological Resources, discuss the CWA 404 permit. As proposed in Measure BIO-10, "To avoid and minimize potential impacts to Rose Creek, the County shall… comply with all conditions required as a result of the permitting process in accordance with the regulatory agency guidance for protecting water quality. In addition, the County shall obtain the following permits and abide by all permit conditions: Section 404 Permit, USACE Nationwide Permit #33 (Temporary Construction, Access, and Dewatering), for potential temporary impacts to waters of the United States." This comment does not pertain to the adequacy of the impact analysis; therefore, no change to the Final IS/MND is necessary.

3-2

Caltrans has assumed assignment of NEPA responsibilities and functions as the NEPA Lead Agency. A Caltrans point of contact for the project will be provided to the USACE with submittal of the draft Section 404 permit application, to allow the USACE to designate Caltrans as the lead agency to act on its behalf during any required coordination. This comment does not pertain to the adequacy of the impact analysis; therefore, no change to the Final IS/MND is necessary.

3-3

The proposed project would not result in any additional fill in the creek bed. In addition, the removal of the old bridge concrete piers would open up and widen the channel to increased flow. Therefore there would be no permanent removal of waters, and no impacts to jurisdictional wetlands or waters of the United States (see Section 3.4, item C, page 3-38 of the IS/MND).

To minimize impacts to water quality, BMPs will be utilized to keep debris and dust from entering the water body during construction and temporary placement of gravel in the creek to construct the temporary access route. Implementation of Measure BIO-10 and the BMPs discussed in Section 3.9, Hydrology and Water Quality, would reduce water quality impacts to Rose Creek to a less-than-significant level. This comment does not pertain to the adequacy of the impact analysis; therefore, no change to the Final IS/MND is necessary.

Comment Letter 4: Central Valley RWQCB

CALIFORNIA Water Boards

EDMUND G. BROWN JR. GOVERNOR

MATTHEW RODRIQUEZ SECRETARY FOR ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

8 May 2018

RECEIVED

MAY 11 2018

COUNTY OF TUOLUMNE
Community Resources Agency

Dave Ruby
County of Tuolumne
2 South Green Street
Sonora, CA 95370

CERTIFIED MAIL
91 7199 9991 7039 6992 0999

COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, ITALIAN BAR ROAD BRIDGE REPLACEMENT PROJECT, SCH# 2018042039, TUOLUMNE COUNTY

Pursuant to the State Clearinghouse's 13 April 2018 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Mitigated Negative Declaration* for the Italian Bar Road Bridge Replacement Project, located in Tuolumne County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases,

KARL E. LONGLEY SCD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER
11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley

the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/.

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Policy is available on page IV-15.01 at:
http://www.waterboards.ca.gov/centralvalleywater_issues/basin_plans/sacsjr.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

4-1 The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

4-2 Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan

(SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

4-2, cont.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/.

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water

4-3

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

4.3, cont. drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

4-4 **Clean Water Act Section 401 Permit – Water Quality Certification**
If an USACOE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

4-5 **Waste Discharge Requirements – Discharges to Waters of the State**
If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

Dewatering Permit
If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver)
R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture
If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/for_growers/apply_coalition_group/index.shtml or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

4-6

2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100**. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 10-100 acres are currently $1,084 + $6.70/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Low or Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Dewatering and Other Low Threat Discharges to Surface Waters* (Low Threat General Order) or the General Order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water* (Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

4-7

4-7, cont.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0074.pdf

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0073.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/help/business_help/permit3.shtml

If you have questions regarding these comments, please contact me at (916) 464-4644 or Stephanie.Tadlock@waterboards.ca.gov.

Stephanie Tadlock

Stephanie Tadlock
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

Response to Comment 3: Central Valley RWQCB

4-1

A new regulatory section with a discussion about the Antidegradation Policy was added to Section 3.17, Utilities and Service Systems. The impact analysis section was revised to state that all discharge of wastewater would comply with the Antidegradation Policy. Both groundwater and surface runoff are evaluated in the IS/MND in Section 3.17, and Section 3.9, Hydrology and Water Quality. This analysis determined that the proposed project would not add a substantial amount of new impervious surface. Because the proposed project would not require the use of groundwater on the project site and would only add a negligible amount of impervious surfaces, impacts on groundwater supply and recharge would be less than significant. In addition, BMPs will be implemented, as part of Measure HYDRO-2, to keep contaminants such as heavy metals, oil, and grease from vehicular traffic from entering the creek, and minimizing sedimentation and erosion in surface waters downstream of the Project footprint. This will be further defined during the development of the NPDES, which is a commitment found in Section 3.9 of the IS/MND. The revisions made to the Final IS/MND are not substantive and do not change the environmental significance in the Final IS/MND. No further change is needed.

