Keddie Bridge (No. 9C-0034) at Spanish Creek Replacement Project

Initial Study/Mitigated Negative Declaration

August 2013

Prepared for:
Plumas County
Department of Public Works
1834 East Main Street
Quincy, CA 95971
(530) 283-6498

Prepared by:

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NSR 51223

Project Information

1. Project Title:	Keddie Bridge (No. 9C-0034) at Spanish Creek Replacement Project
2. Lead Agency Name and Address:	Plumas County Department of Public Works 1834 East Main Street Quincy, CA 95971
3. Contact Person and Phone Number:	John Mannle, 530-283-6498
4. Project Location:	Keddie, Plumas County, California; Section 22 of Township 25N, Range 9E; APNs 005-120-012, -013, and -014
5. Description of Project:	Plumas County is proposing replacement of Keddie Bridge (No. 9C-0034) over Spanish Creek with a new two-lane bridge just downstream of the existing bridge. The existing bridge is functionally obsolete and structurally deficient and poses a safety hazard to vehicle travel. The existing bridge will be removed and replaced with a pedestrian bridge on the existing abutments. The project also includes modification of the approaches on Keddie Resort Road to match the alignment and grade of the new bridge.
6. General Plan Designation:	Prime Recreation
7. Zoning:	Rec-3 (Recreation, 3-acre minimum lot size)
8. Surrounding Land Uses and Setting:	Several cabins associated with the former Keddie Resort are located to the north at the end of Keddie Resort Road, and the Union Pacific Railroad track is located to the east. The project area is on private lands within the Plumas National Forest. State Route 70 is west of the project area and travels north-south. Most development in the unincorporated community of Keddie is located less than 1 mile south along State Route 70.

9. Other Public Agencies Whose Approval May Be Required:

- California Department of Transportation (funding authorization, encroachment permit)
- California Department of Fish and Wildlife (Streambed Alteration Agreement)
- U.S. Army Corps of Engineers (Clean Water Act Section 404 Nationwide Permit)
- Central Valley Regional Water Quality Control Board (Clean Water Act Section 401 Water Quality Certification and Section 402 General Construction Activity Storm Water Permit)
- Northern Sierra Air Quality Management District (Dust Control Plan approval)

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1 Introduction

1.1 Purpose of this Document

The Plumas County Department of Public Works is proposing to replace Keddie Bridge (No. 9C-0034) on Keddie Resort Road over Spanish Creek in the unincorporated community of Keddie, Plumas County, California. The existing single-lane bridge is functionally obsolete as well as structurally deficient and is in need of replacement. The Keddie Bridge (No. 9C-0034) at Spanish Creek Replacement Project (proposed project) consists of installation of the new bridge, removal and disposal of the existing bridge, modification of the approaches along Keddie Resort Road to match the new bridge alignment and grade, and installation of a pedestrian bridge in the location of the existing bridge. This Initial Study identifies the potential environmental impacts of the proposed project to determine whether the project may have a significant effect on the environment and identifies mitigation measures, where applicable, to reduce or avoid significant effects.

This Initial Study has been prepared pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines (14 California Code of Regulations 1500 et seq.), which require that public agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. Plumas County is a public agency with discretionary authority over the project and is the Lead Agency under CEQA. The proposed project would receive funding through federal and state sources and would require approvals from the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans). FHWA has designated Caltrans to act as the National Environmental Policy Act (NEPA) Lead Agency on its behalf. NEPA approval is anticipated to be in the form of a Categorical Exclusion supported by technical studies.

1.2 Supporting Technical Studies

The technical studies listed below are available for review at the County office in Quincy:

- Archeological Survey Report (ASR)/Historical Properties Survey Report (HPSR) (confidential; available to qualified readers only)
- Natural Environment Study-Minimal Impact (NES-MI) Report
- Design Hydraulic Study
- Wetland Delineation Report
- Phase 1 Environmental Site Assessment
- Preliminary Geotechnical Investigation

1.3 Document Organization

This document contains the following chapters:

- **Chapter 1 Introduction:** Describes the purpose and content of this document.
- **Chapter 2 Project Description:** Provides a comprehensive description of the proposed project, tentative schedule, and anticipated permit approvals.
- **Chapter 3 Initial Study Checklist:** Describes the environmental setting and analyzes impacts, with mitigation measures identified where appropriate.
- **Chapter 4 Determination:** Presents Plumas County's findings for the proposed project pursuant to CEQA.
- **Chapter 5 Report Preparation and References:** Identifies the individuals responsible for preparation of this document and lists references used to support the analysis.
- **Appendix A Mitigation Monitoring and Reporting Program:** Presents a monitoring program for the mitigation measures identified in Chapter 3.

2 Project Description

2.1 Location

The project area is in the unincorporated community of Keddie, approximately 5 miles north of Quincy, in Plumas County. It is in Section 22 of Township 25N, Range 9E on the *Crescent Mills* U.S. Geological Survey 7.5-minute quadrangle (see Figure 1 at the end of this section). Keddie Bridge (No. 9C-0034) is on Keddie Resort Road across Spanish Creek, approximately 800 feet east of State Route (SR) 70. The new bridge would be located just downstream (north) of the existing bridge. The Area of Potential Effects (APE) encompasses Keddie Resort Road from SR 70 north to a group of cabins associated with the former Keddie Resort, including the existing bridge and excluding the rock wall on the northeast side of the road; a potential staging area on the west side of SR 70 from Keddie Resort Road to a point about 1,000 feet north; and an area around the existing bridge, extending out about 100 feet (Figure 2).

2.2 Existing Facility Conditions

The original Keddie Resort Road Bridge over Spanish Creek in Plumas County was built in 1914 and consisted of a through truss with timber approaches and concrete piers supporting the main span. By 1950, the 86-foot main span had been replaced with the existing pony truss. In 1954, concrete wingwalls were added, and the timber approaches were replaced with fill. The bridge was modified again in the 1960s with the addition of the existing pedestrian walkway along the upstream side of the bridge. The abutments from the original bridge remain and are supported on concrete footings with rock foundations. The existing bridge has a single travel lane and is about 80 feet long by 16 feet wide. The abutment walls are about 25 feet high. The pedestrian walkway is about 4 feet wide.

Keddie Resort Road is a two-lane road that provides access to Union Pacific Railroad facilities and private lands in the unincorporated community of Keddie, including the currently closed Keddie Resort. A rock wall is located along the east side of Keddie Resort Road just east of the bridge and serves to stabilize the slope. The wall was installed in the 1950s and uses the same rock as other slope stabilization features along SR 70, likely for consistency in the visual setting along the highway.

2.3 Project Purpose and Need

Keddie Bridge has been rated as functionally obsolete as well as structurally deficient with a sufficiency rating of 5.0 and is in need of replacement. Recent Caltrans Bridge Inspection Reports noted a failed paint system, evidence of rust on the bridge, deterioration of the asphalt concrete deck, evidence of scour on the spread footing at Abutment 1, and concrete deterioration at the abutment faces; these issues pose safety concerns for travelers. Bridge rehabilitation has been rejected because the bridge would need substantial repairs as well as strengthening to bring the sufficiency rating above 50, and it could never be raised above 80 due to the substandard horizontal alignment. In addition, the bridge would remain functionally obsolete due to its narrow width and substandard approaches. Plumas County identified the need to replace the bridge in its 2010 Regional Transportation Plan.

The bridge replacement is needed to improve public safety for vehicles and pedestrians using Keddie Resort Road as well as to improve access for maintenance vehicles associated with the railroad. A separate pedestrian bridge is needed for pedestrian access across Spanish Creek that is separated from vehicle traffic for public safety.

2.4 Proposed Project Description

The proposed project would involve the installation of a new bridge (number 9C-0157) across Spanish Creek just downstream (north) of the existing bridge, modification of the approaches to the bridge along Keddie Resort Road, removal and disposal of the existing bridge, and installation of a pedestrian bridge in the location of the existing bridge. Details on the proposed project are provided below. Alternatives to the proposed project are discussed in Section 2.7, Alternatives.

New Bridge Structure and Roadway Approaches

The new bridge would be a two-lane, two-span bridge, approximately 162 feet long and 27 feet wide (Figure 3). The bridge would consist of a simply supported steel girder main span and a cast-in-place concrete approach span. The bridge would be supported by two abutments and one pier. The appearance of the bridge would be similar to other structures in the area. The new bridge would provide two 11-foot-wide travel lanes across the creek instead of the current single lane of travel and would have 2-foot-wide shoulders on both sides. The additional width would improve traffic flow by extending the existing two lanes of Keddie Resort Road across the creek, but would not result in an increase in traffic capacity. In order to reduce earthwork impacts, the roadway profile for the replacement structure would follow the existing profile as much as possible. A retaining wall would be constructed along the eastern approach (northeast side) to reduce the impact of fill slopes on the channel and preserve existing riparian habitat. The wall would be Caltrans Standard Plan Type 1 reinforced concrete and would be approximately 40 feet long. Open bridge railing, such as metal tubular bridge railing, would be used along the bridge. This railing type would allow water and snowmelt to flow over the side of the bridge, instead of being piped off.

Keddie Resort Road would be modified to match the grade and location of the new bridge, which would have similar horizontal and vertical alignments. Approach modifications would be necessary for about 200 feet west and 100 feet east of the new bridge, requiring roadwork on approximately 400 feet of Keddie Resort Road. The approaches would have a similar slope as the current approaches and would be graded at approximately 3.6 percent decline on the west side and 5.6 percent incline on the east side. A culvert on the east side of the bridge would be lengthened or relocated slightly to accommodate the modified approach.

The bridge would be above the 100-year floodplain of Spanish Creek, with only the new pier and abutments placed within the 100-year floodplain. The abutments would most likely be spread footings, which require excavation of in-situ material and conventional form-reinforced-pour construction operations. Each abutment would be approximately 28 feet wide and would extend 12–14 feet below ground. The location of the new abutments would be further up on the banks than the existing bridge abutments to improve the channel opening at the structure. The pier would consist of a single round column founded on a cast-in-drilled-hole pile. The pile would be 6 to 8 feet in diameter and anchored approximately 35–40 feet into the ground.

The new bridge centerline would be approximately 30 feet north of the existing bridge centerline. With the modified alignment of the new bridge, the existing bridge would remain open to maintain access across the creek throughout construction. The rock wall along the inboard side of the northeast approach would not be modified or disturbed by the project. The wall would be protected during construction by temporary fencing, which would be installed between the wall and existing road pavement. The roadway approach would be modified so that it does not affect the wall or its foundation.

After removal of the existing bridge, a pre-fabricated pedestrian bridge would be installed on the existing abutments. The pedestrian bridge would be narrower than the existing bridge to accommodate pedestrians and non-vehicular traffic only and would require minimal additional construction to install.

Bridge Removal

Upon completion of the new roadway approaches and bridge structure, the existing bridge and existing roadway approaches would be removed. The existing bridge would be lifted out with a crane from the bank and transported to a storage yard or other County-approved location for disposal or storage by the contractor. Disposal of the existing bridge would be in accordance with applicable solid and hazardous waste regulations, specifically pertaining to lead-based paint, which is found on the bridge.

Debris would be prevented from rolling down the bank into the water with a poly-wrapped K-rail or another physical barricade; this would also avoid the potential for lead to enter the creek. Operation of equipment near the existing abutments may require the temporary placement of a gravel platform from which to operate heavy machinery in the floodplain, but the equipment would not operate within the active channel. Some fill associated with the existing bridge may be removed, possibly requiring some excavation into the banks. Excavated areas would be backfilled with native material from the new bridge excavations, and the channel banks would be restored to their natural contours, to the extent practicable under the new pedestrian bridge. Natural regeneration of vegetation would be expected along the banks.

Construction Methods

Construction activities would generally involve:

- site clearing, preparation, and earthwork;
- construction of new bridge foundations, abutments, retaining structures, deck, and guardrails;
- modification of the bridge approaches along Keddie Resort Road;
- application of pavement overlay and paint;
- sign installation;
- removal of the existing bridge structure;
- installation of a pedestrian bridge; and
- revegetation of disturbed areas.

Vegetation would be removed from the banks of Spanish Creek where the new bridge would be installed, and some excavation activities would be necessary along the banks and in adjacent upland areas for bridge installation. Equipment expected to be needed for project construction includes: large cranes to set the girders and install piling, excavators, graders, dozers, backhoes, hoe-rams, dump trucks, rollers, concrete trucks, jackhammers, and pavers. Welding may be needed for equipment repair or splicing bridge components together. Construction methods will comply with Caltrans Standard Specifications requirements and will incorporate standard construction practices, such as traffic control, best management practices, and emissions reductions, to minimize environmental effects (see Section 2.5). Construction activities will be scheduled with consideration for seasonal and environmental limitations, such as winter conditions and sensitive biological resources (see Section 2.6).

The general process for the new bridge construction would be to excavate the banks to allow construction of the new abutments. The abutments and wingwalls/retaining walls would be formed and poured. Once cured, the area behind the abutments would be backfilled using compacted fill, and the abutment slopes would be graded. The cast-in-drilled-hole column foundation would also be constructed, followed by the column and bent cap. The cast-in-place eastern approach span would be constructed, and then the steel girders would be erected on the west abutment and center support. This would be followed by various items of work to complete the project, including asphalt concrete overlay, guardrail installation within the existing roadway fill, lane line striping, and general site cleanup. After completion of the new bridge, the existing bridge would be removed, and a new pedestrian bridge would be installed on the existing abutments.

No in-water diversions are expected to be necessary for bridge construction or removal. A drilled shaft column would be placed on the creek bank, but no columns or falsework would be required within the active channel. Temporary falsework would be required on the bank for construction of the cast-in-place approach span. All falsework materials would be removed after completion of construction.

The two new bridge abutments would be constructed on the channel banks, and excavation would be required to found the footings on competent material. The abutment foundations would most likely be spread footings approximately 28 feet wide and 12 feet long. The excavation for the new abutments would be performed with an excavator or backhoe. In order to found the abutments on competent material, rock excavation may be required near the bottom of the abutment locations. The excavated area for the new abutments would be approximately 35 feet wide, 20 feet long, and 12 to 14 feet deep at the deepest locations. Each of the abutments would have long wing walls and/or retaining walls to contain the approach fill.

The pier would be constructed on the eastern channel bank. A small area of the bank would be excavated to make a work platform. The cast-in-drilled-hole pile would be installed by first drilling the hole with a large crane. If water is present in the hole, it would be stabilized with a slurry material. The reinforcement cage would be placed in the hole, and concrete would be pumped into the hole. The slurry material would be pumped into tanks as it is displaced by the concrete for re-use or off-site disposal.

The pedestrian bridge would be built off-site and hauled to the project area for installation. A crane would be used to place the bridge on the existing abutments, after removal of the existing bridge, and the bridge would be secured to the abutments. No retrofits or rehabilitation of the abutments is anticipated. The approaches to the pedestrian bridge would be reconstructed with asphalt concrete over asphalt base and would be restored and contoured to be consistent with the existing approaches.

Fill Import and Export

Construction of the new bridge would require approximately 7,000 cubic yards of backfill (from within the project area and local commercial sources), and approximately 1,600 cubic yards would be excavated for the abutments, walls, and roadway. Some excavated material from site preparation would be used to backfill around the new abutments and approaches. Imported fill would consist of engineered road base (crushed rock from a commercial source) and asphalt and would meet Caltrans specifications.

