Wildwood Road at Hayfork Creek Bridge (No. 5C-086) Replacement Project
Proposed Mitigated Negative Declaration and Initial Study

September 2012

CEQA Lead Agency:
Trinity County
Department of Transportation
31301 State Highway 3
P.O. Box 2490
Weaverville, CA 96093-2490

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NSR 50945
1. Project Title: Wildwood Road at Hayfork Creek Bridge (No. 5C-086) Replacement Project

2. Lead Agency Name and Address
Trinity County Department of Transportation
31301 State Highway 3
P.O. Box 2490
Weaverville, CA 96093

3. Contact Person and Phone Number
Jan Smith, Senior Environmental Compliance Specialist
(530) 623-1365

4. Project Location
Wildwood Road (County Road 302) at Hayfork Creek, Wildwood, Trinity County, California; T 29 N, R 11 W, Sec. 1 (MDBM) Dubakella Mt. Quadrangle;
Assessor Parcel Numbers: 19-20-22, 19-20-43, and 19-20-45

5. Project Sponsor’s Name
Rick Tippett, Director
Trinity County Department of Transportation
31301 State Highway 3
P.O. Box 2490
Weaverville, CA 96093

6. General Plan Designation
Resource (19-20-22, 19-20-43), Rural Residential (19-20-45)

7. Zoning
The following zoning designation applies to all parcels composing the proposed project site:
Unclassified

8. Description of Project

Trinity County Public Department of Transportation proposes to replace the existing bridge (No. 5C-086) on Wildwood Road over Hayfork Creek in the community of Wildwood, Trinity County, California and construct the necessary roadway approach improvements. The proposed bridge structure is on a public roadway and would be used by emergency vehicles, timber harvest operations, rural residents, commercial operations, and other motorists. A new bridge would improve public safety for traffic crossing Hayfork Creek by replacing a functionally obsolete and structurally deficient bridge that is less than two-lanes wide and damaged in several places (sufficiency rating of 42.8). According to the 2006 California Department of Transportation (Caltrans) Bridge Inspection Report the existing bridge is classified as “Structurally Deficient” and “fracture critical” due to the lack of redundancy in the girder configuration and known fatigue-prone deficiencies in the connection details. In addition, the existing bridge is inadequate to meet the current hydraulic freeboard requirements for 50- or 100-year flood events. Existing roadway approaches to the bridge are substandard with horizontal curve radii along both the east and west bridge approaches posted with advisory/warning signs of 15 miles per hour. The existing bridge is eligible for replacement under the
Federal Highway Administration (FHWA) Bridge Replacement Program. The proposed bridge would meet the minimum recommended standards of Caltrans and FHWA.

The existing single-lane bridge was constructed in 1928 and repaired/lengthened in 1960. The reinforced concrete structure has a span length of approximately 130 feet and an overall width of 15 feet, including a single lane width of 12 feet. The proposed new two-lane bridge would be aligned approximately 30 feet (at centerline) to the north (downstream) of the existing alignment centerline. The northerly shift is sufficient to allow a single stage construction operation and to maintain vehicle access across Hayfork Creek during construction. The new structure would be 162-feet long with a three-span configuration measuring 50 feet/62 feet/50 feet and would either be a cast-in-place, post-tensioned, reinforced concrete slab or a precast, pre-stressed, voided slab superstructure type. Approach roadway improvements include 595-feet west and 425-feet east of the new crossing, for a total project length of 1,182 feet.

The new crossing would accommodate a paved roadway width of 28 feet—two 11-foot lanes with 3-foot shoulders. The bridge would be supported on either reinforced concrete (RC) pier walls or pile extension bents and RC seat-type abutments. Foundations for interior and end supports would consist of spread footings benched or otherwise anchored via grouted dowel into the naturally occurring onsite rock formations. The proposed alignment connects to the existing Wildwood Road using horizontal curves with radii of 195 feet and 315 feet at the western and eastern conforms, respectively. The proposed project would raise the roadway centerline elevation by approximately 6 feet above the existing groundline at Hayfork Creek to address hydraulic constraints and to balance cut and fill volumes.

Instream constructing activities, below the ordinary high water mark (OHWM), would be limited to the greatest extent practicable, but may include excavation and removal of existing bridge foundations, dewatering/channelization, backfill, form-reinforced pour operations for construction of the new bridge’s sub-structure elements, installation of rock slope protection, and the erection and removal of a work platform or trestle and falsework/formwork. Roadway embankment fill would be placed outside of the OHWM. Water diversion or channelization structures would be removed upon completion of the project.

During construction, traffic operations would be maintained over the original alignment and existing bridge, although temporary delays may occur during the sequencing used to tie the new alignment into the existing alignment. Upon completion of the new roadway approaches and bridge structure, the existing bridge and its foundations, and existing roadway would be removed and the areas restored to preconstruction contours and revegetated.

9. Surrounding Land Uses and Setting

Rural Residences/Meeting Lodge/Bar/Open Space
10. Other Public Agencies Whose Approval May Be Required (e.g., permits, financing approval, or participation agreement.)

- U.S. Army Corps of Engineers (San Francisco District)
- Federal Highway Administration
- National Oceanic and Atmospheric Administration – Fisheries Service
- U.S. Fish and Wildlife Service
- California Department of Fish & Game (Region 1)
- California Regional Water Quality Control Board (North Coast Region)
- California Department of Transportation (District 2)
- State Office of Historic Preservation
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Chapter 1
Introduction

1.1 Introduction and Regulatory Guidance

This document is an Initial Study (IS) that summarizes potential environmental impacts and provides justification for adoption of a Mitigated Negative Declaration (MND) for the proposed Wildwood Road at Hayfork Creek Bridge (No. 5C-086) Replacement Project (project). This document has been prepared in accordance with the current California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., and the CEQA Guidelines. Mitigation measures have been proposed to avoid or minimize any significant impacts that were identified.

1.2 Lead Agency

The Lead Agency is the public agency with primary responsibility for implementing a proposed project. The Trinity County Department of Transportation (County) is the CEQA Lead Agency. The proposed project would receive funding through federal and state sources and would require approvals from the FHWA and 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.

1.3 Supporting Technical Studies

Technical studies conducted for this project include:

- Archeological Survey Report (ASR)/Historical Properties Survey Report (HPSR)/Historical Resources Evaluation Report (HRER) (confidential; available to qualified readers only)
- Design Hydraulic Study
- Northern Spotted Owl Biological Assessment (BA)
- Northern Spotted Owl Habitat Assessment and Evaluation of Auditory and Visual Disturbance Report
- Natural Environment Study (NES) Report
- Fisheries Biological Assessment/Essential Fish Habitat Assessment (BA/EFHA)
- Wetland Delineation Report
- Preliminary Geotechnical Report
Introduction

- Initial Site Assessment – Hazards and Hazardous Materials (confidential; available to qualified readers only)

- Foundation Investigation

These technical studies are available for review at the County. Please contact:

Jan Smith, Environmental Compliance Specialist
Trinity County Department of Transportation
31301 State Highway 3
P.O. Box 2490
Weaverville, CA 96093
Phone: (530) 623-1365

1.4 Document Organization

The Initial Study is composed of the following chapters:

Chapter 1.0 – Introduction: describes the purpose and content of this document.