4-2

This comment refers to permitting requirements; specifically, storm water permits. This comment is noted. The County will apply for these permits if they are required. However, total area disturbed for the site is estimated at 0.72 acre, which is less than one acre.

4-3

Section 2.3, Page 2-7 of the IS/MND notes that it is anticipated that the proposed project's compliance with Section 404 of the CWA would be authorized under Nationwide Permit 33 (Temporary Construction, Access, and Dewatering). An application for this permit / authorization is anticipated.

4-4

Section 2.3, Pages 2-7 and 2-8 of the IS/MND notes that it is anticipated that the proposed project would require a water quality certification to be in compliance with Section 401 of the CWA. An application for this certification is anticipated.

4-5

A waste discharge permit is not anticipated, since the project will require Section 404 and 401authorizations as noted above.

Page 2-1 identifies that the project is planned for construction during the dry season when no dewatering is necessary. In the event that water must be removed during construction, a dewatering permit would be applied for if required.

4-6

This comment refers to regulatory compliance for commercially irrigated agriculture. The Project does not affect commercial irrigated agriculture production. This comment is noted, and therefore, no change to the Final IS/MND is necessary

4-7

Construction is anticipated during the dry season, and dewatering is not anticipated. If necessary, the contractor would obtain this permit if required. This has been added to page 2-8. A Storm Water Pollution Prevention Plan (SWPPP) would be obtained if required at the time a Notice of Intent is submitted to the RWQCB.

Comment Letter 5: CDFW

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

May 15, 2018

Dave Ruby
County of Tuolumne Public Works Division
2 South Green Street
Sonora, California 95370

Dear Mr. Ruby:

Subject: Italian Bar Road Bridge Replacement Project (Project)
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)
SCH No. 2018042039

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from the County of Tuolumne for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code. Although the comment period for your request has passed, CDFW would appreciate if you would still consider the following comments.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

PROJECT DESCRIPTION SUMMARY

Proponent: Tuolumne County

Objective: The objective of the Project is to replace the structurally deficient Italian Bar Road Bridge over Rose Creek. Primary Project activities include the construction and removal of a single lane temporary culverted crossing with cofferdams to divert water away from construction, demolition of the existing 34 feet long, 18.5 feet wide bridge, and construction of the new 68 feet long, 23.5 feet wide bridge.

Location: Approximately 10.6 miles northeast of the intersection of Italian Bar Road and Yankee Hill Road in the community of Columbia, California, on Italian Bar Road (or Forest Route 4N26) at the Rose Creek Crossing (38.1045, -120.3187).

Timeframe: Tuolumne County anticipates that the entire project can be completed within a single construction season, from April to October of 2019.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Tuolumne County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

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 CDFW or United States Fish and Wildlife Service?

COMMENT 1: Foothill yellow-legged frog (FYLF)

Section 3.4.2, Pages 3-28 to 3-30

5-1 **Issue**: The IS/MND for the Project includes mitigation measures for the FYLF in Section 3.4.2, and addresses FYLF as a State Species of Special Concern. However, on July 7, 2017, the Fish and Game Commission published its acceptance of a petition for consideration and designation of the FYLF as a candidate species. Pursuant to Fish & Game Code § 2074.6, CDFW has initiated a one-year status review report to inform the Commission's decision on whether listing is warranted. During the candidacy period, it is unlawful to import into California, export out of California or take, possess, purchase, or sell within California, FYLF and any part or product thereof, or attempt any of those acts, except as authorized pursuant to Fish & Game Code § 2081(b). Under Fish & Game Code § 86, take means to hunt, pursue, catch, capture, or kill, or to attempt to hunt pursue, catch, capture, or kill. Consequently, take of FYLF during the candidacy period will be prohibited unless authorization pursuant to CESA is obtained. Issuance of an Incidental Take Permit (ITP) is subject to CEQA review. If the FYLF is not fully addressed in the IS/MND,

5-2 preparation of a supplemental CEQA document may be needed if issuance of an ITP is necessary. The mitigation measures contained in the IS/MND may not fully avoid take.

Specific impact: Project activities could result in habitat destruction, inadvertent entrapment, injury, or mortality.

Why impact would occur: Impacts related to bridge construction and demolition will be occurring within habitat occupied by FYLF.