Construction Access and Staging

Access to the work area would be via SR 70 and Keddie Resort Road. No alternate access is available. Large trucks and equipment may need to use private roads north of the bridge to turn around. Staging for equipment and materials would be in a large pullout on the west side of SR 70, just north of Keddie Resort Road. Parking for construction vehicles would be in the staging area.

Utilities

Pacific Gas and Electric Company (PG&E) and Frontier Communications have facilities in the project area. Frontier owns a utility pole just west of the bridge; this pole carries an overhead communication line over the bridge to a joint pole (Frontier/PG&E) just east of the bridge. PG&E power lines come from the northeast to provide power to a luminaire mounted to the eastern pole. The pole just west of the bridge and the overhead line would be relocated away from the revised alignment, possibly to the south of the new alignment where the existing road is located. The relocated utility pole would require excavation to a depth of no more than 20 feet. The pole, luminaire, and power lines to the east should be unaffected.

Right-of-Way and Easements

Because the new bridge would be located outside the existing right-of-way, new right-of-way would need to be obtained from the private property owner. Right-of-way acquisition would be required for two parcels: Assessor Parcel Numbers 005-120-013 and 005-120-014. A permanent road easement would be established along the new bridge, encompassing approximately 0.26 acre. Temporary construction easements would be required along the existing and new alignments to accommodate construction activities, encompassing 0.07 acre on the north side of the new bridge location and 0.3 acre on the south side of the existing bridge.

2.5 Construction Criteria and Specifications

Plumas County would retain a construction contractor for construction of the proposed project. The contractor would be responsible for compliance with all applicable rules, regulations, and ordinances

associated with proposed project activities and for implementing construction-related mitigation measures. Construction specifications would be in accordance with Caltrans Standard Specifications and Special Provisions in force at the time the construction contract is awarded. The standard construction practices that would be implemented are described in this section. Additional measures may be identified as mitigation measures in this document or in permits or other approvals required for the project.

Traffic Control

The existing bridge would remain in operation throughout construction to maintain access to the private lands to the north. Temporary lane closures on Keddie Resort Road may be necessary to accommodate construction activities, particularly during the final stages when the bridge approaches are modified to match the new alignment, but at least one lane would remain open at all times. Traffic control measures would be used along SR 70 and Keddie Resort Road to alert travelers to the work area, any lane closures, and potential delays in accordance with Section 12 "Temporary Traffic Control" of the Caltrans Standard Specifications. These measures would include the use of traffic cones, signs, lighted barricades, lights, and flagmen. Access will be readily available at all times for emergency vehicles.

Air Pollution and Dust Control

Air pollution and dust control would conform to Caltrans Standard Specifications Sections 14-9.02 "Air Pollution Control" and 14.9-03 "Dust Control" and Northern Sierra Air Quality Management District rules. The contractor would be required to implement a dust control program to limit fugitive dust emissions and submit a dust control plan to the air district. Notification of bridge demolition may be required for the California Air Resources Control Board and/or U.S. Environmental Protection Agency in accordance with their rules and regulations for hazardous pollutants.

The fugitive dust and emission controls identified in the dust control plan would include, but are not limited to, the following:

- Water or use a palliative on stockpiles and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.
- Cover trucks hauling soil and other loose material or maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer) pursuant to California Vehicle Code (Section 23114) and air district Rule 226.
- Clean (sweep or wash with water) equipment used on unpaved surfaces prior to entering SR 70 to prevent tracking materials onto the highway.
- Minimize idling time of vehicles and equipment and shut off equipment when not in use pursuant to California Code of Regulations (Title 13, sections 2449(d)(3) and 2485).
- Maintain construction equipment in proper working conditions according to manufacturer's specifications, and check it daily to ensure it is in proper running condition before it is operated.

Water Pollution Prevention

The contractor would be required to implement water pollution control measures that conform to Section 13 "Water Pollution Control" of Caltrans Standard Specifications and prepare a Storm Water Pollution Prevention Plan (SWPPP) that identifies the project-specific best management practices (BMPs) to be implemented during construction. These measures include, but are not limited to, the following:

- Exercise every reasonable precaution to protect Spanish Creek from pollution due to fuels, oils, bitumen, calcium chloride, and other harmful materials and conduct and schedule operations so as to avoid or minimize muddying and silting of the creek.
- Limit vegetation removal to areas necessary for bridge construction and associated activities;
- Use temporary devices, such as dikes, basins, ditches, straw, and seed, to prevent pollutants from entering the creek and to stabilize slopes.
- Install facilities and devices used for water pollution control practices before performing work activities.
- Install soil stabilization materials for water pollution control practices in all work areas that are inactive or before storm events.
- Repair or replace water pollution control practices within 24 hours of discovering any damage.
- Implement effective handling, storage, usage, and disposal practices to control hazardous materials and manage waste and non-stormwater runoff in the work area before they come in contact with receiving waters.
- Keep material or waste storage areas clean, well organized, and equipped with enough cleanup supplies for the material being stored.
- Implement spill and leak prevention procedures for chemicals and hazardous substances stored in the work area.
- Contain and clean up spills of petroleum materials and other hazardous substances listed under 40 CFR, parts 110 and 302 as soon as it is safe.
- Cover active and inactive soil stockpiles with soil stabilization material or a temporary cover and surround stockpiles with a linear sediment barrier.
- If fueling or maintenance must be done on-site, designate a location away from the creek, preferably at the staging area along SR 70.
- Use containment berms or dikes around fueling and maintenance areas.
- Prevent demolished material from entering the creek, such as through use of authorized covers and platforms to collect debris.
- Do not operate mechanized equipment in the active stream channel.
- Do not deposit material derived from roadway work in the creek channel, including along the banks, where it could be washed away by high stream flows.

Hazardous Materials Control

If determined necessary by the contractor after removal of the existing bridge, lead-based paint on the bridge would be removed by the contractor in accordance with methods approved by the U.S. Environmental Protection Agency. Acceptable methods include wet scraping or the use of a dustless needle gun connected to a vacuum unit with a high efficiency particulate air filter that empties

directly into a waste container. The waste container would be properly documented and disposed of at a Class I landfill near the project area.

Safety and Health Requirements

The contractor would be required to follow all safety and health requirements set forth by the Occupational Safety and Health Administration. In addition, to prevent wildfires, the contractor would prepare and implement a fire safety plan for construction operations, such as welding, and use construction equipment equipped with fire prevention devices (e.g., spark arrestors) pursuant to Public Resources Code 4442.

Post-Construction Restoration

Disturbed areas outside of the new bridge location and roadway approaches would be restored to pre-disturbance conditions, which would include grading to prior contours and reseeding with native grasses. After removal of the existing bridge, excavated areas would be filled with native soil from the new bridge excavations. Natural regeneration of vegetation would be expected along the banks following bridge removal, and plantings are not proposed.

2.6 Tentative Schedule

Construction of the proposed project is anticipated to start in May of 2015 and be completed by October of the same year. Construction activities in the creek channel (i.e., abutment and pier installation for new bridge, removal of existing bridge) would be limited to May 15 to October 1 to correspond with the low flow period. Bridge installation would take about 3.5 months, and modification of the roadway approaches would take about 2 weeks. Bridge removal would be expected in September and would take less than 1 week. All construction activities are expected to take approximately 114 working days (less than 6 months).

2.7 Alternatives

Plumas County has considered several alternatives to the proposed project, including the no-project alternative. Under the no-project alternative, the Keddie Bridge would not be replaced, and the existing bridge would continue to be used to provide access across Spanish Creek along Keddie Resort Road. The bridge would be subject to failure in the event that the abutments erode or the bridge rusts beyond repair. The County does not anticipate any maintenance activities under this alternative, and travelers across the bridge would continue to be exposed to potential hazards and safety concerns due to the structural deficiency of the existing bridge.

Alternative structure types were considered to compare costs and features. The proposed bridge structure was determined to be the most suitable and cost-effective design to achieve the project purpose and need. Other structures considered included a single-span, 123-foot-long pre-cast concrete girder bridge with high abutment and approach fill/walls; a two-span, 161-foot-long bridge, with a similar 123-foot-long pre-cast girder span and a shorter, cast-in-place slab span at the east end; and a 164-foot-long, two-span box girder (each span 82 feet long) with a center pier.

The County also considered retaining the existing bridge for use as a non-vehicle access across the creek and to provide a separated pedestrian creek crossing once the new bridge is in place. If maintained in place, the existing bridge would require extensive maintenance, such as painting to prevent future steel member section loss, and pedestrian barriers would need to be installed to bring the bridge up to current pedestrian safety standards. The existing pedestrian walkway, which is attached to the existing bridge, would be removed if the bridge were left in place. Retaining the existing structure in place could complicate traffic safety, most notably the approach safety barriers to the new bridge. This alternative was eliminated from further consideration because of the projected high maintenance costs.

Pedestrian access on the new bridge was also considered, but eliminated, because of the need to expand the new bridge and the resulting additional costs and environmental impacts associated with the expansion.

Bridge rehabilitation was considered as an alternative, but the bridge would need substantial repairs as well as strengthening to bring the sufficiency rating above 50, and it could never be raised above 80 due to the substandard horizontal alignment. In addition, the bridge would remain functionally obsolete due to its narrow width and substandard approaches. Because of these factors, this alternative is neither cost effective nor feasible.

2.8 Required Permits and Approvals

Table 1 lists applicable federal, state, and local authorizations that may be needed prior to project implementation.

Table 1. Anticipated Permit Approvals

Approving Agency	Permit/Approval	Required for
Federal Agencies		
U.S. Army Corps of Engineers	Section 404 Clean Water Act permit	Discharge of fill material into Spanish Creek
State Agencies		
California Department of Transportation	Funding authorization; NEPA compliance	Federal State Transportation Improvement Program; NEPA
	Encroachment Permit	Staging activities along SR 70
California Department of Fish and Wildlife	Streambed Alteration Agreement	Section 1602 of Fish and Game Code
Regional Water Quality Control Board	Coverage under the General Construction Activity Storm Water Permit (Section 402 of the Clean Water Act, 40 CFR Part 122)	Storm water discharges associated with construction activity for greater than 1 acre of land disturbance
	Water Quality Certification	Compliance with Section 401 of the Clean Water Act

Table 1. Anticipated Permit Approvals

Approving Agency	Permit/Approval	Required for
Local Agencies/Others		
Northern Sierra Air Quality Management District	Dust Control Plan approval	Compliance with Rule 226 (Dust Control) for soil disturbance greater than 1 acre
Plumas County	Project approval; CEQA compliance	
Private Landowner	Easement	Modified easement through private land to accommodate new bridge
Plumas County Building Department	Grading permit	May be needed if fill material is deposited on private land

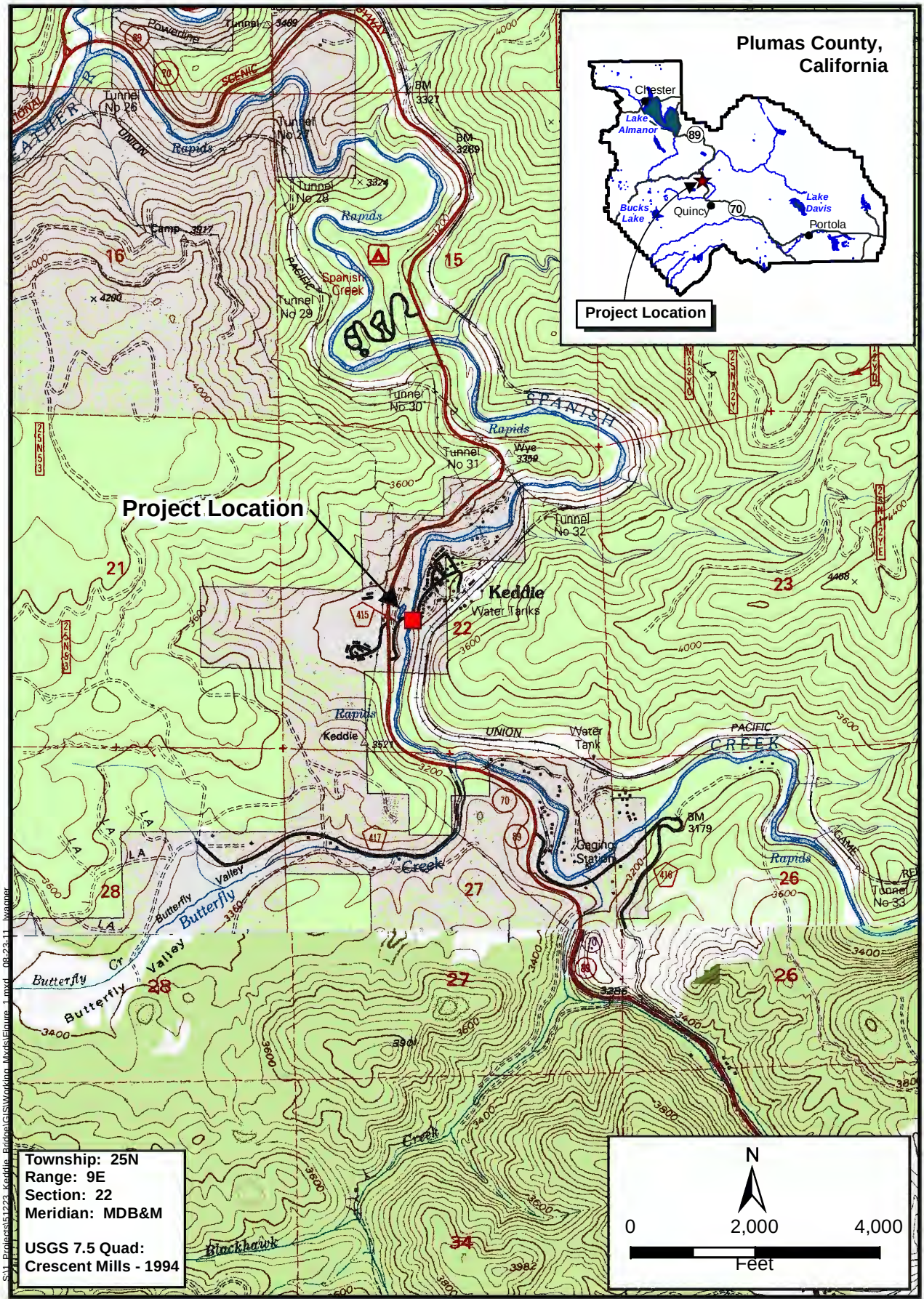

Figure 1
Project Location and Vicinity Map

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KEDDIE ROAD BRIDGE
NO. 09C-0034 OVER SPANISH CREEK
REPLACEMENT PROJECT

Area of Potential Effects Map Approved by:

Wayne Wirig for CH — 2/22/12
Cassandra Hensher — Date
POS - Principal Investigator - Prehistoric Archeology
Caltrans D2, Office of Local Assistance

Jon Howat — 02.22.2012
Jon Howat P.E., Chief — Date
District of Local Assistance Engineer
Caltrans D2, Office of Local Assistance

PLUMAS NATIONAL FOREST
UPRR
Exist Rock Wall (Not to be Disturbed)
005-120-011 Equity Trust Co.
005-120-012 Equity Trust Co.
Existing Bridge
Spanish Creek
Vertical APE in vicinity of proposed abutments is approximatley 40'.
005-120-013 Equity Trust Co.
005-120-014 Equity Trust Co.
Keddie Resort Rd
Route 70
Potential Staging Area
005-120-0005 English Properties Inc.