Chapter 2.0 – Project Description: provides a comprehensive description of the proposed project, tentative schedule, and required permit approvals.

Chapter 3.0 – Environmental Impacts and Mitigation Measures: describes the environmental impacts of the proposed project on the CEQA Environmental Checklist. Where appropriate, mitigation measures are provided that would reduce potentially significant impacts to a less-than-significant level.

Chapter 4.0 – Determination: provides the environmental determination for the project.

Chapter 5.0 – Summary of Mitigation Commitments: provides a comprehensive list of all mitigation measures proposed for the proposed project.

Chapter 6.0 – Report Preparation: identifies the individuals responsible for preparation of this document.

Chapter 7.0 – References: provides a list of references used to prepare this document, including personal communications with agency staff.
Chapter 2
Project Description

2.1 Location

The Wildwood Road at Hayfork Creek Bridge (No. 5C-086) Replacement Project is located in the community of Wildwood, Trinity County, California. The project site is aligned along Wildwood Road (County Road 302) approximately 2.6 road miles northwest of the Wildwood Road intersection with State Highway 36, and 13 air miles southeast of the community of Hayfork. The bridge is located over Hayfork Creek, a tributary to the Trinity River. The project site is found on the Dubakella Mt., California 7.5 minute U.S. Geological Survey quadrangle, Township 29 North, Range 11 West, Section 1, Mount Diablo Base & Meridian. The project location is shown in Figure 1. The project area corresponds to a Trinity County right-of-way easement through portions of the following Assessor Parcel Numbers (APN): 19-20-22, 19-20-43, and 19-20-45.

2.2 Existing Facility Conditions

The existing single-lane bridge is located on Wildwood Road, a rural two-lane county road. The bridge was constructed in 1928 and repaired and lengthened in 1960. It currently consists of a reinforced concrete deck slab overlaying three simply supported spans of two rolled steel girders. The structure is approximately 130-feet long and is supported on two reinforced concrete pier walls, a reinforced concrete seat-type abutment, and a reinforced concrete pedestal abutment. All interior and end supports are founded on spread footings likely anchored or benched into naturally occurring rock formations. As Wildwood Road approaches Hayfork Creek it narrows down from a two-lane road to a single-lane road. The single-lane bridge deck has an overall width of 15 feet and provides an actual lane width of 10 feet with a shoulder width of 1 foot on either side. Both approaches to the bridge are posted with cautionary signs for 15 miles per hour (mph) due to substandard horizontal curve radii.

2.3 Project Purpose and Need

The purpose of the project is to improve public safety by providing a cost effective method for traffic to safely cross Hayfork Creek. Wildwood Road links State Highway 36 to the south with State Highway 3 to the north, thus providing access for fire protection, timber harvest, residential, and commercial uses through this mountainous, remote, and largely unroaded region. The Caltrans Bridge Inspection Report classified the Hayfork Creek bridge as “structurally deficient” (sufficiency rating of 42.8) and “fracture critical” due to the lack of redundancy in the girder configuration and known fatigue-prone deficiencies in the connection details (California Department of Transportation 2006). The existing bridge does not satisfy the current hydraulic freeboard requirements that would allow for passage of a 100-year flood event or a 50-year flood event plus 2 feet of freeboard beneath the deck soffit. The existing bridge also exhibits signs of deterioration, including degradation of steel edge barrier connection and reinforced concrete curbs, visible tractor damage on the asphalt concrete.
Figure 1
Project Location and Vicinity Map

Hayfork Creek Bridge 5C-086 on Wildwood Road Replacement Project

Biological Study Area

Public Land Survey:
Township: 29N
Range: 11W
Section: 1
USGS 7.5 Quad:
Wildwood - 1981
deck surface, cracking and heavy efflorescence along the underside of the reinforced concrete deck slab, spalling (i.e., chipping or flaking), and section loss on the tops of the reinforced concrete pier walls. Approach roadways to the east and west contain substandard horizontal curve radii.

2.4 Proposed Project

2.4.1 Replacement of Existing Bridge

Bridge Structure

The proposed project consists of replacing a single-lane bridge with a two-lane bridge and constructing the necessary approach roadway improvements to accommodate the bridge replacement (Figure 2). The proposed project would locate the replacement bridge centerline 30-feet north of the existing bridge centerline. The northerly shift is sufficient to allow a single stage construction operation and to maintain vehicular access across Hayfork Creek on the existing bridge throughout construction. The proposed project consists of a 162-foot long structure with a three-span configuration measuring 50 feet/62 feet/50 feet, with either cast-in-place,-post-tensioned, reinforced concrete slab or a precast, pre-stressed, voided slab superstructure type. The bridge was designed to minimize instream impacts by spanning the ordinary high water mark (OHWM) and removing all of the existing piers and abutments. The preliminary design drawing is overlaid on Figure 2. The three-span structure would include two piers and two abutments. The new piers would be walls with spread footings featuring excavation of in-situ material and conventional form-reinforced-pour construction operations. The new piers and abutments would be within the 100-year floodplain, but outside of the OHWM.

The new bridge would accommodate a roadway width of 28 feet—two 11-foot lanes with 3-foot shoulders. Structure types that could be used for the crossing would be supported on either RC pier walls or pile extension bents and RC seat-type abutments. Foundations for interior and end supports would consist of spread footings benched or otherwise anchored via grouted dowel into the naturally occurring rock formations. The proposed project would raise the roadway centerline elevation by approximately 6 feet above the existing ground line at Hayfork Creek to address hydraulic constraints and to balance cut and fill volumes.

Roadway Approaches

Approach roadway improvements would extend 595 feet west and 425 feet east of the new crossing for a total project length of 1,182 feet. The approach roadway section would be comprised of 3-foot earthen backing/3-foot shoulder/11-foot lane/11-foot lane/3-foot shoulder/3-foot earthen backing crowned at 2 percent. Road embankment fills would be graded at 2:1 horizontal run over vertical rise and would be contained within the proposed right-of-way corridor; the exception being those slopes needed to tie the roadway into existing driveways. It is anticipated that retaining walls would not be necessary. The proposed alignment connects to the existing Wildwood Road using horizontal curves with radii of 195 feet and 315 feet at the western and eastern conforms, respectively.

Instream Construction and Dewatering Activities

Instream constructing activities, below the OHWM, would be limited to the greatest extent practicable, but may include excavation and removal of existing bridge foundations;
dewatering/channelization; backfill; form-reinforced pour operations for construction of the new bridge’s sub-structure elements; installation of rock slope protection (RSP); and the erection and removal of a work platform, trestle, and falsework/formwork. Roadway embankment fill would be placed outside of the OHWM.