Evidence impact would be significant: As noted in the IS/MND, the California Natural Diversity Database (CNDDB) has recent records of FYLF along Rose Creek, including at the Project location. In the Sierra Nevada, FYLF have disappeared from approximately 66% of locations historically documented as occupied (Thomson et al. 2016). Land use changes that result in degradation or destruction of riparian habitat; road development and use; urbanization, and water diversion are among proximate factors contributing to local declines of FYLF (Thomson et al. 2016, USDA 2016). In the context of the proposed Project's activities and declining population trend, impacts of the Project on local and regional populations of FYLF may be significant.

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure 1: FYLF Take Authorization

CDFW recognizes there may be circumstances where take of FYLF may be unavoidable. Tuolumne County has assumed that FYLF are occupying the Project area. During candidacy or if FYLF becomes listed and take cannot be avoided, CDFW may issue an ITP authorizing take of FYLF, pursuant to Fish & Game Code § 2081(b). Take authorization is issued only when take is incidental to an otherwise lawful activity, the impacts of the take are minimized and fully mitigated, the applicant ensures there is adequate funding to implement any required measures, and take is not likely to jeopardize the continued existence of the species. Since Tuolumne County has assumed presence of FYLF, CDFW recommends adding provisions to the IS/MND for seeking take authorization under CESA.

5-3

If any life stage of the FYLF (adult, metamorph, larvae, egg mass) is found during surveys or at any time during Project activities, CDFW recommends **all** Project activities halt or do not commence and Tuolumne County consult with CDFW to determine if the Project can be implemented and avoid take. If take cannot be avoided, an ITP prior to conducting any Project activities is necessary to comply with CESA. Please note that capture, or attempt to do so, is defined as take as described above. Therefore, removal or relocation of FYLF from the Project site requires take authorization to comply with CESA.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special status species and natural communities detected during Project surveys to the CNNDB. The CNNDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by

CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the IS/MND to assist Tuolumne County in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Jared Paul, Environmental Scientist at (559) 243-4014 extension 212 or Jared.Paul@wildlife.ca.gov.

Sincerely,

Julie A. Vance
Regional Manager

ec: Office of Planning and Research, State Clearinghouse, Sacramento

Response to Comment 5: CDFW

5-1
This comment refers to the change in the listing status of the foothill yellow-legged frog from State Species of Special Concern to Candidate Threatened under the California Endangered Species Act (CESA). The IS/MND has been updated to reflect the current listing status designation for foothill yellow-legged frog.

5-2
This comment notes that issuance of an Incidental Take Permit (ITP) may be required if project activities do not fully address potential impacts to foothill yellow-legged frog. CDFW states that an ITP must be obtained if any state listed species or their habitats are impacted and that CDFW may choose to process its own CEQA document if it believes that the project's CEQA document does not meet its needs. As a result of the candidate status of the foothill yellow-legged frog, a more restrictive condition is necessary to ensure that the resource is protected from any potential impacts resulting from the project. The County acknowledges this comment, and as a result, has revised project mitigation measures. The proposed revised mitigation measures are equivalent and more effective in mitigating or avoiding potential significant impacts from the proposed project and, in itself, will not cause any potentially significant impacts on the environment.

5-3

This comment refers to mitigating potential impacts to foothill yellow-legged frog, and the suggested issuance of an ITP should the species be identified during surveys. Because there are no recent occurrences of the foothill yellow-legged frog on site, the County believes that the risk of encountering the species at this site during construction is low. In addition, Measure BIO-2 has been amended with additional protective measures including, but not limited to, focused surveys within 48 hours prior to construction activities and exclusion fencing around the work area. Should the species be encountered at the site during construction, construction activities will be halted and CDFW will be consulted on subsequent measures. It is anticipated that the suggested preconstruction biological surveys and biological monitoring during initial ground disturbance activities would be effective mitigation measures. The potential adverse impact to foothill yellow-legged frogs from project activities is considered to be less than significant. With these measures, the County does not believe that an ITP will be required. This revision does not result in a change to the impact significance made in the Draft IS/MND; no other changes to the Final IS/MND are needed.

Notice of Completion

The following is not a comment and is included for public information purposes only.