AREA OF POTENTIAL EFFECTS (APE)
TEMPORARY CONSTRUCTION EASEMENT
PARCEL BOUNDARY
STATE RIGHT OF WAY
COUNTY ROAD EASEMENT
TOE OF FILL
TOP OF CUT
LIMITS OF BORING LOCATIONS

ARCHEOLOGICAL - Prehistoric and Historic
The Area of Potential Effects includes all existing (and proposed) Right of Way and temporary construction easements.
APE encompasses all Alternatives.

0 50 100ft
SCALE : 1"=100'

Figure 2. Area of Potential Effects

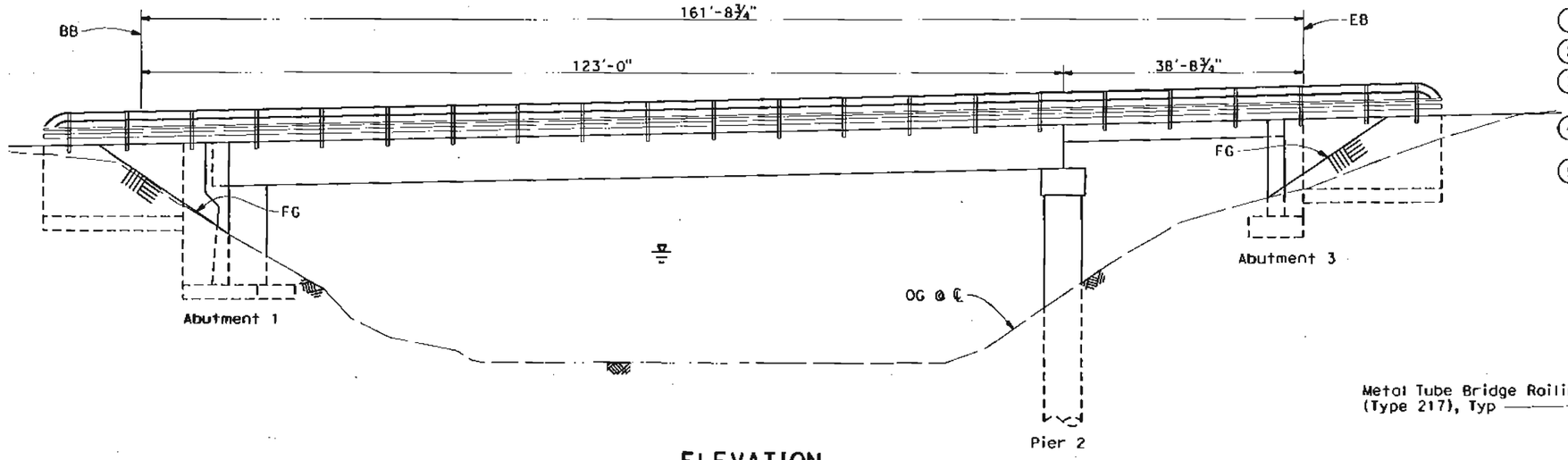
PREPARED FOR THE COUNTY OF PLUMAS - DEPARTMENT OF PUBLIC WORKS

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT
02	PLU	CR	XX

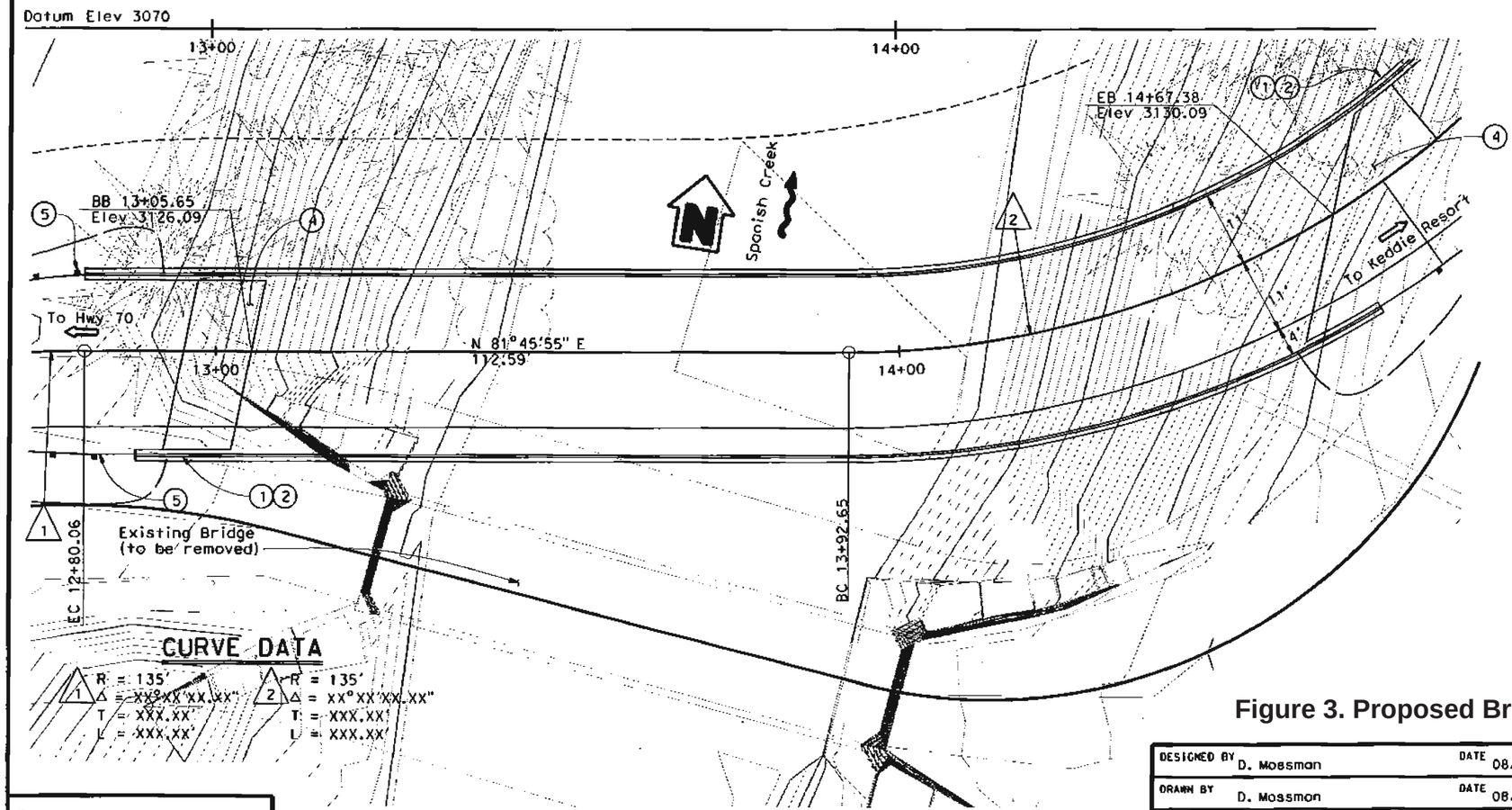
QUINCY ENGINEERING, INC
3247 Ramos Circle
Sacramento, CA 95827 - 2501

Notes:

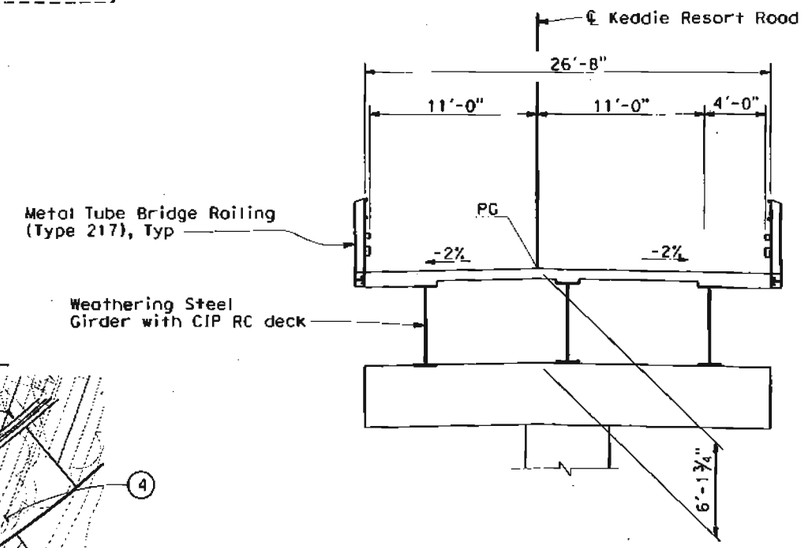
1. Point Br. No. 09C-0157
2. Point "Spanish Creek Bridge"
3. Metal Beam Guard Railing (See Road Plans)
4. Structure Approach Type EO(10)
5. Steel Backed Timber Railing (See Road Plans)



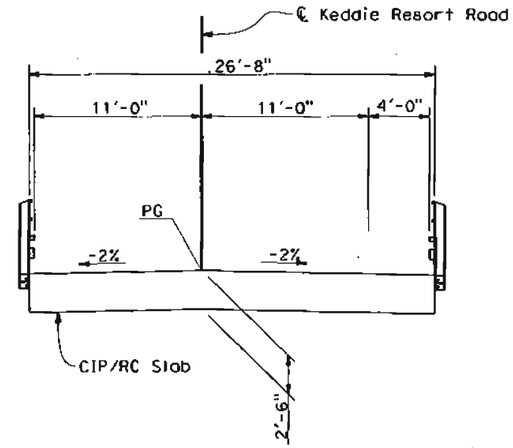
ELEVATION
1"=10'



PLAN
1"=10'



TYPICAL SECTION - SPAN 1
1"=5'



TYPICAL SECTION - SPAN 2
1"=5'

Figure 3. Proposed Bridge Design

DESIGNED BY	D. Mossman	DATE	08/11
DRAWN BY	D. Mossman	DATE	08/11
CHECKED BY	X	DATE	X
APPROVED	X	DATE	X

D. Mossman
PROJECT ENGINEER

ALT 4 PLANNING STUDY
KEDDIE RESORT RD. BRIDGE

BRIDGE NO. X	UNIT: X
SCALE: As Shown	PROJECT NUMBER & PHASE: X

X
DESIGN OVERSIGHT
X
SIGN OFF DATE

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 7/16/10)

FILE => S:\Client\PLUMAS\P03-600 Keddie\CAD\p03600a-a-gp05_Ped1.dgn CONTRACT NO.: X

USERNAME => _USERNAME,DATE PLOTTED => 8/7/2012 TIME PLOTTED => 4:46:09 PM

3 Initial Study Checklist

3.1 Introduction

This chapter incorporates the Environmental Checklist contained in Appendix G of the CEQA Guidelines, including the CEQA Mandatory Findings of Significance. Each resource section provides a brief description of the setting, a determination of impact potential, and a discussion of the impacts. Where appropriate, mitigation measures are provided that would be used by the County to reduce potential impacts to a less-than-significant level. A discussion of the mandatory findings of significance is included at the end of this chapter.

Addressed in this section are the following 17 environmental categories:

- Aesthetics
- Agricultural and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

Each of these issue areas was fully evaluated, and one of the following four impact determinations was made:

- **No Impact:** No impact to the environment would occur as a result of implementing the proposed project.

- **Less-than-Significant Impact:** Implementation of the proposed project would not result in a substantial and adverse change to the environment and no mitigation is required.

- **Less than Significant With Mitigation Incorporated:** A "significant" impact that can be reduced to a less-than-significant level with the incorporation of project-specific mitigation measures.

- **Potentially Significant Impact:** Implementation of the proposed project could result in an impact that has a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (CEQA Guidelines Section 15382).

3.2 Environmental Setting, Impacts, and Mitigation Measures

I. **AESTHETICS —** Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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?	☐	☐	☐	☒

Environmental Setting

SR 70 is an eligible state scenic highway (California Department of Transportation 2011) and is part of the Feather River National Scenic Byway, which extends from 10 miles north of Oroville to its junction with U.S. Highway 395 in Lassen County (National Scenic Byways Online 2011). SR 70 is also a local scenic road and offers travelers views of scenic vistas in the county, such as open space, forested areas, mountain peaks and ridgelines, and water bodies. As such, the forests surrounding the APE are part of a scenic vista and contribute to the scenic quality of views along SR 70.

The APE is fairly disturbed from past activities associated with bridge and road improvements and general use of the area, but the surrounding lands contain pine forests that provide a scenic setting. Due to the surrounding vegetation and topography, the existing bridge and portion of the APE along Keddie Resort Road are not visible from SR 70. The land along SR 70 in the APE is visible from the highway, but it is already disturbed from past uses and detracts from the scenic character of the surrounding forests. Travelers along Keddie Resort Road, which are limited to private landowners and workers associated with the railroad, constitute the primary viewer group in the APE.

Discussion of Impacts

a, b) ***Less than Significant Impact.*** Staging activities would take place during the construction phase along an eligible state scenic highway (SR 70), but these activities would take place in a previously disturbed area. No trees would be removed for staging, and no potential scenic resources along the highway would be adversely affected by staging. Most of the construction activities would take place along Keddie Resort Road and would not be visible from SR 70. The project would have a minimal effect on the scenic quality of the area, as discussed under item c) below, and would not substantially affect scenic vistas in Plumas County.

c) ***Less than Significant Impact.*** The new bridge would be located just downstream (north) of the existing bridge and would only be visible to travelers along Keddie Resort Road. Vegetation and topography would mask views of the new bridge, during and after construction, from SR

70, the railroad track, and the cabins to the north. Travelers on SR 70 would have views of the staging area and equipment periodically accessing the work area, but these views would be limited to the construction period, lasting no more than 6 months, and would be brief as travelers pass through the area. Trees along SR 70 would not be affected by bridge construction, but some small trees along Spanish Creek would be removed to install the new bridge.

The new bridge would have similar dimensions as the existing bridge, although it would be located just downstream, and would not block views of the surrounding area for travelers along Keddie Resort Road. Temporary visual impacts would occur during construction as the new bridge is built and the existing bridge is removed, but few travelers would be affected by the temporary impacts. The new bridge and pedestrian bridge would be visually similar to other structures in the region and would not detract from views along Spanish Creek or degrade the quality of the visual setting in the vicinity of the bridge. Long-term changes to the visual setting of the area would be minimal and consistent with current conditions. Impacts on the visual character and quality of the area would be less than significant.

d) ***No Impact.*** The new bridge would not include any nighttime lighting and would not create a new source of glare. Small reflectors or signs similar to the current bridge markers would be used as a safety measure on the bridge to inform travelers of its location.

II. AGRICULTURAL AND FOREST RESOURCES — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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 by Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in 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?	☐	☐	☐	☒

Environmental Setting

No important farmland has been mapped in Plumas County by the Farmland Mapping and Monitoring Program. None of the APE is used for agriculture. Adjacent and nearby lands on the Plumas National Forest contain forests that may be used for forestry practices or subject to periodic vegetation management, but are not currently active timberlands.

Discussion of Impacts

a–e) ***No Impact.*** The project would not convert agricultural or forestry lands and would not encourage the conversion of nearby forests to other uses.

III. AIR QUALITY — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute 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?	☐	☐	☒	☐

Environmental Setting

Plumas County is in the Mountain Counties Air Basin, and air quality is regulated by the Northern Sierra Air Quality Management District. The county has generally good air quality, but air pollutants from the Sacramento region, and to a lesser extent the San Francisco Bay Area, are occasionally transported into the county during strong northerly winds. Wildfires also create a source of smoke and poor air quality, primarily during the summer months. The primary air pollutant of concern in Plumas County is particulate matter (PM_{10} and $PM_{2.5}$).