Bank protection measures would be required to stabilize the backfilled material on the banks in front of the abutments. This protection would consist of RSP of 2-Ton or 4-Ton Class using placement Method A (i.e., placement by heavy equipment; however, placement by dumping or dozing would not be allowed). It is estimated that approximately 80- to 110-lineal feet along each bank would be required to protect the abutments—this is the bridge width plus 25- to 40-feet upstream and downstream of the bridge. The toe of RSP would be buried with approximately 40 percent to 55 percent below finished grade. This material would be in and around the abutments, which are at least 20 feet away from the active stream channel and also outside of the OHWM.

Temporary falsework would be required to support the concrete forms for the new bridge deck. Considering the relatively small distance between the stream channel and the new bridge, and the presence of exposed bedrock, falsework would be supported on the stream bottom rather than on driven piles. Falsework would consist of cross-braced towers constructed adjacent to the pier walls on which temporary support for the bridge deck construction portion of the project would be supported atop beams spanning between the towers and over the stream.

Gravel work pads would be constructed on each bank of Hayfork Creek immediately downstream of the new bridge alignment and along the edge of the stream, and within the OHWM to contain debris and provide additional working access to the existing abutments and new bridge features, thus alleviating the need for equipment to enter the channel. Temporary work platforms would extend up to 10 feet into the OHWM on the east bank of Hayfork Creek. Temporary work platforms would be constructed of suitable-sized salmon spawning gravels, i.e., “fish rock.” This material will meet the Caltrans Gravel Cleanliness Specification 227 with a score of 85 or higher and be appropriately sized for salmonid spawning habitat. Because fish rock does not stay together under pressure of heavy equipment, clean crushed angular gravel would be placed on top of the fish rock with geotextile fabric to separate the crushed angular gravels from the fish rock. Concrete k-rails may be used to contain the rock along the edges of the work platforms. At the end of the first instream construction period, and post-project completion, all temporary materials used in construction would be removed. The crushed angular gravels, geotextile fabric, and k-rails would be removed and the fish rock in and immediately adjacent to the channel would be allowed to redistribute naturally.

A trestle would be constructed across Hayfork Creek downstream (north) of the new alignment to allow workers to access the bridge deck and move across the creek. Typical trestle platforms would be 25-feet wide with supports spaced at 30 to 40 feet on center. Two supports bents, one on each bank and supported on the channel bottom, would be needed to span the stream. The support bents would be placed within the OHWM, but not within the active channel at the time of installation.

Although unlikely given the underlying bedrock and hydrologic conditions in the project area during the summer and fall, if dewatering is required during the installation of the piles, or possibly during installation of RSP, the water would be pumped to a temporary detention basin(s) isolated from the stream channel. Once in the detention basin(s), the water would either be allowed to percolate into...
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the soils and infiltrate the groundwater or would be run through sediment filter tanks prior to returning to the stream. Water diversion or channelization structures (if needed) would be removed upon completion of the project.

**Hydraulics and Geology**

A design hydraulic analysis has been prepared for the purpose of meeting the requirements of 23 CFR §650.115 and §650.117 (Pacific Hydrologic Incorporated 2011). The hydraulic analysis used computer modeling (HEC-RAS) and empirical equations (FHWA HEC-18) to determine the scour potential and minimum soffit elevation (1,949.92 feet) for the proposed bridge structure under most probable 100-year flood and 50-year flood event flows (1.27-feet above 100-year flood and 2.30-feet above 50-year flood event flows). As shown in Table 1, the analysis concluded that construction of the proposed bridge would result in a slightly reduced water surface elevation during infrequent floods in Hayfork Creek. In addition, the project would essentially eliminate inundation of the bridge during major storm events, whereas the current bridge is subject to frequent inundation.

### Table 1. Hydraulic Analysis Results

<table>
<thead>
<tr>
<th>Bridge</th>
<th>Flood Type</th>
<th>Flow (cubic feet per second)</th>
<th>Flood Return Period (years)</th>
<th>Water Surface Elevation (feet - mean sea level)</th>
<th>Average Channel Velocity (feet per second)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Bridge</strong></td>
<td><strong>Standard</strong></td>
<td>8,430</td>
<td>50</td>
<td>1,947.93</td>
<td>14.1</td>
</tr>
<tr>
<td><strong>Hydraulic Conditions</strong></td>
<td><strong>Base</strong></td>
<td>9,720</td>
<td>100</td>
<td>1,948.72</td>
<td>14.1</td>
</tr>
<tr>
<td><strong>Base, no drift</strong></td>
<td>9,720</td>
<td>100</td>
<td></td>
<td>1,949.54</td>
<td>14.1</td>
</tr>
<tr>
<td><strong>Flood of Record</strong></td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Overtopping Flood</strong></td>
<td>4,000±</td>
<td>5±</td>
<td></td>
<td>1,945.0</td>
<td>12±</td>
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<td><strong>Proposed New Bridge</strong></td>
<td><strong>Standard</strong></td>
<td>8,430</td>
<td>50</td>
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<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Overtopping Flood</strong></td>
<td>&gt;12,000</td>
<td>&gt;200</td>
<td></td>
<td>1,951.81</td>
<td>12±</td>
</tr>
</tbody>
</table>

Notes:  
[A] Measured at cross-section 348 located approximately 16-feet upstream of the proposed new bridge.  
[B] Measured at cross-section 383 for flood risk comparison to existing condition.  
[C] Highest average channel velocity near bridge.  
Source: (Pacific Hydrologic Incorporated 2011)

Bank protection measures such as RSP, proposed for use on the front of the abutments would be used to prevent further channel degradation. If unchecked, hydraulic analysis determined that as much as 6 feet of scour could be expected at the abutment faces (Pacific Hydrologic Incorporated 2011). Bridge replacement would not change the sediment transport characteristics of Hayfork Creek or have a significant effect on channel stability.
Right of Way and Acquisition

Acquisition of right of way would be required to accommodate the new roadway alignment. The proposed right-of-way limits extend from the new centerline by 30 feet on both sides, providing a total corridor width of 60 feet. Due to sight distance requirements, additional right of way would be necessary north of Wildwood Road along the horizontal curve at the western approach. The additional right of way would extend from the new centerline by 50 feet to the north, providing a total corridor width of 80 feet over the length of the horizontal curve. Right of way acquisition would be required from two parcels: APNs 19-20-22 and 19-20-43. Temporary construction easements would be required along the new alignment to accommodate construction operations, provide equipment and material staging and storage areas, and facilitate tie-ins for existing driveways. Temporary construction easements would be required from three parcels: APNs 19-20-22, 19-20-43, and 19-20-45.