Print Form

Appendix C

2018042039

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Italian Bar Road Bridge Replacement Project
Lead Agency: County of Tuolumne — Contact Person: Dave Ruby
Mailing Address: 2 South Green Street — Phone: 209.533.5633
City: Sonora — Zip: 95370 — County: Tuolumne

Project Location: County: Tuolumne — City/Nearest Community: Columbia (10.6 miles northeast)
Cross Streets: Italian Bar Road (Forest Route 4N26) — Zip Code: 95383
Longitude/Latitude (degrees, minutes and seconds): 38 ° 6 ′ 16.12 ″ N / 120 ° 19 ′ 7.78 ″ W Total Acres: 0.72
Assessor's Parcel No.: 022-160-12-00 — Section: — Twp.: — Range: — Base:
Within 2 Miles: State Hwy #: — Waterways: Rose Creek
Airports: — Railways: — Schools:

Document Type:
CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☒ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other:
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI
Other: ☐ Joint Document ☐ Final Document ☒ Other: Cat. Exclusion

Received Office of Planning & Research
APR 13 2018
STATE CLEARINGHOUSE

Local Action Type:
☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other: Bridge Const.

Development Type:
☐ Residential: Units — Acres
☐ Office: Sq.ft. — Acres — Employees
☐ Commercial: Sq.ft. — Acres — Employees
☐ Industrial: Sq.ft. — Acres — Employees
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type — MGD
☒ Transportation: Type Bridge replacement
☐ Mining: Mineral
☐ Power: Type — MW
☐ Waste Treatment: Type — MGD
☐ Hazardous Waste: Type
☐ Other:

Project Issues Discussed in Document:
☒ Aesthetic/Visual ☒ Agricultural Land ☒ Air Quality ☒ Archeological/Historical ☒ Biological Resources ☐ Coastal Zone ☐ Drainage/Absorption ☐ Economic/Jobs
☐ Fiscal ☐ Flood Plain/Flooding ☐ Forest Land/Fire Hazard ☒ Geologic/Seismic ☒ Minerals ☒ Noise ☒ Population/Housing Balance ☒ Public Services/Facilities
☒ Recreation/Parks ☐ Schools/Universities ☐ Septic Systems ☐ Sewer Capacity ☒ Soil Erosion/Compaction/Grading ☐ Solid Waste ☒ Toxic/Hazardous ☒ Traffic/Circulation
☒ Vegetation ☒ Water Quality ☐ Water Supply/Groundwater ☒ Wetland/Riparian ☐ Growth Inducement ☒ Land Use ☐ Cumulative Effects ☒ Other: GHG Emissions

Present Land Use/Zoning/General Plan Designation:
Rural USFS land/public land

Project Description: *(please use a separate page if necessary)*
Project Location: Tuolumne County. Approximately 10.6 miles northeast of the intersection of Italian Bar Road and Yankee Hill Road in the community of Columbia, California on Italian Bar Road (or Forest Route 4N26) at the Rose Creek crossing.
Project Description: Tuolumne County (County) is proposing to replace the Italian Bar Road Bridge over Rose Creek (Bridge No. 32C0037). Italian Bar Road Bridge is located in an unincorporated mountainous area of Tuolumne County, within the Stanislaus National Forest. There are no developed land uses at or near the project. The project site encompasses approximately 0.72 acre. Please refer to Summary Packet.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2010

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

X	Air Resources Board	X	Office of Historic Preservation
	Boating & Waterways, Department of		Office of Public School Construction
	California Emergency Management Agency		Parks & Recreation, Department of
	California Highway Patrol		Pesticide Regulation, Department of
X	Caltrans District #10		Public Utilities Commission
	Caltrans Division of Aeronautics	X	Regional WQCB #5
	Caltrans Planning		Resources Agency
	Central Valley Flood Protection Board		Resources Recycling and Recovery, Department of
	Coachella Valley Mtns. Conservancy		S.F. Bay Conservation & Development Comm.
	Coastal Commission		San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
	Colorado River Board		San Joaquin River Conservancy
	Conservation, Department of		Santa Monica Mtns. Conservancy
	Corrections, Department of		State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of		SWRCB: Water Quality
	Energy Commission		SWRCB: Water Rights
X	Fish & Game Region #4		Tahoe Regional Planning Agency
	Food & Agriculture, Department of		Toxic Substances Control, Department of
X	Forestry and Fire Protection, Department of	X	Water Resources, Department of
	General Services, Department of		
	Health Services, Department of		Other:
	Housing & Community Development		Other:
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date 4/16/2018 Ending Date 5/16/2018

Lead Agency (Complete if applicable):

Consulting Firm: AECOM
Address: 300 Lakeside Drive, Suite 400
City/State/Zip: Oakland, CA 94612
Contact: Jeff Zimmerman
Phone: 510.874.3005

Applicant: County of Tuolumne
Address: 2 South Green Street
City/State/Zip: Sonora, CA 95370
Phone: 209.533.5633

Signature of Lead Agency Representative: DBR Date: 4/10/18

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Revised 2010