The State established California ambient air quality standards for 10 criteria pollutants, and the California Air Resources Board is tasked with assigning area designations based on available air quality data and the California standards. The California standards are more stringent than the national ambient air quality standards established by the U.S. Environmental Protection Agency, which also classifies areas as attainment, nonattainment, or unclassified based on the national standards. The State has classified Plumas County as nonattainment for respirable particulate matter (PM_{10}) and as attainment or unclassified for other California standards. The County is in attainment

for all national standards. The primary sources of pollutants contributing to the nonattainment designation for PM_{10} are wood stoves, wind-blown dust from dirt roads and ground-disturbing activities, and burning or combustion of fuels. Ozone is also a concern, but the levels of pollutants that create ozone are below ambient air quality standards. Carbon monoxide (CO) is a pollutant of concern at the local level in areas of heavier vehicle traffic. In the APE, the primary sources of air pollution are vehicle traffic and wind-blown dust.

Sensitive receptors include people who have a high sensitivity to air pollution, especially children, seniors, and sick persons. Locations of sensitive receptors can include residences, hospitals, schools, and recreation areas. No sensitive receptors exist in the vicinity of the APE.

Naturally occurring asbestos is a concern in Plumas County because it is known to be present in certain soils and can pose a health risk if released into the air. The County General Plan identifies those areas with potential to contain asbestos in soils (Plumas County 2011). Ground disturbance activities within these areas are subject to additional regulatory requirements to minimize human exposure potential. Soils in the APE do not have potential to contain naturally occurring asbestos.

Discussion of Impacts

a, b) ***Less than Significant Impact.*** Construction activities would result in short-term increases in fugitive dust (PM_{10} and $PM_{2.5}$) and other emissions from the following: use of heavy equipment that generates dust, exhaust, and tire-wear emissions; soil disturbance; materials used in construction; and construction traffic. The PM_{10} and ozone precursor emissions associated with the project would be minimized through the implementation of air pollution and dust control measures in combination with the relatively small disturbance footprint (less than 10 acres) and short-term construction period (approximately 114 days). Construction-related emissions would also be expected to remain localized around the project area and dissipate within the immediate vicinity, based on the surrounding topography and vegetation. The project would comply with Northern Sierra Air Quality Management District rules for visible emissions (Rule 202), nuisance (Rule 205), dust control (Rule 226), and cutback and emulsified asphalt paving materials (Rule 227) and with Caltrans Standard Specifications. A dust control plan will be submitted to the District in accordance with Rule 226, and all measures in the plan will be implemented during construction.

Although Plumas County is designated nonattainment for PM_{10}, compliance with a dust control plan and implementation of pollution control measures, as described in Chapter 2, would ensure the emissions do not result in a violation of air quality standards in the air basin or a substantial adverse contribution to air quality in the region, and impacts on air quality would be less than significant. The project would be consistent with applicable air quality plans in the area and would not affect air quality planning. No mitigation measures are necessary.

The new bridge is not designed to increase traffic along Keddie Resort Road; it would improve safety conditions for travelers using the road. The use of the road would be the same, and traffic would not be expected to increase as a result of the new bridge. Long-term emissions from traffic using Keddie Resort Road would be similar to current conditions and would not increase as a result of the proposed project.

c) ***Less than Significant Impact.*** As discussed under items a, b) above, the project would result in minor construction-related emissions. It would not result in a cumulatively considerable net increase of any criteria pollutant. The project would cause short-term air quality impacts in the vicinity of the project area as a result of construction activities; however, it would not result in long-term or cumulatively considerable increases in air pollutant emissions for which Plumas County is currently in nonattainment (PM_{10}). The temporary increase in air pollutant emissions associated with construction activities would result in less-than-significant contributions to cumulative pollutant levels in the region.

d) ***Less than Significant Impact.*** Travelers along nearby roads could be exposed to temporary air pollutants from construction activities, such as fugitive dust, CO, and ozone precursors. No other receptors would be exposed to air quality effects. Construction activities would be temporary, lasting approximately 114 days, and emissions would not be substantial with implementation of air pollution and dust control measures. Compliance with air district rules would also ensure that construction activities do not create major dust or exhaust plumes. With the minor and temporary nature of emissions, receptors would not be exposed to substantial pollutant concentrations. This impact would be less than significant.

e) ***Less than Significant Impact.*** Construction activities would involve the use of gasoline or diesel-powered equipment that emits exhaust fumes and asphalt paving, which has a distinctive odor during application. These activities would take place intermittently throughout the workday, and the associated odors are expected to dissipate within the immediate vicinity of the work area. Persons near the construction work area may find these odors objectionable. However, the limited number of receptors, infrequency of the emissions, rapid dissipation of the exhaust into the air, and short-term nature of the construction activities would result in less-than-significant odor impacts.

IV. BIOLOGICAL RESOURCES — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or 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 Wildlife or 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?	☐	☒	☐	☐

IV. **BIOLOGICAL RESOURCES —** Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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?	☐	☐	☐	☒

Environmental Setting

Terrestrial habitat in the APE consists primarily of ponderosa pine, montane riparian, and fresh emergent wetland. Spanish Creek flows north through the APE. The dominant habitat is ponderosa pine. It is dominated by ponderosa pine (*Pinus ponderosa*) and, to a lesser extent, black oak (*Quercus kelloggii*) and has a shrubby and herbaceous understory with deer brush (*Ceanothus integerrimus*), Fremont's silk tassel (*Garrya fremontii*), white-leaved manzanita (*Arctostaphylos viscida*), rip-gut brome (*Bromus diandrus*), and cheat grass (*Bromus tectorum*). Montane riparian habitat is found along Spanish Creek. Dominant species include white alder (*Alnus rhombifolia*), big-leaf maple (*Acer macrophyllum*), red-osier dogwood (*Cornus sericea*), mock orange (*Philadelphus lewisii*), Himalayan blackberry (*Rubus armeniacus*), reed canary grass (*Phalaris arundinacea*), torrent sedge (*Carex nudata*), and Indian rhubarb (*Darmera peltata*). A man-made detention pond adjacent to the APE boundary contains a small fresh emergent wetland that supports broad-leaved cattail (*Typha latifolia*), reed canary grass, and beggar's tick (*Bidens frondosa*).

Waters of the United States, including wetlands, delineated in the APE include riparian wetlands adjacent to the creek (0.011 acre), a fresh emergent wetland west of the creek in a detention pond (0.047 acre), an ephemeral stream (0.004 acre), and the creek (0.312 acre, 60 to 75 feet wide at the ordinary high water mark [OHWM]). The riparian wetlands occur along the lower bank of the creek, just outside of the active channel, and consist of reed canary grass and torrent sedge. The fresh emergent wetland in the pond is fed by an intermittent stream and surface runoff and supports broad-leaved cattail, reed canary grass, and beggar's tick. Spanish Creek is a perennial creek and is a water of the United States that flows into the East Branch North Fork of the Feather River approximately 3.5 miles downstream of the APE. The ephemeral stream conveys flow under Keddie Resort Road into Spanish Creek from the west bank.

Special-status wildlife species that may use the habitats in the APE or vicinity (e.g., up- or downstream along Spanish Creek) include foothill yellow-legged frog (*Rana boylii*), western pond turtle (*Emys marmorata*), Harlequin duck (*Histrionicus histrionicus*), olive-sided flycatcher (*Contopus cooperi*), yellow warbler (*Dendroica petechia brewsteri*), yellow-breasted chat (*Icteria*

virens), Sierra Nevada mountain beaver (*Aplodontia rufa californica*), ring-tailed cat (*Bassariscus astutus*), western mastiff bat (*Eumops perotis californicus*), and pallid bat (*Antrozous pallidus*). All of these species except ringtail (a Fully Protected species) are California Species of Special Concern. No state or federally listed species are expected to occur in the APE. No special-status plants have potential to occur in the APE based on results of the biological study (North State Resources 2012b).

The frog, turtle, most of the birds, beaver, and ring-tailed cat may be found along Spanish Creek and may nest or breed in suitable riparian habitat. Olive-sided flycatcher may be found in coniferous forests in and surrounding the APE. The bats could use the existing bridge for roosting and may forage in surrounding habitat. Migratory birds protected under the Migratory Bird Treaty Act may use the riparian and coniferous forest habitats for nesting or resting. Additional details on these species are provided in the Natural Environment Study – Minimal Impacts report (North State Resources 2012b).

Discussion of Impacts

a) ***Less than Significant with Mitigation Incorporated.*** The proposed project could affect ten special-status animal species that may use the upland and riparian habitats in the APE, as discussed below. No special-status plants would be affected by the proposed project.

Foothill Yellow-Legged Frog. Bridge installation across Spanish Creek could disturb or result in direct injury or mortality to foothill yellow-legged frogs, their tadpoles, or their egg masses, if present within the APE. Activities in the active channel of the creek have the greatest potential to affect the frog; however, the project has been designed to avoid activities in the active channel. Pier construction would take place along the east bank of the creek, just outside the active channel, but no equipment or materials would be placed in the active channel, which would reduce the potential for direct impacts on the frog. Indirect impacts could result from degraded water quality during construction if polluted runoff or other contaminants enter the creek. Implementation of standard construction practices for water pollution prevention (see Chapter 2) would minimize water quality-related impacts, and Mitigation Measures BR-1 through BR-4 would reduce potentially significant impacts to a less-than-significant level.

Western Pond Turtle. Construction activities along the banks of Spanish Creek associated with bridge installation could result in the direct loss of individuals, if western pond turtles are present during construction. Construction activities scheduled during the nesting season for western pond turtle (typically March through August) have a greater potential for harming or resulting in direct mortality of western pond turtles or removing active nests. In addition, discharge of pollutants or sediment into the creek via runoff could cause short-term impacts on riverine habitat from degraded water quality. Impacts on habitat for western pond turtle would be minimal because of the design of the new bridge and small amount of bankside habitat that would be affected by the proposed project (less than 0.1 acre). The bridge would span Spanish Creek and would not impede flows or movement of animals along the active channel or banks of the creek. Implementation of standard construction practices for water pollution prevention (see Chapter 2) would minimize water quality-related impacts, and Mitigation Measures BR-1 through BR-4 would reduce potentially significant impacts to a less-than-significant level.

Special-Status Birds. Construction activities along the banks of Spanish Creek associated with bridge installation could result in disturbance to nesting birds, such as Harlequin duck, yellow warbler, and yellow-breasted chat, if present in the riparian habitat during construction. Staging activities and overall construction activities in the APE could disturb nesting olive-sided flycatchers in nearby ponderosa pine habitat. Construction activities during the nesting season for the birds (typically March through August) could result in the loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Activities outside this season are less likely to adversely affect the species, but they could result in birds being flushed from the area as a result of noise, ground vibrations, and other construction-related disturbance. Less than 0.1 acre of habitat for these species would be removed for bridge installation. The birds would be able to use suitable habitat in surrounding areas and could return to the APE following construction (e.g., during the next nesting season). Implementation of standard construction practices for post-construction restoration (see Chapter 2) would minimize habitat-related impacts, and Mitigation Measures BR-1 through BR-4 would reduce potentially significant impacts to a less-than-significant level.

Special-Status Mammals. Construction activities along the banks of Spanish Creek associated with bridge installation could result in disturbance to the mountain beaver or ring-tailed cat if present in dens or burrows in or near the bridge footprint. No large, hollow trees are expected to be removed; however, other potential denning sites (e.g., abandoned burrows and woody debris piles) occur within riparian areas along Spanish Creek within the APE and could be disturbed or removed during bridge installation. If individuals are present in burrows where excavation and vegetation removal are necessary, they could be injured or otherwise harmed during the activities. Construction activities could disturb resting or young rearing activities of both species, particularly during the breeding and rearing season, if the species are present near the work area. The breeding season begins as early as December for mountain beaver and typically by February for ring-tailed cat. Weaning of young ring-tailed cats would be expected by the end of August. Implementation of standard construction practices for post-construction restoration (see Chapter 2) would minimize habitat-related impacts, and Mitigation Measures BR-1 through BR-4 would reduce potentially significant impacts to a less-than-significant level.

Special-Status Bats. If western mastiff or pallid bats use the existing bridge for roosting, removal of the bridge and construction activities in adjacent areas could result in disruption of roosting activities and rearing of young. Removal of the bridge is expected to take place in September, which would avoid potential impacts on maternity roosts or young bats. Other construction-related disturbance could occur to day roosts on the bridge during construction of the new bridge; however, the potential for roosting activity is considered low. Impacts on bats would be less than significant, and no mitigation measures are necessary.

Migratory Nesting Birds. Construction activities during the nesting season for migratory birds and raptors (typically March through August) could disrupt nesting activities and adversely affect migratory birds using habitat in or near (typically within 250 feet) of the work area. Impacts would be the same as those described for special-status birds. Because of the extent of ponderosa pine habitat around the existing bridge and proposed bridge locations, the proposed project is not likely to affect raptors nesting more than 250 feet from the new bridge

location (no direct line-of-sight exists beyond about 250 feet from the bridge). Removal of the existing bridge is expected to take place in September, which would avoid removal of active nests (e.g., swallow nests) on the bridge. Implementation of standard construction practices for post-construction restoration (see Chapter 2) would minimize habitat-related impacts, and Mitigation Measures BR-1 through BR-4 would reduce potentially significant impacts to a less-than-significant level.

Mitigation Measure BR-1: Worker Awareness Training

Prior to construction, all workers will receive Worker Environmental Awareness Training (WEAT) to be conducted by a qualified biologist. WEAT will include, but is not limited to, identification of relevant biological resources (e.g., special-status species that may be found in the APE) and an overview of conservation measures and avoidance and mitigation measures that are required during construction activities. Handouts summarizing information presented during WEAT and relevant contact information will be provided to the workers.

Mitigation Measure BR-2: Construction Schedule

If practicable, construction activities, vegetation removal, and removal of the existing bridge shall be scheduled to avoid the breeding and rearing season (March through August) for foothill yellow-legged frog, western pond turtle, special-status birds, mountain beaver, ring-tailed cat, bats, migratory birds, and raptors. Due to weather constraints in Plumas County, all construction activities may not be able to avoid the breeding and rearing season for these species, and pre-construction surveys will be implemented if construction is necessary between March and August (see Mitigation Measure BR-3). If practicable, vegetation removal shall be scheduled between September and February to prevent the removal of active nests or dens.

Mitigation Measure BR-3: Pre-Construction Surveys

If construction activities must be scheduled between March and August, a qualified biologist shall conduct a pre-construction survey within 500 feet of the work area (e.g., staging area, bridge construction, bridge removal) to locate in-stream egg masses (foothill yellow-legged frog) and active nest, den, or roost sites of special-status birds, migratory birds, raptors, western pond turtle (focused along Spanish Creek and within 300 feet of the creek), Sierra Nevada mountain beaver, ring-tailed cat, western mastiff, and pallid bat. The survey should be conducted no more than 15 days prior to the initiation of construction and should be repeated if work stops for more than one week during the breeding and rearing period for these species.

If active nest, den, or roost sites are found, the biologist shall identify appropriate conservation measures to protect the species. These measures may include, but are not limited to, establishing a construction-free buffer zone around the breeding site, biological monitoring of the breeding site, delaying construction activities in the vicinity of the breeding site until the young have dispersed, and removing trees or other vegetation that supports active nest or den sites once the sites are determined to no longer be active (typically by August).