Utilities

Within the limits of the proposed project, there are existing overhead utility lines running alternately along the north and south side of Wildwood Road. It is anticipated that the overhead lines and support poles would be relocated prior to or during construction. At the crossing location, the lines would be rerouted underground and pass over Hayfork Creek in conduits provided in the crossing structure. No other utilities are known to be present at the proposed crossing location.

Aesthetic Requirements

The proposed concrete bridge structure and realigned roadway approaches would be consistent with the aesthetics of the existing structure and would not significantly change the aesthetic quality of the project site.

Bridge Demolition

Upon completion of the new roadway approaches and bridge structure, the existing bridge, its foundations, and existing roadway approaches would be removed from the project site. The existing bridge deck and girders would be cut at bents and lifted out with a crane. An excavator equipped with a bucket or an excavator with a hammer would be used to break up the substructure elements (pier walls and abutments). Debris would be kept from rolling down the bank into the water by using poly-wrapped K-rail or other physical barricade. It is anticipated that all bridge demolition would take place from the bank and would not require equipment to enter the channel since the existing piers are far enough outside of the active low-flow channel and there are sufficient work areas adjacent to the existing bridge from which to operate the equipment. Operation of equipment near the existing piers may require the temporary placement of a gravel platform from which to operate heavy machinery in the floodplain, but not within the active channel. The old bridge, concrete, and rebar would be disposed of offsite at an appropriate disposal or re-use facility.

Traffic Control

Average daily traffic over Wildwood Road is relatively low; therefore, traffic control devices in the construction area, such as temporary stop lights, would not be needed. Stop signs during non-construction times and flagging during construction hours are anticipated. Temporary, minor disruptions may be experienced depending upon the sequencing used to tie the new alignment into the...
existing alignment at the project conforms. The existing bridge would remain in use during construction to allow for uninterrupted traffic operations.

### 2.4.2 Design Exceptions

Although the new roadway sections would conform to the existing roadway at the project limits, the proposed project would likely require some design exceptions. The small radii horizontal curves near the conform point at the project limits do not provide for the standard 55 mph (88.5 kilometers per hour [kph]) design speed for roadways of the same classification. The proposed geometrics at the western approach provide for a safe operating speed of 35 mph (56.3 kph) based on stopping sight distance requirements, but limit user comfort to an operating speed of 25 mph (40.2 kph), as defined by the Caltrans Highway Design Manual.

### 2.4.3 Design Criteria

All design specifications, including horizontal and vertical roadway alignment geometry were developed based on the following:

**Bridge Design**

Using Caltrans’ Bridge Design Specifications, the proposed structure would be designed to meet HS-20 loading specifications, including permit and alternative live loading, and would satisfy the current Seismic Design Criteria (SDC) Version 1.4. Hydraulic Design Criteria outlined in Caltrans’ Local Procedures Manual prescribe that the bridge be capable of conveying the base or 100-year flood and passing a 50-year flood without creating excessive flow velocities, encroaching onto traffic lanes, or creating objectionable backwater. The new bridge must have a minimum of 2-feet of freeboard between the bridge and flows resulting from a 50-year flood event for streams the size of Hayfork Creek. (The project hydraulic analysis concluded that the new bridge would have a soffit elevation of 2.30 feet above the 50-year flood.) The proposed project is not a Type I project as defined in 23 CFR 772.5(h). The project would require only minor alterations to the existing horizontal and vertical alignments with no increase in the number of through traffic lanes.

**Roadway Design**

Roadway alignment and design information are based on topographic information. The roadway design would be based on the Caltrans Highway Design Manual and AASHTOs *Policy on Geometric Design of Highways and Streets 2001* (Green Book). The new roadway would consist of two 11-foot lanes with 3-foot shoulders.

### 2.4.4 Construction Criteria and Methods

Construction of the replacement bridge and roadway approach improvements will follow the criteria and methods outlined in the following paragraphs.

**Specifications**

Construction specifications would be in accordance with the most current Caltrans Standard Specifications and Special Provisions.
**Traffic Control/Detour**

The existing bridge would remain in operation throughout construction and continue to provide for two-way traffic. The proposed project would not require a temporary detour or closure of Wildwood Road. Direct access to residences and businesses in the project vicinity would not be permanently affected by implementation of the proposed project. Throughout construction, access to these adjacent properties from Wildwood Road would be maintained.

**Contractor Staging and Access**

During construction, contractor equipment and materials would be staged in the open fields near the northwest corner and southeast corner of the existing bridge (Figure 2). The existing Wildwood Road would be used by the contractor to access the active construction site and staging areas. Upon project completion, temporary contractor access routes and staging areas would be restored to natural conditions by re-contouring and re-vegetating disturbed areas.

**Bridge Demolition – Hazardous Materials Removal**

Painted bridge surfaces were found to contain lead-based paint in quantities that exceed the federal Environmental Protection Agency’s threshold (Taber Consultants 2010); therefore, parts of the bridge containing painted surfaces will be removed, handled, and disposed of at a Class I landfill.

### 2.4.5 Fill Import and Export

Construction of the new bridge would require approximately 8,900 cubic yards of backfill (from project site and commercial sources) and approximately 7,100 cubic yards of excavation. Construction of the new bridge abutments would require two excavation areas, each measuring approximately 57-feet long by 30-feet wide (Figure 2). Some of this excavated material would be used to backfill the new abutments. Imported fill would consist of engineered road base (crushed rock from a commercial source), asphalt, and RSP, from a commercial source or generated from a nearby County construction project. Table 2 provides a summary of project fill and excavation quantities.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Amount of Excavation (cubic yards)</th>
<th>Amount of Fill (cubic yards)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway approach</td>
<td>1,800</td>
<td>4,300</td>
</tr>
<tr>
<td>Existing bridge abutments/pier removal</td>
<td>400</td>
<td>300</td>
</tr>
<tr>
<td>New bridge abutments and piers</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Temporary diversion/stream crossing</td>
<td>100</td>
<td>300</td>
</tr>
<tr>
<td>New low flow channel</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rock slope protection</td>
<td>1,900</td>
<td>1,900</td>
</tr>
<tr>
<td>Silt and vegetation removal</td>
<td>1,900</td>
<td>100</td>
</tr>
<tr>
<td>Planting soil (between RSP interstices)</td>
<td>0</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7,100</strong></td>
<td><strong>8,900</strong></td>
</tr>
</tbody>
</table>
2.4.6 Water Pollution Prevention

The contractor is required to implement water pollution control measures that conform to Section 13 of Caltrans Standard Specifications. Key water pollution control measures include designation of a Water Pollution Control Manager, preparation and implementation of a Storm Water Pollution Control Plan or a Water Pollution Control Plan and contains specific practices for materials handling and storage, vehicle and equipment fueling and maintenance and other specific practices to be implemented during construction to prevent water pollution.