If a foothill yellow-legged frog egg mass is found, the biologist shall flag the site and determine if construction activities can avoid impacting the egg mass. If the egg mass cannot be avoided, it will be relocated to a suitable location outside of the work area by a qualified biologist.

If a western pond turtle nest is found, the biologist shall flag the site and determine if construction activities can avoid impacting the nest. If the nest cannot be avoided, it will be excavated and re-buried at a suitable location outside of the work area by a qualified biologist.

Mitigation Measure BR-4: Avoidance During Construction

If foothill yellow-legged frog, western pond turtle, mountain beaver, or ring-tailed cat is encountered during construction, activities in the vicinity shall cease until one or more of the following occur:

- The animal leaves the work area.
- Appropriate corrective measures have been implemented (e.g., relocation of the animal to appropriate habitat identified by a qualified biologist, outside of the APE).
- It has been determined that the animal will not be harmed. Any trapped, injured, or killed foothill yellow-legged frogs, western pond turtles, mountain beaver, or ring-tailed cats shall be reported immediately to the California Department of Fish and Wildlife.

b) ***Less than Significant with Mitigation Incorporated.*** Montane riparian vegetation along the banks of Spanish Creek would be removed prior to installation of the new bridge and modification of the roadway approaches. Approximately 0.02 acre of riparian vegetation above the OHWM on the west bank of the creek and approximately 0.04 acre of riparian vegetation above the OHWM on the east bank of the creek (total of approximately 0.06 acre of upland riparian vegetation) would be removed to accommodate the new bridge abutments, retaining walls, and approach fills for the realigned road. Some ponderosa pine habitat would also be removed along the upper edges of the riparian vegetation along the west bank of the creek.

Construction activities could introduce invasive plants into the APE from seeds or plant material on equipment, if the equipment is not washed prior to entering the APE. Ground disturbance could encourage the spread of invasive plants already present in the APE by creating conditions that are more favorable for invasive plants than native plants.

Some riparian vegetation would be expected to re-establish along the banks of the creek after construction, and implementation of standard construction practices for post-construction restoration (see Chapter 2) would minimize habitat-related impacts. The loss of riparian vegetation would be minimal, and riparian habitat would continue to be available along Spanish Creek in the APE and immediate vicinity. Mitigation Measure BR-5 would ensure riparian habitat outside the proposed bridge footprint is protected, and Mitigation Measure BR-6 would reduce the potential for invasive plants to be introduced or spread into the APE. These mitigation measures would reduce potentially significant impacts to a less-than-significant level.

Mitigation Measure BR-5: Conservation and Restoration of Habitat

Vegetation removal, grading, and other ground-disturbing construction activities shall be limited to the smallest area necessary. Exclusionary fencing shall be installed along the boundaries of the constructed pond and associated fresh emergent wetlands, riparian habitat along SR 70 in the northwestern corner of the APE, and riparian habitat along Spanish Creek outside of the work area. These areas will be marked as environmentally sensitive areas to ensure all construction activities avoid potential disturbance to the habitats. All project access, parking, and staging will be limited to existing roadways, previously disturbed areas, and parking areas.

If riparian areas along the creek are temporarily disturbed during construction, native riparian vegetation representative of species existing in the APE (e.g., white alder, big-leaf maple) shall be planted to restore the disturbed areas to pre-disturbance conditions or better. The performance goal for tree replacement would be the successful establishment of at least one tree for each tree removed at five years after planting. To achieve this standard, tree replacement is proposed to occur at a 3:1 ratio per mature woody riparian tree [trees equal to or greater than 15.24-cm (6-inch) diameter at breast height] removed during construction. Replacement trees shall be planted in the appropriate season following the completion of construction. Propagules (i.e., tree seedlings) shall be obtained either onsite or from a local nursery. Plant spacing intervals will be determined as appropriate based on site conditions following construction. The County shall monitor the plantings annually for up to five years to ensure that trees have become established. Supplemental planting shall be conducted as necessary to ensure that the performance standard is achieved. Non-native species removed during project construction will be replaced with native riparian species.

Mitigation Measure BR-6: Prevention of Spread of Invasive Species

The construction contractor will be responsible for preventing the spread of invasive plant species into the APE. The following measures will be implemented:

- All equipment used for off-road construction activities will be weed-free prior to entering the APE.
- If project implementation calls for mulches or fill, they will be weed free.
- Any seed mixes or other vegetative material used for re-vegetation of disturbed areas will consist of locally adapted native plant materials to the extent practicable.

c) ***Less than Significant with Mitigation Incorporated.*** Construction activities near the constructed pond, the unnamed ephemeral drain, and Spanish Creek could cause erosion, sedimentation, accidental fuel leaks, and spills that could affect water quality of the features. Implementation of standard construction practices for water and air pollution prevention (see Chapter 2) in conjunction with Mitigation Measure BR-7 would ensure the proposed project results in less-than-significant water quality-related effects on waters of the United States.

Realignment of Keddie Resort Road would result in the placement of fill material, including a culvert, in less than 0.01 acre (approximately 3 linear feet) of the unnamed ephemeral stream along the west side of Keddie Resort Road. The culvert would maintain flow under the road and into Spanish Creek.

The new bridge abutments would be installed along the banks of Spanish Creek, and the retaining wall and associated approach fill would be constructed on the east bank of the creek, above the abutment. Based on the preliminary bridge design, both of the bridge abutments would be placed above the OHWM of Spanish Creek and outside of wetlands. A support pier would be placed on the east bank of Spanish Creek within the OHWM. The pier would consist of a single round column founded on a cast-in-drilled-hole pile. The pile would be 6 to 8 feet in diameter and anchored approximately 35 to 40 feet into the ground. Installation of the pier would result in placement of fill material into less than 0.01 acre (8 linear feet) of Spanish Creek within the OHWM.

The abutments, retaining walls, and approach fill on both the east and west banks would be constructed above the OHWM and would not result in placement of fill into the creek or riparian wetlands. The bridge would span the 100-year floodplain and would not impede flows through Spanish Creek. Direct impacts on the fresh emergent wetland or constructed pond (just outside the APE) are not anticipated. With implementation of the standard construction practices for water pollution prevention and post-construction restoration, the proposed project would have a less-than-significant impact on waters of the United States. Based on the current project design, the proposed project would not result in a net loss of wetlands. Natural regeneration of riparian vegetation would be expected along the banks of Spanish Creek outside the bridge footprint.

Mitigation Measure BR-7: Water Pollution Prevention and Erosion and Sediment Control

Construction activities that increase the erosion potential in the APE shall be restricted to the dry season (June 15–October 31) to the maximum extent practicable to minimize the potential for rainfall events to transport sediment to surface water features in the APE. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures must be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place. The SWPPP will identify specific BMPs to implement, such as those listed in the project description.

d) ***Less than Significant Impact.*** The new bridge would not impede flows along Spanish Creek and would maintain a corridor along the creek for fish and wildlife movement through the APE. No other aspects of the proposed project would affect movement of wildlife through the APE. Impacts would be less than significant.

e, f) ***No Impact.*** The proposed project would be consistent with the Plumas County General Plan and would not conflict with local policies or ordinances protecting biological resources. No habitat conservation plans or natural community conservation plans have been adopted for the region.

V. CULTURAL RESOURCES — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Environmental Setting

Prehistory, Ethnography, and History

The APE lies in the ethnographic territory of the Northeastern Maidu. Traditionally the Northeastern Maidu had permanent villages in the larger mountain valleys such as American Valley, Genesee Valley, and Red Clover Valley, which are 5.5 miles south, 9.5 miles northeast, and 22 miles east of the project area, respectively (Riddell 1978). The Northeastern Maidu had a loose political organization based around several main villages with smaller settlements and temporary camps as satellites. Resources associated with the Maidu villages include bedrock mortars, textiles and baskets, and stone tools.

Three years after the discovery of gold on the American River in the mid-1800s, most of the Maidu territory, including the area around Quincy (5.5 miles south of the project area), became occupied by settlers and miners. The early miners concentrated on the rivers and streams of the Sierra Nevada foothills including the Feather River and Butterfly Valley Creek (approximately 1 mile southwest of the project area) (Mac Boyle 1918). As the initial gold fever subsided, some miners turned to other pursuits, such as agriculture and construction, to sustain a mining economy. The mountain valleys including American Valley quickly became the scene of cattle ranches, providing meat and dairy products to the local miners and the burgeoning mining industry in Nevada.

The need for transportation routes to move agricultural products out of and supplies into the region was quickly filled with pack trails that became major wagon roads; however, portions of Plumas County remained nearly inaccessible during the winter. Eventually a railroad route was planned through the Feather River Canyon, and several work camps were placed along the route, including a camp at Keddie. In 1911, the Western Pacific Railroad line was formally in operation (Young 2003). The railroad operated a yard at Keddie, and railroad workers lived in the small community until 1974 (Metcalf 2006).

In the early 20th century, interest in automobiles, the need for a better transportation route into the high mountain valleys of Plumas County, and various legislative enactments including the State

Highway Acts of 1910 and 1916 created the impetus to begin construction of a highway between Oroville and Quincy (Snyder 1983). After a decade of debate regarding the route of the proposed highway, the California Highway Commission approved the route through the Feather River Canyon. Construction began in 1928 and the Feather River highway was completed and opened to the public in 1937.

The rise of the automobile in the early 20th century changed the manner in which people took vacations. Mountain resorts became popular recreational destinations, and in the 1930s, Keddie was developed as a resort. A gas station, garage, store, soda fountain/coffee shop, post office, and approximately 40 cottages were added to the existing hotel and small cabins previously built by the railroad. In 1943, the Federal Public Housing Authority authorized a war housing development of 30 houses, a community building, and a water system with fire hydrants (Keddie Resort, Inc., v. The United States, 125 F. Supplement 943 [1954]). This housing development was located west of the highway and away from the resort portion of Keddie. By mid-century, resorts were not as popular for vacation destinations, and many failed. Keddie survived as a community in large part because of the railroad workers and local residents renting the houses. After the railroad closed the yard in 1974, the employees were relocated, and Keddie lost a portion of its permanent population (Metcalf 2006). The community of Keddie has been in decline since the 1970s in part because of the population loss, changes in the regional economy and patterns of recreation, water supply issues, and a widely publicized unsolved crime. Over the past 38 years, many buildings have been abandoned and condemned.

Documented Cultural Resources

CEQA defines a "historical resource" as any object, building, structure, site (including prehistoric and historic-era resources), area, place, record or manuscript that meets the criteria of eligibility for listing on the California Register of Historical Resources, that is listed on the California Register of Historical Resources, that is listed on a local register of historical resources, or that is determined to be a unique archaeological resource (CEQA Guidelines Section 15064.5). The term "cultural resource" is used to refer to any and all resources regardless of their eligibility status at the local, state, or federal levels.

Archived records, historical documents, and prior investigations of the area indicated the presence of a known historical resource in the APE, CA-PLU-970H the Feather River Highway (North State Resources 2012a). The portion of SR 70 in the APE was determined not eligible for the National Register of Historic Places or California Register of Historical Resources, and none of the contributing elements (e.g. masonry guard rails, bridges) of this linear site are in the APE.

Bridge 9C-0034 spanning Spanish Creek (built in 1914 and altered in 1965) is also in the APE. The bridge was built in 1914 by the Western Pacific Railroad. By 1950, the 86-foot main span had been replaced with the existing steel pony truss. The timber approach spans were replaced after 1950 with fill, and the reinforced concrete piers were converted into abutments with added wingwalls (Caltrans 1954). A photograph of the bridge (dated 1954) looking east across the creek shows no rock retaining wall parallel to Keddie Resort Road. In 1965, the bridge was further altered by the addition of a 4-foot-wide pedestrian walkway. The bridge was strengthened in 1965 and again in 1966 although the bridge inspection reports do not discuss how it was strengthened (Caltrans 1979). The bridge is rated

Category 5, which means it is not eligible for listing on the National Register; thus, it is not considered a historical resource under CEQA.

Keddie Resort (peak period of occupation 1930 to 1950) includes many buildings and associated infrastructure, such as roads and other features of the built environment. Several elements of Keddie Resort are in or adjacent to the APE, including the old gas station and garage along SR 70; a portion of a small constructed pond located to the north of Keddie Resort Road and west of Spanish Creek; and a retaining wall constructed of local rock built around 1965 to the east of Spanish Creek on the east side of Keddie Resort Road. The small pond is not attributable to a specific time period. The rock wall is just outside the APE and is not related to the peak period of occupation of the resort (1930-1950) because it was built around the same time that the bridge was altered in the 1960s.

Based on the results of the records search (including historical maps and other documentation) and other background research, the APE has a low potential to contain prehistoric cultural resources, primarily because of the extensive disturbance associated with 20th century developments, including the railroad and the community of Keddie. Historic-era resources related to Keddie Resort have a high potential of being present in the APE. The main historical themes of the immediate vicinity are the community of Keddie, Keddie Resort, transportation related to the Western Pacific Railroad, and the Feather River Highway (SR70).

Discussion of Impacts

a, b) ***Less than Significant with Mitigation Incorporated.*** The proposed project would involve ground-disturbing activities that could affect previously undiscovered subsurface cultural resources associated with historic uses of the area. If the previously undiscovered resources are considered historical resources under CEQA, impacts could be significant. Implementation of Mitigation Measure CR-1 would protect the resources and ensure that impacts are less than significant.

No known historical resources would be affected by the proposed project. No contributing elements of the Feather River Highway would be affected by project activities. The gas station and garage building associated with the Keddie Resort would not be affected by project activities because they are located just outside of the proposed staging area and would not be disturbed during staging. The small pond is outside of the proposed alignment for the approaches to the new bridge and would likely be avoided during construction. The rock wall will be protected during construction by temporary fencing and would not be affected by project activities. The existing bridge, which has been determined to be ineligible for the National Register, would be removed, and the new bridge, located just downstream, would replace the existing bridge. Because the bridge is not eligible for listing, removal of the bridge would not affect a known historical resource.

Mitigation Measure CR-1: Accidental Discovery of Cultural Resources

The Caltrans standard policy for previously unidentified cultural resources states that "work be halted in that area until a qualified archaeologist can assess the significance of the find." In the event cultural resources (other than those determined to lack eligibility for either the National

Register or the California Register) are unearthed inadvertently as a result of project-related activities, all work in the immediate vicinity of the discovery will be stopped, and the County and Caltrans will be notified. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be retained to evaluate the find and recommend appropriate conservation measures. Appropriate conservation measures shall be implemented prior to re-initiation of activities in the immediate vicinity of the discovery.

c) ***No Impact.*** Paleontological resources that have been found in Plumas County include various radiolaria associated with limestone deposits and cherts and various plants associated with Tertiary period deposits (Durrell 1987; University of California Museum of Paleontology 2012). These types of deposits and other unique geologic features are not present in the APE.

d) ***Less than Significant with Mitigation Incorporated.*** Based on the prehistoric and historic uses of the area and the current disturbed nature of the APE, human remains are not expected to be affected by construction activities. However, ground-disturbing activities could expose previously undiscovered remains and result in significant impacts if the remains are human. Implementation of Mitigation Measure CR-2 would help ensure that any potential impacts on human remains are less than significant.

Mitigation Measure CR-2: Accidental Discovery of Human Remains

If human remains are discovered during project activities, all work in the vicinity of the find will be stopped, and the Plumas County Sherriff-Coroner's Office will be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission. Treatment of the remains shall be conducted in accordance with further direction of the County Coroner or the Commission, as appropriate.

VI. GEOLOGY AND SOILS — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒

VI. GEOLOGY AND SOILS — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on strata 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, creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Environmental Setting

The elevation of the APE is between 3,100 and 3,400 feet above sea level. Keddie Resort Road slopes gently downhill from SR 70 toward Spanish Creek and slopes uphill from the creek toward the Keddie Resort area. The creek is about 20 feet below the existing bridge. Forested hills surround the APE and create a visual barrier between the bridge and SR 70 to the west and the railroad track to the east. A steep slope on the east side of Keddie Resort Road and the bridge displays evidence of past erosion and has been stabilized by a rock wall.

The APE is underlain by Paleozoic marine sediments (Lydon et al. 1960) of the Shoo Fly formation, consisting of phyllite, slate, quartzite, and graywacke sandstone (Blackburn Consulting 2012). Soils are in the Kistirn-Aiken-Deadwood families complex, 30 to 50 percent slopes (map unit 222) (Natural Resources Conservation Service 2011). This soil complex is found on mountains and was derived from residuum weathered from andesite. The soil is well drained and has a depth to restrictive bedrock of between 17 and 69 inches, depending on site-specific conditions. Soils in this complex tend to be gravelly loams to very gravelly silt loams. Subsurface testing in the APE revealed loose to medium dense, clayey sand and gravel to 3–8 feet along the west bank and to 19 feet along the east bank of Spanish Creek (Blackburn Consulting 2012). Deeper borings revealed intensely weathered rock at 25 feet and moderately hard rock at about 63 feet below the ground surface. The potential for liquefaction and landslides in the APE is considered low.

Several faults that have experienced movement since the Quaternary era (i.e., active faults) exist within 10 miles of the APE (California Geological Survey 2010). The Indian Valley and Mohawk Valley faults have experienced fault displacement since the Holocene (within the past 11,700 years). These faults are located to the northeast and southeast, respectively, of the APE and generally follow a northwest-southeast trend. The Butte Creek fault zone is located about 5 miles northwest of the

APE and could generate an earthquake of magnitude 6.8 (Blackburn Consulting 2012), which would cause ground shaking in the APE. Despite the presence of active faults, seismic hazards in the county are considered low (Plumas County 2011). Earthquake activity in or near the county, however, could result in damage to structures if ground shaking is experienced.

Discussion of Impacts

a) i) ***No Impact.*** No Alquist-Priolo Earthquake Fault Zones have been mapped in Plumas County, and no faults are known to cross through the APE.

ii) ***Less than Significant Impact.*** In the event of a major earthquake from nearby faults, the new bridge and pedestrian bridge may be subject to strong ground shaking, but they would not be expected to sustain substantial damage. The bridges will be designed in accordance with California Building Code standards for the appropriate seismic zone to minimize the potential for damage from earthquake activity. Impacts relating to ground shaking would be less than significant.

iii) ***No Impact.*** No faults cross through the APE, and ground failure from seismic activity is not expected in the APE.

iv) ***Less than Significant Impact.*** The potential for landslides in the APE is considered low, although some erosion occurs along the banks of Spanish Creek. The banks around the abutments for the new bridge would be protected to prevent erosion around them. Landslides are not expected to affect the new bridge, and minor erosion along the creek would result in a less-than-significant impact.

b) ***Less than Significant Impact.*** Construction activities would disturb soil and increase the potential for soil erosion from wind and water until the new road is paved and vegetation re-establishes in adjacent disturbed areas. Excavation for the abutments would disturb soil along the creek and could result in increased sediment from eroded soils entering the creek, as discussed under Hydrology and Water Quality. Soil along the bank where the existing bridge is removed would be initially exposed to erosion during the first rain event after bridge removal, but vegetation would be expected to naturally re-establish along the bank and protect the soils from substantial erosion associated with normal rain events over the long term. Soil disturbance during construction would be minimal, and indirect effects from soil erosion would be minimized with implementation of a SWPPP and BMPs. Long-term effects from soil erosion are not anticipated because the road would be paved, the banks of the creek around the abutments would be protected, and adjacent disturbed areas would be revegetated with grasses or naturally restored with vegetation. Impacts associated with soil erosion would be less than significant.

c) ***Less than Significant Impact.*** The banks of Spanish Creek are subject to erosion from floods and varying flows in the creek, and soils along the creek are not expected to be subject to liquefaction or other hazards in the event of an earthquake or severe flood (Blackburn Consulting 2012). Outside the creek, the area is gently sloping and does not contain unstable soils or hazards. Construction of footings would be consistent with Caltrans and American

Association of State Highway and Transportation Officials Design Specifications. Bridge design would account for potential unstable conditions, and impacts would be less than significant.

d) ***No Impact.*** Soils in the APE have low clay content and are not considered expansive.

e) ***No Impact.*** The proposed project does not include wastewater facilities.

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

Environmental Setting

Greenhouse gases (GHGs) are recognized by wide consensus among the scientific community to contribute to global warming/climate change and associated environmental impacts because of their ability to trap heat in the atmosphere and affect climate. The major GHGs that are released from human activity include carbon dioxide, methane, and nitrous oxide (Governor's Office of Planning and Research 2008). The primary sources of GHGs are vehicles (including planes and trains), energy plants, and industrial and agricultural activities (such as dairies and hog farms).

California has demonstrated its intent to address global climate change through research, adaptation, and GHG inventory reductions. In response, the California Legislature enacted the California Global Warming Solutions Act of 2006 (AB 32, Health and Safety Code Section 38500 et seq.) to implement standards that will reduce GHG emissions to 1990 levels. In the act, the Legislature found that "[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." Senate Bill 97, adopted in 2007, required the Governor's Office of Planning and Research to develop CEQA guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions," and the Resources Agency certified and adopted the amendments to the guidelines on December 30, 2009. The Northern Sierra Air Quality Management District has not established guidelines for evaluating GHG emissions from proposed projects and does not have thresholds for assessing the significance of impacts.

Discussion of Impacts

a) ***Less than Significant Impact.*** Emissions of GHGs from the project would be produced from the materials used in the bridge as well as construction-related equipment emissions. The project would not result in the generation of emissions after construction is complete. Emissions of GHGs resulting from construction activities would be short-term and minor.

While the project would have an incremental contribution within the context of the county and region, the individual impact is considered less than significant.

b) ***No Impact.*** The project would not generate significant emissions of GHGs and, therefore, would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing the emission of GHGs.

VIII. HAZARDS AND HAZARDOUS MATERIALS — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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 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 compatibility 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?	☐	☐	☒	☐

Environmental Setting

The Plumas County Communities Wildfire Mitigation Plan provides an overview of wildfire hazards in the county and identifies measures to reduce risks and hazards (Plumas County Fire Safe Council 2010). The Keddie area is designated an at-risk community for wildfires because of the vast amount of forests that surround the developed areas. An emergency evacuation plan has not been adopted for the Keddie community. Private lands in the APE fall under the State's responsibility for protection and are ranked very high for fire hazards (Cal Fire 2007). Federal lands are the responsibility of Plumas National Forest and are managed according to the National Forest's Land and Resource Management Plan (U.S. Forest Service 1988). Plumas County has 21 independent fire agencies that provide fire protection and response services to most of the county. A volunteer fire department operates out of Quincy with three stations and about 35 volunteers.

Hazardous materials and waste are substances that are considered toxic, ignitable, corrosive, or reactive (as defined in California Code of Regulations, Title 22, Sections 66261.20-66261.24). The release of hazardous materials into the environment could contaminate soils, surface water, and groundwater supplies. Under Government Code Section 65962.5, the California Department of Toxic Substances Control maintains a list of hazardous substance sites. This list, referred to as the "Cortese List," includes CALSITE hazardous material sites, sites with leaking underground storage tanks, and landfills with evidence of groundwater contamination. In addition, the State Water Resources Control Board maintains files on hazardous material sites. The Plumas County Environmental Health Department is responsible for management of hazardous materials and preserving the environment and public health.

No known underground storage tanks or active clean-up sites exist in the vicinity of the APE (State Water Resources Control Board 2012). A former railroad car service area was located to the southeast along the railroad track, but it has been cleaned up and does not require further action. The existing bridge contains lead-based paint.

Discussion of Impacts

a, b) ***Less than Significant Impact.*** Small amounts of hazardous materials (e.g., fuel and solvents) would be used during construction activities for equipment maintenance and repaving the road. Use of hazardous materials would be limited to the construction phase and would comply with applicable local, state, and federal standards associated with the handling and storage of hazardous materials. The existing bridge would be removed and transported to a storage yard or other location identified by the contractor in coordination with the County. If the contractor decides to dispose of the bridge, it will be properly disposed at a landfill that can receive hazardous waste (i.e., lead-based paint). Hazardous materials or other substances would not be allowed to enter the creek during bridge removal, and lead-based paint would not be removed from the bridge while it is in the project area. Hazardous materials would not be stored or used, such as for equipment maintenance, near Spanish Creek to prevent accidental discharge of hazardous materials into the water. The contractor would be required to immediately clean up any spills and properly dispose of all wastes and used spill control materials. With implementation of these standard construction practices, impacts associated with the use or accidental spill of hazardous materials would be less than significant.

c-f) ***No Impact.*** The APE is not near any schools, airports, private airstrips, or active clean-up or hazardous material sites.

g) ***Less than Significant Impact.*** Temporary lane closures may be required during construction, but Keddie Resort Road would remain open for traffic and access would not be impeded in the event of an emergency. Impacts associated with emergency evacuation or access would be less than significant.

h) ***Less than Significant Impact.*** The APE is surrounded by forest lands that pose a high hazard for wildfire. Construction activities could involve the use of equipment that could pose a fire hazard and ignite adjacent vegetation. A fire safety plan would be in place during construction, and precautionary measures would be implemented during equipment use and activities that could cause a fire (e.g., use of spark arrestors). Water used for dust control would help maintain soil moisture and provide a source of water for extinguishing a fire. With these measures in place, the potential for a wildfire from construction activities would be low, and impacts would be less than significant.

XI. HYDROLOGY AND WATER QUALITY — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there should 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 which 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 erosion or siltation on- or off-site?	☐	☐	☒	☐
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 flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒

XI. HYDROLOGY AND WATER QUALITY — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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 which 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) Inundation of seiche, tsunami, or mudflow?	☐	☐	☐	☒

Environmental Setting

Spanish Creek flows south to north through the APE toward the East Branch of the North Fork Feather River. The creek has its headwaters on the eastern side of the Sierra Crest in the Spanish Peak area above Buck's Lake, approximately 15 miles southwest of the APE. The primary water source for the creek is precipitation, which is higher on the Sierra peaks, ranging between 45 and 55 inches compared with 35 to 40 inches in the APE. Water quality concerns in the Spanish Creek watershed are primarily from sediment entering the creek as a result of erosion along banks, roads, and drainage features adjacent to the creek and periodic flooding.

Spanish Creek above Indian Creek, which is downstream of the APE, is characterized as a depositional, non-alluvial stream and is a monitoring site for the Feather River Coordinated Resource Management Watershed Monitoring Program (Plumas Corporation 2004). The creek has an average channel width of about 90 feet and average depth of less than 3 feet at the monitoring site. The reach near the monitoring site has less than 15 percent fine sediment. Maximum daily water temperature recorded during the summer and late fall months of 2003 was 78 degrees Fahrenheit. Nutrient and metal levels in the creek are low and not a concern. Turbidity levels also tend to be low and stay lower than Indian Creek during high flow events. Similar conditions exist in the APE.

As a tributary to the North Fork Feather River, beneficial uses and water quality objectives for the river apply to Spanish Creek. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan) defines the beneficial uses and water quality objectives (Central Valley Regional Water Quality Control Board 2011). The beneficial uses for the North Fork Feather River include water supply, power, recreation, warm and cold freshwater habitat, warm and cold spawning habitat, and wildlife habitat. Water quality objectives for sediment and turbidity are most relevant to the proposed project. For sediment, the suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. For turbidity, waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

Peak flows estimated during the most probable 50- and 100-year flood events are estimated to be 24,800 and 30,000 cubic feet per second, respectively (Pacific Hydrologic Incorporated 2012). Spanish Creek is in Zone A (special flood hazard areas subject to inundation by the 1 percent annual chance flood event, no base flood elevation determined), and areas outside the creek are in Zone X (areas of 0.2 percent annual chance of flood) (Federal Emergency Management Agency 2005). Zone A through the APE is about 200 feet wide, centered on the creek; however, the hydraulic analysis concluded that the creek does not flow over the banks during a 100-year storm event, indicating that the flood hazard area is about 160 feet wide.

Discussion of Impacts

a) ***Less than Significant Impact.*** Construction activities along the banks of Spanish Creek would occur between May 15 and October 1, when flows are the lowest, to minimize impacts to the creek. Sediment may be discharged into the creek during construction, but the use of BMPs would minimize the potential for eroded or disturbed soil to enter the creek. Hazardous materials (e.g., fuels, solvents) may also incidentally enter the creek during construction, but standard construction practices and spill prevention and clean-up measures would minimize the water quality effects. A temporary increase in turbidity may result from erosion of the newly exposed banks after removal of the existing bridge, but turbidity levels would decrease as the soil becomes stabilized. The project would comply with the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity, Order No. 2009-0009 DWQ and Caltrans Standard Specifications (Section 13). A SWPPP will be prepared for the project, and BMPs will be implemented during construction activities to reduce or minimize discharge of pollutants from construction activities. Implementation of BMPs in accordance with the SWPPP and Caltrans requirements, as described in Chapter 2, would ensure that project impacts on water quality are less than significant.

b) ***No Impact.*** The proposed project would not involve the use of groundwater supplies and would not affect groundwater recharge in the APE.

c, d) ***Less than Significant Impact.*** Bridge installation and removal would not require in-water diversions or alterations to the drainage pattern of Spanish Creek. Modifications to the banks of the creek for the new bridge and installation of new abutments and a pier could alter flow rates along the creek. The grade of Keddie Resort Road would be modified to match the new bridge, but it would not affect drainage patterns in the upland portions of the APE. The new abutments would be placed higher along the creek bank than the existing abutments, which would accommodate more flow through the creek. The new pier placed in the channel would not obstruct flow or modify drainage patterns. The changes along the creek would be minimal and would not affect the overall drainage or flow pattern of Spanish Creek, resulting in a less-than-significant impact.

e) ***Less than Significant Impact.*** The wider new bridge structure and modified roadway approaches would increase the amount of impervious surface in the APE. Because of the larger size of the new bridge, the additional surface area would result in a slight increase in storm water runoff, which would be a less-than-significant impact. The potential for polluted runoff

(e.g., containing lubricants) to enter Spanish Creek during operation would be similar to current conditions because the new bridge would have the same function and use as the existing bridge.

f) ***No Impact.*** The project would not have other water quality impacts beyond those discussed under item a) above.

g) ***No Impact.*** The proposed project would not involve construction of housing.

h) ***Less than Significant Impact.*** The new bridge soffit would be more than 2 feet above the 100-year flood elevation, and the bridge abutments would be located higher on the creek banks than the existing abutments, which would allow more flow to pass under the bridge. Removal of the existing bridge would result in a minor increase in water surface elevations and higher velocities of flow during the 100-year flood event, which would increase the potential for bank erosion for about 1,000 feet upstream of the existing bridge (Pacific Hydrologic Incorporated 2012); however, the new pedestrian bridge at the location of the existing bridge would maintain similar flows as current conditions. These changes would not substantially increase channel instability in the vicinity of the new bridge and would not impede or redirect flood flows. Impacts relating to flood flows and hazards would be less than significant.

i) ***Less than Significant Impact.*** Footings and abutments for the new bridge would be placed in the flood zone of Spanish Creek, but the bridge itself would be above the floodplain and be capable of conveying flows associated with the 100-year flood event. If a major flood event is anticipated during the construction period, activities would be postponed for the safety of the workers. With construction taking place during the low-flow period, the potential for a flood to affect temporary structures or expose workers to hazards is minimal. Flood hazard-related impacts would be less than significant.

j) ***No Impact.*** The APE is not in an area subject to seiche, tsunami, or mudflow.