The contractor shall also conform to the following provisions, which will be included in the Project Specifications:

- Where working areas encroach on live streams, barriers adequate to prevent the flow of muddy water into streams shall be constructed and maintained between working areas and streams, and during construction of the barriers. Muddying of streams shall be held to a minimum.

- Mechanized equipment shall not be operated in the live stream channel except as may be necessary to construct crossings or barriers and fills at channel changes.

- Water containing mud or silt from aggregate washing or other operations shall be treated by filtration, or retention in a settling pond, or ponds, adequate to prevent muddy water from entering live streams.

- Oily or greasy substances originating from the Contractor’s operations shall not be allowed to enter a stream or be placed in a location where the potential for stream contamination may occur.

- Portland cement or fresh Portland cement concrete shall not be allowed to enter flowing water of streams.

- Material derived from roadway work shall not be deposited in a stream channel where it could be washed away by high stream flows.

2.5 Tentative Schedule

Construction of the proposed project is estimated to be less than 18 months, with the potential to be completed in 12 to 15 months. It is anticipated that two instream work windows may be necessary. In Stage 1, the anticipated construction sequencing would involve construction of the two-lane replacement structure in a single operation north of the existing crossing during the initial instream work window (typically June 15 through October 31). Concurrent with this operation, construction of the western and eastern approach roadways would be completed.

At the conclusion of Stage 1, traffic operations would be shifted from the existing alignment to the new alignment and the two-lane replacement structure. In Stage 2, the removal of the existing bridge and roadway approaches would be completed. Due to environmental work windows and seasonal constraints, the removal of the existing bridge and any portions of the existing roadway paving may
require a second season. Construction of the proposed project is planned to begin in May 2014 and be completed by October 31, 2015.

2.6 Required Permits and Approvals

The following permits and approvals likely will be required to implement the proposed project:

- U.S. Army Corps of Engineers – San Francisco District: Section 404 Nationwide Permit 14 (Linear Transportation Crossing Projects)
- National Marine Fisheries Service – Endangered Species Act Compliance (Southern Oregon/Northern California Coho Salmon)
- California Department of Transportation – District 2: National Environmental Protection Act (NEPA) approval; Endangered Species Act Compliance (Northern Spotted Owl)
- California Department of Fish and Game – Redding Office: Section 1602 Streambed Alteration Agreement; State Endangered Species Act Compliance
- North Coast Regional Water Quality Control Board: Section 401 Water Quality Certification

2.7 No Project Alternative

In addition to the action alternative, the County also considered a “No Project” alternative in its evaluation of the project, pursuant to CEQA. Under the No Project alternative, the County would not proceed with replacement of the existing Hayfork Creek bridge on Wildwood Road. However, Caltrans and FHWA have identified the existing bridge structure as being structurally deficient and fracture critical. Approach roadways to the east and west contain substandard horizontal curve radii. The bridge is also hydraulically deficient. Implementation of the No Project Alternative could result in future public safety issues associated with the bridge’s substandard structural integrity and hydraulic deficiencies, as well as the hazard posed by the roadway approaches.
Chapter 3  Environmental Setting, Impacts, and Mitigation Measures

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 cumulative impacts is included at the end of this chapter (Section XVIII, Mandatory Findings of Significance).

Addressed in this section are the following 17 environmental categories:

- Aesthetics
- Agricultural 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).
3.1 Environmental Setting

3.1.1 Regional Setting

The project area lies within the eastern portion of Trinity County, California in the Klamath Mountain Province. This region is at the junction of the uplifted Coast Ranges, the volcanic Cascades, and the ancient volcanic roots of the Sierra Nevada. The topography of Trinity County is quite rugged and steep, and much of it is densely forested and sparsely populated. Trinity County does not contain any incorporated cities; the largest town is Weaverville, with a population of approximately 3,500. A significant part of the U.S. Forest Service (Forest Service) Shasta-Trinity National Forest (STNF) is contained within Trinity County.

The region supports an extensive system of rivers and streams. High gradient, low order streams are common. Hayfork Creek flows through a small valley in the Trinity Mountain-Hayfork subsection of the southern Klamath Mountains geologic province. The Hayfork Creek Watershed drains 234,000 acres. Hayfork Creek is the largest tributary to the South Fork Trinity River, which flows into the mainstem Trinity River and then to the Klamath River before reaching the Pacific Ocean. The 79,574-acre middle reach of Hayfork Creek and the 36,328-acre Salt Creek watersheds drain through Hayfork Valley and include the smaller Tule Creek, Big Creek, Kingsberry Gulch, Carr Creek, Philpot Creek and Barker Creek subwatersheds. The middle reach of Hayfork Creek flows almost entirely through private lands in its east/west alignment through the Hayfork Valley. Geologically, the watershed is composed largely of the Rattlesnake Creek and the Hayfork terranes.

Several plant communities are present in the region, including Klamath mixed conifer, foothill pine (gray pine), mixed chaparral, montane hardwood, montane riparian, and riverine. Dense late-seral and old-growth forests are the dominant habitat types within the Hayfork Creek Watershed, covering a majority of the steep, mountainous terrain. In general, the growing season ranges from March 1 to October 31, but may be as short as mid-June through early September in some areas. Most herbaceous growth occurs during a relatively short period in late spring, ceasing as soil moisture depletes in early summer. Winters are typically cold and wet, while summers tend to be warm and dry with occasional thunderstorms in the higher elevations.

3.1.2 Local Setting

The project is located approximately 13 air miles southeast of Hayfork, Trinity County; 37 miles southwest of Redding, Shasta County; and 46 miles northwest of Red Bluff, Tehama County (approximately 60 road miles following Highway 36 west from Red Bluff). Wildwood is a sparsely populated rural community located in a small valley surrounded by densely forested Forest Service lands managed by the STNF. The project area elevation is approximately 3,281 feet mean sea level.

Existing Land Uses

The project area includes the Hayfork Creek floodplain and the uplands immediately adjacent to the existing and proposed bridge alignments. Uplands in much of the proposed new alignment corridor are undeveloped. Forest, interspersed by open fields, surrounds most of the project area. While most development in the project vicinity is rural residential, a commercial building (restaurant/bar/lodge) is
located near the southwest corner of the existing bridge. Rural residential development occurs throughout the level to gently sloping land adjacent to Hayfork Creek upstream and downstream of the proposed project area. Current and recent land uses within the project area include public roadway, waterway, and private resource land.

**Climate**

Precipitation in the vicinity of Wildwood primarily falls as rain, with an annual rainfall of approximately 33 inches (Western Regional Climate Center 2010). Air temperatures range between an average January high of 50 degrees Fahrenheit (°F) and an average July high of 90 °F. The year-round average high is approximately 79 °F (Western Regional Climate Center 2010).

**Hydrological Setting**

Hayfork Creek flows south to north in a fairly narrow, level corridor. Both sides of the stream are heavily shaded with a multi-canopy vegetation layer dominated by white alder. Arroyo willow (*Salix lasiolepis*), American dogwood (*Cornus sericea ssp. sericea*), and western chokecherry (*Prunus virginiana*) dominate the understory.

In the vicinity of the Wildwood Road bridge, Hayfork Creek appears to be substantially in a state of dynamic equilibrium (i.e., steady state) between partial geologic controls. Although the stream channel is expected to experience occasional localized bank erosion, there is no evidence of significant channel instability (e.g., incision, aggradations) (Pacific Hydrologic Incorporated 2011).

The site’s hydrology is driven by seasonal flooding and fluctuating water tables associated with the perennial streams—Hayfork and Hall City creeks. In the project area, Hayfork Creek is confined to its stream channel with two oxbows that flow during high precipitation events. The average width of Hayfork Creek, at the OHWM, is approximately 35 feet. Riffles, runs, and shallow pools are present with riffles occurring most often. Channel substrate is dominated by cobble, sand, and boulders with minor amounts of exposed gravels and bedrock. The hydraulic analysis conducted for the proposed project determined that Wildwood Road, including the existing bridge, is overtopped by flood flows at an interval of approximately 5 years (Pacific Hydrologic Incorporated 2011). These flood events are substantially natural and are not significantly influenced by land use activities within the drainage basin (Pacific Hydrologic Incorporated 2011).

The Hayfork Creek/Hall City Creek confluence occurs just south of the project area and a small portion of Hall City Creek (0.1 river mile) flows west through the southeast corner of the project area (Figure 2). Hall City Creek is very similar in structure and shaded aquatic habitat to Hayfork Creek. As it passes through the project area, Hall City Creek is approximately 10-feet wide and has a cobble-dominated substrate.

From Wildwood, Hayfork Creek flows approximately 15 river miles north to the community of Hayfork then approximately 28 river miles west to the South Fork Trinity River. The South Fork Trinity River flows northwesterly to the mainstem Trinity River, which flows to the Klamath River, a direct tributary to the Pacific Ocean.
Soils

The soil map units and miscellaneous land types within the project area and vicinity are described in the Shasta-Trinity National Forest Area, Parts of Humboldt, Siskiyou, Shasta, Tehama, and Trinity Counties (Soil Survey Staff 2010). Two soil map units occur in the project area:

- **Holland family, deep, 0 to 20 percent slopes.** A non-hydric soil, somewhat excessively drained; depth to restrictive layer is 26 inches to paralithic bedrock. Taxonomic nomenclature is *Ultic haploxeralfs*.

- **Xerfluvents-Riverwash association, 0 to 20 percent slopes.** A hydric soil found along drainageways; depth to restrictive layer is greater than 80 inches. Taxonomic nomenclature is *Xerfluvents*.

Geology

A geologic reconnaissance survey of the project area confirmed that it is underlain by slightly to moderately weathered metamorphic rock with somewhat narrowly spaced foliation/joints (Taber Consultants 2009). The rock is exposed along the east bank of Hayfork Creek approximately 150-feet north of the existing bridge.

The Geologic Map of the Klamath Mountains and Oregon (Irwin 1994) shows the project area as being underlain by Jurassic-aged mafic volcaniclastic rocks of the Hayfork Balley meta-andesite formation (Taber Consultants 2010). Within the Hayfork Creek channel, the underlying material consists of Quaternary alluvium and Pre-cretaceous period metamorphic rocks (Taber Consultants 2010). In the stream channel, loose alluvial materials consisting of sand, cobbles, and gravel were found to have noticeably accumulated since last noted in 1960 (Taber Consultants 2009).

The project is not in an Alquist-Priolo Earthquake Fault Zone (California Department of Conservation 2007) and no faults have been mapped in the project area. The nearest mapped fault is the Salt Creek Fault, an inactive fault located approximately 1.3 miles southwest of the project area. The nearest mapped fault considered to have the potential for an event of 6.25 magnitude or greater is the Lake Mountain Fault located approximately 23 miles southwest of the project area (Taber Consultants 2010). Based on a rock outcrop observed during site reconnaissance and a review of the project area geology, naturally occurring asbestos is unlikely to occur in the project area (Taber Consultants 2010).

Vegetation Communities/Wildlife Habitats

Habitat types were classified based on the descriptions provided in *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer Jr. 1988). The habitat types occurring within the project area include annual grassland, barren, Klamath mixed conifer, montane riparian, ponderosa pine, and riverine. Habitat types in the project area are shown on Figure 3.
Figure 4

WHR Biological Habitat Communities

- Biological Study Area
- Annual Grassland (2.41 acres)
- Barren (2.50 acres)
- Klamath Mixed Conifer (0.49 acre)
- Montane Riparian (2.25 acres)
- Ponderosa Pine (1.84 acres)
- Riverine (0.52 acre)

厅市 Creek Rd
Hayfork Creek
Wildwood Rd
厅市 Creek Rd

0 200 400 Feet

North State Resources, Inc.
Annual Grassland

Annual grassland occurs around residential areas west of Hayfork Creek. Annual grassland habitats often consist of dense grasses and invasive weeds. Dominant species include ripgut brome (*Bromus diandrus*), soft chess (*B. hordeaceus*), cheatgrass (*B. tectorum*), yellow star-thistle, (*Centaurea solstitialis*), red-stemmed filaree (*Erodium cicutarium*), elegant madia (*Madia elegans*), sweet clover (*Melilotus alba*), English plantain (*Plantago lanceolata*), bulbous bluegrass (*Poa bulbosa*), and rose clover (*Trifolium hirtum*).

Barren

Barren habitat includes the paved Wildwood Road corridor, compacted dirt parking areas associated with residential developments, and an open area used for asphalt and dirt spoils from previous earth and road work in the project vicinity. Sparse opportunistic weedy species may be present.

Klamath Mixed Conifer

Klamath mixed conifer occurs west of Wildwood Road bridge. In the project area, this habitat type is characterized as a moderately open overstory with few shrubs in the understory. Herbaceous plants in the understory are sparse. Multiple tree species compose the vegetative canopy, including Douglas-fir (*Pseudotsuga menziesii*), ponderosa pine (*Pinus ponderosa*), incense cedar (*Calocedrus decurrens*), sugar pine (*P. lambertiana*), and madrone (*Arbutus menziesii*). Dominant shrub species in the understory include whitethorn (*Ceanothus cordulatus*), deer brush (*C. integerrimus*), common snowberry (*Symphoricarpos albus*), and hazelnut (*Corylus cornuta*). Herbaceous species include sticky cinquefoil (*Potentilla glandulosa*), yarrow (*Achillea millefolium*), and mountain sweet cicely (*Osmorhiza chilensis*).