X. LAND USE AND PLANNING — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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 the 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 communities conservation plan?	☐	☐	☐	☒

Environmental Setting

The APE is in a rural area of Plumas County and is part of the unincorporated community of Keddie. Land uses in the APE include the roadway (Keddie Resort Road and SR 70) and open space. Built

structures in the APE include the road, bridge, and utility poles with lines. A small, unlined detention pond is located northwest of Keddie Resort Road in an open area, and a rock wall is adjacent to the road just outside the northeast side of the APE. Cabins associated with the former Keddie Resort exist to the north, and the Union Pacific railroad is to the east. Spanish Creek is popular for swimming, boating, trout fishing, and recreational gold mining.

The APE is designated for recreational uses with an established right-of-way for the road. Zoning is also recreation for lot sizes greater than 3 acres. The Plumas National Forest encompasses and surrounds the APE, although the entire APE is on private land. The Mt. Hough Ranger District manages the National Forest lands in the Quincy area. The Plumas County General Plan guides development activities on private lands in the unincorporated areas of the county, and the Plumas National Forest Land and Resource Management Plan provides management guidance for Forest Service lands. The Plumas County Zoning Ordinance regulates the types of uses and structures allowed in each zone.

Discussion of Impacts

a) ***No Impact.*** The APE is not in an established community. The bridge is designed to improve safety for travelers on Keddie Resort Road and would not divide any communities.

b) ***No Impact.*** The new bridge would have the same function as the existing bridge and would not change land uses in the APE. The proposed project would not conflict with the Plumas County General Plan or Plumas National Forest Land and Resource Management Plan.

c) ***No Impact.*** No habitat conservation plans or natural community conservation plans have been adopted for the area.

XI. MINERAL RESOURCES — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist 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?	☐	☐	☐	☒

Environmental Setting

The APE is not in a known mineral resource zone or locally important mineral resource recovery site per the Plumas County General Plan. Spanish Creek was historically mined for gold, and recreational mining continues to take place along the creek. Seven mining claims have been recorded in the vicinity of the APE (southwest portion of Section 22, Township 22N, Range 9E) (U.S. Bureau of Land Management 2011).

Discussion of Impacts

a, b) ***No Impact.*** The new bridge would not result in the loss of access for recreational mining along Spanish Creek. No locally important mineral resources would be affected by the project.

XII. NOISE — Would the project result in:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
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 compatibility plan or, where such a plan has not been adopted, within two miles of a public airport of 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?	☐	☐	☐	☒

Environmental Setting

Noise levels in the APE are fairly quiet with periodic highway traffic noise from SR 70 and train noise from the nearby railroad. The primary source of noise is vehicle traffic, and natural sounds generate from the creek, wildlife, and wind. No sensitive receptors exist nearby. Vegetation and topography form natural buffers around the APE.

The Plumas County General Plan Noise Element establishes programs to control and abate environmental noise and to protect citizens from excessive exposure. It also establishes acceptable noise levels and standards for construction activities. In residential communities, maximum noise levels (L_{max}) from construction activities are 75 decibels (dB) during daytime hours (7 a.m. to 7 p.m.), 65 dB during evening hours (7 p.m. to 10 p.m.), and 60 dB during nighttime hours (10 p.m. to 7 a.m.). In industrial areas, maximum noise levels are 90 dB at any time of day.

Discussion of Impacts

a, d) ***Less than Significant Impact.*** Replacement of Keddie Bridge would generate temporary noise from equipment use, bridge installation, and bridge removal. Construction activities would be limited to daytime hours when higher noise levels are acceptable. No residential areas are located in or near the APE, and the APE would loosely be classified as an industrial area, where higher noise levels are acceptable. Construction noise may periodically exceed 90 dB during the most intense activities, such as pile driving, which would be limited to daytime activities (7 a.m. to 7 p.m.) for about four days during the construction period, but no sensitive receptors exist nearby. In addition, noise generated in the APE would be primarily masked by intervening vegetation and topography that surround the APE, and construction activities would not expose motorists along SR 70 or workers along the railroad to substantial noise. Although existing ambient noise levels are relatively quiet, temporary noise from construction would not cause a substantial increase in ambient noise or expose sensitive receptors to unacceptable noise levels. Impacts associated with construction noise would be less than significant.

b) ***No Impact.*** The project would not generate groundborne vibrations or noise that could affect sensitive receptors.

c) ***No Impact.*** The proposed project would not increase traffic on Keddie Resort Road and would, therefore, not increase traffic noise along the road. Long-term noise levels would be similar to current conditions.

e, f) ***No Impact.*** The APE is not near a public or private airport.

XIII. POPULATION AND HOUSING — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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 housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Environmental Setting

Keddie Resort Road is located approximately 0.7 mile north of the primary developed portion of the unincorporated community of Keddie along SR 70. The APE does not support a permanent population. The nearby cabins were associated with the Keddie Resort, which is currently closed.

Discussion of Impacts

a-b) ***No Impact.*** The new bridge would serve the same function as the existing bridge and would not induce population growth in Keddie or nearby areas. No housing exists in the APE, and people and houses would not be displaced by the proposed project.

XIV. PUBLIC SERVICES — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Environmental Setting

Local volunteer and private fire districts provide fire protection and related services throughout the county. The Quincy volunteer fire department is the nearest department and has three stations and about 35 volunteers. The Plumas County Sheriff's Office provides law enforcement services in the county and operates out of Quincy. The Plumas National Forest is responsible for law enforcement and fire protection services on federal lands in the forest boundaries. SR 70 is a primary thoroughfare that is used for emergency and everyday access from Quincy to Keddie. Keddie Resort Road is the primary access route to the cabins north of the APE. No schools, parks, or public facilities exist in or near the APE.

Discussion of Impacts

a) ***No Impact.*** The proposed project would not affect public services in Keddie or Plumas County, increase the demand for public services, or require construction of new governmental facilities.

XV. RECREATION — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Environmental Setting

No parks or other recreational facilities exist in the APE. Keddie Resort is a former cabin rental area that provided overnight housing for recreationists and others visiting the area. The resort is currently closed.

Discussion of Impacts

a, b) ***No Impact.*** The project would not affect recreation facilities or prevent access to recreation facilities or opportunities in the vicinity.

XVI. TRANSPORTATION/TRAFFIC — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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?	☐	☐	☐	☒

XVI. TRANSPORTATION/TRAFFIC — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
d) Substantially increase hazards 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?	☐	☐	☐	☒

Environmental Setting

SR 70 serves as the primary transportation route between the southern portion of Plumas County and the northern and western portions. The state highway is a minor two-lane arterial near the APE with paved shoulders. SR 70 near its junction with SR 89 experiences average annual daily traffic volumes of 2,800 vehicles traveling eastbound and 1,250 vehicles traveling westbound (Plumas County 2010).

Keddie Resort Road intersects SR 70 about 3.5 miles south of the SR 70/89 junction. The road extends from the east side of SR 70 north to the former Keddie Resort and railroad maintenance yard. The road connects to other local roads in the resort area, but does not provide access further north. It also connects to a railroad maintenance road that follows the east side of the railroad. Keddie Resort Road is a local two-lane road, with one lane across Keddie Bridge. Travelers on the road include railroad maintenance workers and private landowners. Daily traffic is not measured, but is likely low due to the limited access beyond the bridge.

Public transit is provided between Chester and Quincy, which provides opportunities for Keddie residents to use the service. No bike lanes or paths exist in the APE, but bicyclists may travel along SR 70 or Keddie Resort Road. The County has a draft Bicycle Transportation Plan, but it has not yet been adopted. A foot bridge crosses Spanish Creek north of the APE near the cabins, and the existing bridge has a pedestrian walkway along the south side.

Discussion of Impacts

a) ***Less than Significant Impact.*** The proposed project is identified as a planned improvement in the 2010 Regional Transportation Plan for Plumas County. It would be consistent with the plan and would improve safety for travelers on Keddie Resort Road. The road would be open during construction to maintain access on lands to the north of the APE, and traffic control measures would be used throughout construction. Impacts on the circulation system in and near the APE would be less than significant.

b) ***Less than Significant Impact.*** Construction traffic would temporarily increase traffic on SR 70 and Keddie Resort Road, which could increase delays in the vicinity of the APE as equipment and vehicles turn off SR 70 onto the road or the staging area. Traffic control measures would

be in place to alert travelers of the construction activities, and the slight delays in traffic would be temporary. The new bridge is not designed to increase traffic on Keddie Resort Road, and long-term traffic along the road would be similar to current conditions. The proposed project would have a temporary effect on traffic in the vicinity of the APE and would not increase congestion over the long term, resulting in a less than significant impact.

c) ***No Impact.*** The APE is not near an airport or airstrip.

d) ***No Impact.*** The new bridge would serve the same function as the existing bridge and would improve safety for travelers on Keddie Resort Road. The new roadway approaches would match with the bridge location and would not create hazards for travelers.

e) ***Less than Significant Impact.*** The existing bridge would be left in place during construction to maintain access on Keddie Resort Road, and emergency vehicles would be able to use the road at all times. Slight delays may be experienced during construction periods, but access would not be impeded. Impacts on emergency access would be less than significant.

f) ***No Impact.*** The proposed project would not prevent the use of SR 70 or Keddie Resort Road for public transit or alternative forms of transportation. The new bridge would maintain access across Spanish Creek along Keddie Resort Road, and the pedestrian bridge would provide safe access for pedestrians and bicyclists.

XVII. UTILITIES AND SERVICE SYSTEMS — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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 which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

XVII. UTILITIES AND SERVICE SYSTEMS — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Environmental Setting

Utility lines cross through the APE along Keddie Resort Road and SR 70. A power line follows the west side of SR 70. A single utility pole with a luminaire stands near the rock wall east of the bridge, and a utility pole stands between SR 70 and Keddie Resort Road west of the bridge. A communication line crosses the creek between the two poles. A power line extends from the luminaire to other poles northeast of the APE. Spanish Creek, as a tributary to the Feather River, contributes surface water for downstream urban, industrial, and agricultural uses. No wastewater facilities exist in the APE, and the cabins north of the APE likely have septic systems.

Plumas County has six solid waste transfer stations and recycling centers; the East Quincy station is closest to the APE. The county has one active sanitary landfill in Chester that receives construction and demolition waste, mixed municipal waste, and tires. The Chester landfill has a remaining capacity of about 388,000 cubic yards and is projected to reach capacity by 2024.

Discussion of Impacts

a,b,d,e) ***No Impact.*** The project would not generate wastewater or require a new water supply. It would not alter stormwater drainage. No new wastewater or water facilities would be constructed or needed as part of the project.

c) ***Less than Significant Impact.*** A culvert on the east side of the bridge under Keddie Resort Road would be lengthened or relocated slightly to continue conveying flow under the road. It would have the same capacity as the existing culvert and would not modify storm drainage. Construction of the new culvert would have minimal environmental effects, and impacts would be less than significant.

f, g) ***Less than Significant Impact.*** The project would generate a small quantity of solid waste from removal of pavement and possible disposal of parts of the existing bridge. Any materials used during or generated from construction would be properly disposed of in accordance with federal, state, and local regulations. The existing bridge would be stored by the contractor and properly disposed at an authorized facility that can receive hazardous waste, if disposal is necessary. Impacts relating to solid waste disposal would be less than significant.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Does the project have the potential to 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 a rare or endangered plant or animal 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 which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion of Impacts

a) ***Less than Significant with Mitigation Incorporated.*** As discussed in the preceding sections, the proposed project has a potential to result in adverse effects on biological and cultural resources. Mitigation measures are identified for the proposed project to avoid or minimize potential adverse effects on these resources.

b) ***Less than Significant Impact.*** The proposed project could result in cumulatively considerable impacts on special-status wildlife species, but project design, BMPs, and mitigation measures would ensure project effects on the species are less than significant. The project includes construction measures to minimize the temporary impacts of construction activities on other resources, and no long-term adverse impacts are anticipated. With these measures, the project would result in individually minor impacts and would not contribute substantially to cumulative impacts on any resource, resulting in a less than significant impact.

c) ***Less than Significant Impact.*** The proposed project, particularly during the construction phase, could result in a variety of temporary impacts to human beings. Potential adverse effects would be related to temporary increases in noise and air pollutants, disruptions to traffic flow, and accidental spills of hazardous materials during construction. However, compliance with Caltrans Specifications and implementation of standard construction practices would ensure that these impacts are less than significant.

4 Determination

This Initial Study has determined that in the absence of mitigation the proposed project could have the potential to result in significant impacts associated with the factors checked below. Mitigation measures are identified to reduce potentially significant impacts to less-than-significant levels.

	Aesthetics		Mineral Resources
	Agricultural Resources		Noise
	Air Quality		Population and Housing
X	Biological Resources		Public Services
X	Cultural Resources		Recreation
	Geology and Soils		Transportation/Traffic
	Hazards and Hazardous Materials		Utilities
	Hydrology and Water Quality	X	Mandatory Findings of Significance
	Land Use/Planning		

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "Potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Name and Title: Date

5 Report Preparation and References

5.1 Report Preparation

Plumas County Department of Public Works

James Graham	Senior Planner
John Mannle	Associate Engineer/Transportation Planner

North State Resources, Inc. – Environmental Compliance

Wirt Lanning	CEQA/NEPA Program Manager
Leslie Perry	Project Manager/Environmental Analyst
Heather Kelly	Wildlife Biologist
John Hunt	Biologist/Botanist
Kristina Crawford	Cultural Resources Specialist/Principal Investigator

Quincy Engineering, Inc. – Preliminary Design Engineering

Steve Mellon	Project Engineer
Lindsay Juarez	Engineer

5.2 References

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APPENDIX A

Mitigation Monitoring and Reporting Plan

Mitigation Monitoring and Reporting Plan
for the
Keddie Bridge (No. 9C-0034) at Spanish Creek Replacement Project

CEQA Lead Agency:
Plumas County

Prepared: August 2013

Introduction

Purpose

Plumas County Department of Public Works (County) has prepared an Initial Study and Mitigated Negative Declaration (IS/MND) for the proposed Keddie Bridge (No. 9C-0034) at Spanish Creek Replacement Project. The proposed project consists of installation of a new bridge, removal and disposal of the existing bridge, modification of the approaches along Keddie Resort Road to match the new bridge alignment and grade, and installation of a pedestrian bridge in the location of the existing bridge. The proposed project is described in more detail in the IS/MND.