Montane Riparian

Montane riparian habitat occurs along the stream banks of Hayfork and Hall City creeks, and is generally characterized by a dense, multi-layered canopy with a moderately dense understory. Upland herbaceous species become more prevalent as the hydrology provided by the stream’s water table decreases away from the stream. White alder (*Alnus rhombifolia*) dominates the overstory adjacent to the streams. Stands of black cottonwood (*Populus deltoides*) occur in slightly drier areas further away from the streams. Other tree species occurring in this habitat type include incense cedar, ponderosa pine, and big-leaf maple (*Acer macrophyllum*). Narrow-leaf willow (*Salix exigua*) and arroyo willow are common shrubs found where openings occur in the understory in addition to American dogwood, common snowberry, Sierra plum (*Prunus subcordata*), and western choke cherry. Herbaceous species occurring in this habitat type include cheat grass, blue wildrye (*Elymus glaucus*), bulbous bluegrass, galium (*Galium aparine*), awned melic (*Melica aristata*), and everlasting pea (*Lathyrus latifolius*). Ponderosa Pine

Ponderosa pine habitat occurs east of Hayfork Creek. This habitat type is dominated by a moderately dense overstory of ponderosa pine with a sparse understory of whitethorn and deer brush. Herbaceous cover is sparse and species composition is comprised of bi-colored lupine (*Lupinus bicolor*), yarrow, and English plantain.
Riverine

Riverine habitat consists of the flowing channels of Hayfork and Hall City creeks. Hayfork Creek is a perennial, low-gradient stream that is, on average, approximately 35 feet wide at the OHWM. Listed in order of dominance, substrates include cobble, sand, boulder, and gravel. Portions of riparian vegetation occur within the OHWM. Plant species found in riverine habitat include Indian rhubarb (*Darmera peltata*) and torrent sedge (*Carex nudata*).

Hall City Creek is also a perennial, low-gradient stream. It is very similar in structure and shaded aquatic habitat to Hayfork Creek. As it passes through the project area, Hall City Creek is approximately 10-feet wide and has a cobble-dominated substrate.
3.2 Environmental Impacts and Mitigation Measures

I. AESTHETICS — Would the project:

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

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

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

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

Discussion of Impacts

a) **No Impact.** There are no scenic vistas or resources within the project area. The proposed project consists of replacing the existing Hayfork Creek bridge and roadway approaches with similar structures and would be constructed in a manner consistent with the existing aesthetic.

b) **Less-than-Significant Impact.** Wildwood Road is not designated as a state scenic highway or federal byway (California Department of Transportation 2010a; Federal Highway Administration 2011). Wildwood Road (also known as Forest Route 3) is a part of the National Forest road system, but is not a designated Forest Service Scenic Byway (Federal Highway Administration 2011). However, Wildwood Road is currently designated as an Eligible County Scenic Roadway (LSC Transportation Consultants Inc. 2002). Although some riparian vegetation (e.g., willows) would be removed to allow for the new bridge alignment and roadway approaches the effect would not be inconsistent with the existing scenic quality of the site and therefore, would be less than significant.

c) **Less-than-Significant Impact.** The proposed project consists of replacing the existing Hayfork Creek bridge and roadway approaches with similar structures. The proposed project would be constructed in a manner consistent with the existing aesthetic. The proposed project would not introduce any elements that would degrade the existing visual character or quality of the site or surrounding area and therefore, would have a less-than-significant effect on the visual character and quality of the project area.

d) **No Impact.** Construction and operation of the proposed project are not expected to result in increased glare in the project area and no permanent lighting is proposed as part of the proposed project. All construction activities would be limited to the hours of 7:00 AM to 7:00 PM,
Monday through Saturday. No construction would occur during hours that would require the use of construction lights.

**Mitigation Measures**

No project-specific mitigation is required under this subject.
II. AGRICULTURAL AND FOREST RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

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

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

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined 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? □ □ □ ☒

Discussion of Impacts

a) No Impact. The proposed project area does not contain lands mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program (California Department of Conservation 2008). Soils within the project area are not prime agricultural soils.
b) **No Impact.** There are no parcels zoned for agricultural use in the project area vicinity and none are currently under a Williamson Act contract. The project area includes an existing roadway and would not split an existing agricultural parcel.

c) **No Impact.** The proposed project would not conflict with existing zoning for, or cause rezoning of forestland, timberland, or timberland zoned Timber Production.

d) **No Impact.** The proposed project area is located in an existing road corridor and does not include any forestland.

e) **No Impact.** Construction and operation of the proposed project would not result in the conversion of any farmlands to a non-agricultural use or forest lands to non-forest use.

**Mitigation Measures**

No project-specific mitigation is required under this subject.
III. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

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? ☐ ☐ ☐ ☒

Discussion of Impacts

a, b) No Impact. Trinity County is currently a state-designated nonattainment area for particulate matter (PM10) and is unclassified based on national standards (California Air Resources Board 2010). Air pollution control would conform to rules and regulations of the North Coast Unified Air Quality Management District (AQMD) (North Coast Unified Air Quality Management District 2005). The project would not conflict with any applicable air quality plan or violate any air quality standards.

c) Less than Significant with Mitigation Incorporated. Construction activities associated with the proposed project would result in a relatively minor net increase in PM10. While not contributing significantly by itself, as a single and complete project, construction activities that generate fugitive dust would contribute to the region’s cumulative PM10 levels. In addition, diesel particulate emitted from heavy equipment is an identified Toxic Air Contaminant. Construction emissions would be temporary and primarily localized around the construction areas; however, particulate matter generated during project construction would contribute to the existing violations of particulate matter in the county and would exceed state ambient air quality standards. Therefore, construction equipment will operate in compliance with the North Coast Unified AQMD air quality rules and the construction contractor would be required to minimize fugitive dust and emissions to the extent possible. Implementation of Mitigation
Measure #1—Air Quality/Fugitive Dust Control will reduce this impact to a less-than-significant level.

d) Less-than-Significant Impact. Sensitive receptors such as homes and a commercial business occur immediately adjacent to parts of the project alignment. The effect to air quality experienced by these sensitive receptors would be similar to the effect generated by motor vehicle traffic, which is common throughout the area. Impacts to air quality resulting from construction of the proposed project would be temporary and less than significant.

e) No Impact. The proposed project would not create any objectionable odors.

Mitigation Measures

Mitigation Measure #1—Air Quality/Fugitive Dust Control

The County shall include provisions in the construction bid documents that the contractor shall implement a dust control program to limit fugitive dust emissions. The dust control program shall include, but not be limited to, the following elements, as appropriate:

- Water inactive construction sites at least twice daily when soils are not naturally moist. Water shall be applied in a manner that does not result in runoff.

- Pursuant to California Vehicle Code (State of California 2012), all trucks hauling soil and other loose material to and from the construction site shall be covered or should maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer).

- Exposed stockpiles of soil and other fine backfill material shall be watered twice daily or have soil binders added.