As described in the IS/MND, the proposed project includes a number of construction measures and specifications to minimize or prevent adverse effects on the environment (see below for list of these measures). The IS/MND also identified several mitigation measures that are required to reduce potentially significant impacts to levels that are less than significant (see below for list of these measures). This Mitigation Monitoring and Reporting Plan (MMRP) describes a program for ensuring that the construction measures and additional mitigation measures are implemented in conjunction with the proposed project. In addition to the measures identified herein, permitting agencies, such as the California Department of Fish and Wildlife and U.S. Army Corps of Engineers, may identify additional measures to implement as part of the permits they issue, and those measures will also need to be implemented in conjunction with the proposed project and monitored to ensure implementation. Monitoring and reporting requirements will be identified in the respective permits.

The County, as the lead agency under the California Environmental Quality Act (CEQA), is responsible for overseeing the implementation and administration of this MMRP. The County will designate a staff member to manage the MMRP. Duties of the staff member responsible for plan coordination will include conducting routine inspections and reporting activities, coordinating with the project construction contractor, coordinating with regulatory agencies, and ensuring enforcement measures are taken.

Regulatory Framework

California Public Resources Code Section 21081.6 and California Code of Regulations Title 14, Chapter 3, Section 15097 require public agencies to adopt mitigation monitoring or reporting plans when they approve projects under a MND. The reporting and monitoring plans must be adopted when a public agency makes its findings pursuant to CEQA so that the mitigation requirements can be made conditions of project approval.

Format of This Plan

The MMRP describes the construction measures included in the proposed project and the mitigation measures identified in the IS/MND. This MMRP also includes a summary statement of the impact discussed in the IS/MND to correspond with the mitigation measure(s). Mitigation measures are followed by an implementation description, the criteria used to determine the effectiveness of the

mitigation, the timeframe for implementation, and the party responsible for monitoring implementation of the measure.

Implementation of mitigation measures is ultimately the responsibility of the County; during construction, the delegated responsibility is shared by the construction contractor. Each mitigation measure in this plan contains a "Verified By" signature line, which will be signed by the County project manager when the measure has been fully implemented and no further actions or monitoring are necessary for the implementation or effectiveness of the measure.

Measures Included in the Proposed Project

The construction contractor will be responsible for compliance with all applicable rules, regulations, and ordinances associated with proposed project activities and for implementing construction-related mitigation measures. Construction specifications will be in accordance with Caltrans Standard Specifications and Special Provisions in force at the time the construction contract is awarded. The following standard construction practices will be implemented as part of the proposed project:

Traffic Control

The existing bridge will remain in operation throughout construction to maintain access to the private lands to the north. Temporary lane closures on Keddie Resort Road may be necessary to accommodate construction activities, particularly during the final stages when the bridge approaches are modified to match the new alignment, but at least one lane will remain open at all times. Traffic control measures will be used along SR 70 and Keddie Resort Road to alert travelers to the work area, any lane closures, and potential delays in accordance with Section 12 "Temporary Traffic Control" of the Caltrans Standard Specifications. These measures will include the use of traffic cones, signs, lighted barricades, lights, and flagmen. Access will be readily available at all times for emergency vehicles.

Air Pollution and Dust Control

Air pollution and dust control will conform to Caltrans Standard Specifications Sections 14-9.02 "Air Pollution Control" and 14.9-03 "Dust Control" and Northern Sierra Air Quality Management District rules. The contractor will be required to implement a dust control program to limit fugitive dust emissions and submit a dust control plan to the air district. Notification of bridge demolition may be required for the California Air Resources Control Board and/or U.S. Environmental Protection Agency in accordance with their rules and regulations for hazardous pollutants.

The fugitive dust and emission controls identified in the dust control plan will include, but are not limited to, the following:

- Water or use a palliative on stockpiles and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.

- Cover trucks hauling soil and other loose material or maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer) pursuant to California Vehicle Code (Section 23114) and air district Rule 226.
- Clean (sweep or wash with water) equipment used on unpaved surfaces prior to entering SR 70 to prevent tracking materials onto the highway.
- Minimize idling time of vehicles and equipment and shut off equipment when not in use pursuant to California Code of Regulations (Title 13, sections 2449(d)(3) and 2485).
- Maintain construction equipment in proper working conditions according to manufacturer's specifications, and check it daily to ensure it is in proper running condition before it is operated.

Water Pollution Prevention

The contractor will be required to implement water pollution control measures that conform to Section 13 "Water Pollution Control" of Caltrans Standard Specifications and prepare a Storm Water Pollution Prevention Plan (SWPPP) that identifies the project-specific best management practices (BMPs) to be implemented during construction. These measures include, but are not limited to, the following:

- Exercise every reasonable precaution to protect Spanish Creek from pollution due to fuels, oils, bitumen, calcium chloride, and other harmful materials and conduct and schedule operations so as to avoid or minimize muddying and silting of the creek.
- Limit vegetation removal to areas necessary for bridge construction and associated activities;
- Use temporary devices, such as dikes, basins, ditches, straw, and seed, to prevent pollutants from entering the creek and to stabilize slopes.
- Install facilities and devices used for water pollution control practices before performing work activities.
- Install soil stabilization materials for water pollution control practices in all work areas that are inactive or before storm events.
- Repair or replace water pollution control practices within 24 hours of discovering any damage.
- Implement effective handling, storage, usage, and disposal practices to control hazardous materials and manage waste and non-stormwater runoff in the work area before they come in contact with receiving waters.
- Keep material or waste storage areas clean, well organized, and equipped with enough cleanup supplies for the material being stored.
- Implement spill and leak prevention procedures for chemicals and hazardous substances stored in the work area.
- Contain and clean up spills of petroleum materials and other hazardous substances listed under 40 CFR, parts 110 and 302 as soon as it is safe.
- Cover active and inactive soil stockpiles with soil stabilization material or a temporary cover and surround stockpiles with a linear sediment barrier.

- If fueling or maintenance must be done on-site, designate a location away from the creek, preferably at the staging area along SR 70.
- Use containment berms or dikes around fueling and maintenance areas.
- Prevent demolished material from entering the creek, such as through use of authorized covers and platforms to collect debris.
- Do not operate mechanized equipment in the active stream channel.
- Do not deposit material derived from roadway work in the creek channel, including along the banks, where it could be washed away by high stream flows.

Hazardous Materials Control

If determined necessary by the contractor after removal of the existing bridge, lead-based paint on the bridge would be removed by the contractor in accordance with methods approved by the U.S. Environmental Protection Agency. Acceptable methods include wet scraping or the use of a dustless needle gun connected to a vacuum unit with a high efficiency particulate air filter that empties directly into a waste container. The waste container would be properly documented and disposed of at a Class I landfill near the project area.

Safety and Health Requirements

The contractor will be required to follow all safety and health requirements set forth by the Occupational Safety and Health Administration. In addition, to prevent wildfires, the contractor will prepare and implement a fire safety plan for construction operations, such as welding, and use construction equipment equipped with fire prevention devices (e.g., spark arrestors) pursuant to Public Resources Code 4442.

Post-Construction Restoration

Disturbed areas outside of the new bridge location and roadway approaches will be restored to pre-disturbance conditions, which includes grading to prior contours and reseeding with native grasses. After removal of the existing bridge, excavated areas will be filled with native soil from the new bridge excavations. Natural regeneration of vegetation is expected along the banks following bridge removal, and plantings are not proposed.

Impacts and Associated Mitigation Measures

Impact BR-1: General disturbance to and impacts on biological resources

Mitigation Measure BR-1: Worker Awareness Training

Prior to construction, all workers will receive Worker Environmental Awareness Training (WEAT) to be conducted by a qualified biologist. WEAT will include, but is not limited to, identification of relevant biological resources (e.g., special-status species that may be found in the APE) and an

overview of conservation measures and avoidance and mitigation measures that are required during construction activities. Handouts summarizing information presented during WEAT and relevant contact information will be provided to the workers.

Implementation: The County will retain the services of a qualified biologist to conduct a WEAT prior to construction.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: At the onset of construction

Verified By: _____ Date: _____
County Project Manager

Impact BR-2: Potential impacts during sensitive periods for wildlife

Mitigation Measure BR-2: Construction Schedule

If practicable, construction activities, vegetation removal, and removal of the existing bridge shall be scheduled to avoid the breeding and rearing season (March through August) for foothill yellow-legged frog, western pond turtle, special-status birds, mountain beaver, ring-tailed cat, bats, migratory birds, and raptors. Due to weather constraints in Plumas County, all construction activities may not be able to avoid the breeding and rearing season for these species, and pre-construction surveys will be implemented if construction is necessary between March and August (see Mitigation Measure BR-3). If practicable, vegetation removal shall be scheduled between September and February to prevent the removal of active nests or dens.

Implementation: The County will coordinate with the construction contractor regarding the schedule for construction.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: Prior to construction

Verified By: _____ Date: _____
County Project Manager

Impact BR-3: Potential impacts to breeding or nesting special-status wildlife

Mitigation Measure BR-3: Pre-Construction Surveys

If construction activities must be scheduled between March and August, a qualified biologist shall conduct a pre-construction survey within 500 feet of the work area (e.g., staging area, bridge construction, bridge removal) to locate in-stream egg masses (foothill yellow-legged frog) and active nest, den, or roost sites of special-status birds, migratory birds, raptors, western pond turtle (focused along Spanish Creek and within 300 feet of the creek), Sierra Nevada mountain beaver, ring-tailed cat, western mastiff, and pallid bat. The survey should be conducted no more than 15 days prior to

the initiation of construction and should be repeated if work stops for more than one week during the breeding and rearing period for these species.

If active nest, den, or roost sites are found, the biologist shall identify appropriate conservation measures to protect the species. These measures may include, but are not limited to, establishing a construction-free buffer zone around the breeding site, biological monitoring of the breeding site, delaying construction activities in the vicinity of the breeding site until the young have dispersed, and removing trees or other vegetation that supports active nest or den sites once the sites are determined to no longer be active (typically by August).

If a foothill yellow-legged frog egg mass is found, the biologist shall flag the site and determine if construction activities can avoid impacting the egg mass. If the egg mass cannot be avoided, it will be relocated to a suitable location outside of the work area by a qualified biologist.

If a western pond turtle nest is found, the biologist shall flag the site and determine if construction activities can avoid impacting the nest. If the nest cannot be avoided, it will be excavated and re-buried at a suitable location outside of the work area by a qualified biologist.

Implementation: The County will retain the services of a qualified biologist to conduct pre-construction surveys and will implement the measures described above.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: Prior to and during construction (between March–August)

Verified By: _____ Date: _____
County Project Manager

Impact BR-4: Potential impacts to special-status wildlife in the project area

Mitigation Measure BR-4: Avoidance During Construction

If foothill yellow-legged frog, western pond turtle, mountain beaver, or ring-tailed cat is encountered during construction, activities in the vicinity shall cease until one or more of the following occur:

- The animal leaves the work area.
- Appropriate corrective measures have been implemented (e.g., relocation of the animal to appropriate habitat identified by a qualified biologist, outside of the APE).
- It has been determined that the animal will not be harmed. Any trapped, injured, or killed foothill yellow-legged frogs, western pond turtles, mountain beaver, or ring-tailed cats shall be reported immediately to the California Department of Fish and Wildlife.

Implementation: The County will retain the services of a qualified biologist to implement the measures described above, as needed, and the construction contractor will be responsible for complying with the avoidance measures.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: During construction

Verified By: _____ Date: _____
County Project Manager

Impact BR-5: Disturbance to and removal of riparian vegetation

Mitigation Measure BR-5: Conservation and Restoration of Habitat

Vegetation removal, grading, and other ground-disturbing construction activities shall be limited to the smallest area necessary. Exclusionary fencing shall be installed along the boundaries of the constructed pond and associated fresh emergent wetlands, riparian habitat along SR 70 in the northwestern corner of the APE, and riparian habitat along Spanish Creek outside of the work area. These areas will be marked as environmentally sensitive areas to ensure all construction activities avoid potential disturbance to the habitats. All project access, parking, and staging will be limited to existing roadways, previously disturbed areas, and parking areas.

If riparian areas along the creek are temporarily disturbed during construction, native riparian vegetation representative of species existing in the APE (e.g., white alder, big-leaf maple) shall be planted to restore the disturbed areas to pre-disturbance conditions or better. The performance goal for tree replacement would be the successful establishment of at least one tree for each tree removed at five years after planting. To achieve this standard, tree replacement is proposed to occur at a 3:1 ratio per mature woody riparian tree [trees equal to or greater than 15.24-cm (6-inch) diameter at breast height] removed during construction. Replacement trees shall be planted in the appropriate season following the completion of construction. Propagules (i.e., tree seedlings) shall be obtained either onsite or from a local nursery. Plant spacing intervals will be determined as appropriate based on site conditions following construction. The County shall monitor the plantings annually for up to five years to ensure that trees have become established. Supplemental planting shall be conducted as necessary to ensure that the performance standard is achieved. Non-native species removed during project construction will be replaced with native riparian species.

Implementation: The construction contractor will report to the County the extent of disturbance in riparian areas, and the County will identify specific replacement plantings. A qualified restoration biologist will be retained to implement the restoration and monitor the plantings.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: During and following construction

Verified By: _____ Date: _____
County Project Manager

Impact BR-6: Potential for introducing or spreading invasive plants

Mitigation Measure BR-6: Prevention of Spread of Invasive Species

The construction contractor will be responsible for preventing the spread of invasive plant species into the APE. The following measures will be implemented:

- All equipment used for off-road construction activities will be weed-free prior to entering the APE.
- If project implementation calls for mulches or fill, they will be weed free.
- Any seed mixes or other vegetative material used for re-vegetation of disturbed areas will consist of locally adapted native plant materials to the extent practicable.

Implementation: The construction contractor will implement the measures described above.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: During and following construction

Verified By: _____ Date: _____
County Project Manager

Impact BR-7: Potential for water quality impacts in surface water features

Mitigation Measure BR-7: Water Pollution Prevention and Erosion and Sediment Control

Construction activities that increase the erosion potential in the APE shall be restricted to the dry season (June 15–October 31) to the maximum extent practicable to minimize the potential for rainfall events to transport sediment to surface water features in the APE. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures must be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place. The SWPPP will identify specific BMPs to implement, such as those listed in the project description.

Implementation: The construction contractor will implement the measures described above.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: Prior to and during construction

Verified By: _____ Date: _____
County Project Manager

Impact CR-1: Potential disturbance to buried cultural resources

Mitigation Measure CR-1: Accidental Discovery of Cultural Resources

The Caltrans standard policy for previously unidentified cultural resources states that "work be halted in that area until a qualified archaeologist can assess the significance of the find." In the event cultural resources (other than those determined to lack eligibility for either the National Register or the California Register) are unearthed inadvertently as a result of project-related activities, all work in the immediate vicinity of the discovery will be stopped, and the County and Caltrans will be notified. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be retained to evaluate the find and recommend appropriate conservation measures. Appropriate conservation measures shall be implemented prior to re-initiation of activities in the immediate vicinity of the discovery.

Implementation: The construction contractor will implement the measures described above.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: During construction

Verified By: _____ Date: _____
County Project Manager

Impact CR-2: Potential disturbance to human remains

Mitigation Measure CR-2: Accidental Discovery of Human Remains

If human remains are discovered during project activities, all work in the vicinity of the find will be stopped, and the Plumas County Sherriff-Coroner's Office will be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission. Treatment of the remains shall be conducted in accordance with further direction of the County Coroner or the Commission, as appropriate.

Implementation: The construction contractor will implement the measures described above.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: During construction

Verified By: _____ Date: _____
County Project Manager