- Any topsoil that is removed for the construction operation shall be stored on-site in piles not to exceed 4 feet in height to allow development of microorganisms prior to resoiling of the construction area. These topsoil piles shall be clearly marked and flagged. Topsoil piles that will not be immediately returned to use shall be revegetated with a non-persistent erosion control mixture.

- Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles. These soil piles shall also be surrounded by silt fencing, straw wattles, or other sediment barriers or covered unless they are to be immediately used.

<table>
<thead>
<tr>
<th>Timing/Implementation:</th>
<th>During construction</th>
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<tbody>
<tr>
<td>Enforcement:</td>
<td>North Coast AQMD</td>
</tr>
<tr>
<td>Monitoring:</td>
<td>County and/or its contractor</td>
</tr>
</tbody>
</table>
IV. BIOLOGICAL RESOURCES — Would the project:

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

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

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

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

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

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

Discussion of Impacts

a) Less than Significant with Mitigation Incorporated. A Natural Environment Study (NES) report (North State Resources 2012a), which analyzes the project effects on biological resources, was approved by Caltrans on March 27, 2012. No special-status plant species were detected by NSR during a protocol-level survey of the project area in June 2009. However, suitable habitat does occur for the following special-status fish and wildlife species:

- Southern Oregon/northern California coasts Evolutionarily Significant Unit (ESU) coho salmon (Onchorynchus kisutch) – Federally Threatened, Designated Critical Habitat, Essential Fish Habitat
- Klamath Mountains Province ESU steelhead salmon (*Oncorhynchus mykiss*) – State Species of Special Concern

- Upper Klamath-Trinity rivers ESU Chinook salmon (*Oncorhynchus tshawytscha*) – State Species of Special Concern, Essential Fish Habitat

- Foothill yellow-legged frog (*Rana boylii*) – State Species of Special Concern

- Tailed frog (*Ascaphus truei*) – State Species of Special Concern

- Western pond turtle (*Actinemys marmorata*) – State Species of Special Concern

- Little willow flycatcher (*Empidonax traillii brewsteri*) – State Endangered

- California Yellow warbler (*Dendroica petechia brewsteri*) – State Species of Special Concern

- Yellow-breasted chat (*Icteria virens*) – State Species of Special Concern

- Olive-sided flycatcher (*Contopus cooperi*) – State Species of Special Concern

- Long-eared owl (*Asio otus*) – State Species of Special Concern

- Bald eagle (*Haliaeetus leucocephalus*) – State Endangered, State Fully Protected Species

- Northern spotted owl (*Strix occidentalis caurina*) – Federally Threatened

- Pacific fisher (*Martes pennant pacifica*) – Federally Candidate for Protection, State Species of Special Concern

- Ringtail cat (*Bassariscus astutus*) – State Fully Protected Species

- American badger (*Taxidea taxus*) – State Species of Special Concern

- Townsend’s big-eared bat (*Corynorhinus townsendii*) – State Species of Special Concern

- Western red bat (*Lasiurus blossevillii*) – State Species of Special Concern

**Fish.** A Biological Assessment/Essential Fish Habitat Assessment (BA/EFHA) (North State Resources 2011b), was prepared in support of consultation with the National Marine Fisheries Service (NMFS) under Section 7 of the Federal Endangered Species Act. The BA/EFHA concluded, and NMFS concurred (National Marine Fisheries Service 2012), that the proposed project may affect, but is not likely to adversely affect, Southern Oregon/Northern California Coasts (SONCC) ESU coho salmon. Coho salmon have been extirpated from much of Hayfork Creek (North State Resources 2011b). Project impacts to Upper Klamath-Trinity (UKT) rivers ESU Chinook salmon—a species that is not federally listed, but is managed under the Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267)—would be similar to those of SONCC ESU coho.
salmon. The proposed project is not likely to destroy or adversely modify SONCC ESU coho salmon designated critical habitat or essential fish habitat (EFH), or UKT ESU Chinook salmon EFH.

Construction activities may result in a short-term temporary loss of riparian habitat and may result in temporary and localized increases in turbidity and suspended sediment. A seasonal work window would reduce the potential for any direct or indirect impacts to listed fish and to elements of critical habitat or EFH. The new bridge would be constructed as a three-span bridge with the central piers located outside of the OHWM, thus minimizing the potential for the bridge structure to affect fish passage.

Because SONCC ESU coho salmon are absent from Hayfork Creek the potential for the proposed project to have an effect on the species was assessed in the context of potential project effects on designated critical habitat. Project construction would temporarily affect primary constituent elements of critical habitat and elements of EFH; however, the project is designed to minimize effects to habitat. The constituent elements of the critical habitat would not be appreciably affected. Protection measures described in Mitigation Measure #2 – Erosion and Sediment Control, Mitigation Measure #3 – Prevention of Accidental Spills of Pollutants, Mitigation Measure #4 – Replacement of Lost Riparian Habitat, and Mitigation Measure #5 – Anadromous Fish will be used to maintain water quality and reduce impacts to fish to a less-than-significant level.

**Foothill Yellow-legged Frog and Tailed Frog.** Although Hayfork and Hall City creeks provide suitable habitat foothill yellow-legged frog or tailed frog, field assessments did not detect the presence of either species in the project area. Foothill yellow-legged frog is the only species known to occur in the project vicinity. There are documented occurrences of foothill yellow-legged frog approximately 2-miles north of the project area in Chancelulla Gulch and an observation of foothill-yellow legged frog in Hayfork Creek at Gemmill Gulch approximately 2.5 miles downstream of the project area (North State Resources 2012a). Because suitable habitat is present within the project area, construction activities have the potential to affect either species of frog. Mitigation Measure #6 – Frogs will be used to reduce potential project impacts to a less-than-significant level. These species may also be affected if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills. Mitigation measures #2 and #3 will be used to maintain water quality. In addition, loss of riverine and riparian habitat may have a negative impact on these species; therefore, Mitigation Measure #4 will be used to reduce this impact to a less-than-significant level.

**Western pond turtle.** Western pond turtle was not observed during field assessments/surveys (North State Resources 2012a); however, the reach of Hayfork Creek in the project area provides suitable habitat for this species. There are two recorded occurrences of western pond turtle in Hayfork Creek; one 2-miles north and the other 4.9-miles north of the project area. Although unlikely, construction-related impacts, especially instream work, could result in an adverse effect via direct loss (e.g., due to operation of equipment in or adjacent to the river channel when flowing or standing water is present). However, the potential for direct loss would occur only during project construction. Implementation of avoidance and minimization
measures will reduce the potential for direct loss. *Mitigation Measure #7 – Western Pond Turtle* will be used to reduce any impacts to turtles to a less-than-significant level. This species may also be affected if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills. Mitigation measures #2 and #3 will be used to maintain water quality. Loss of riverine and riparian habitat may have a negative impact on this species; therefore, Mitigation Measure #4 will be used to reduce this impact to a less-than-significant level.

**Little willow flycatcher.** Riparian habitat adjacent to Hayfork and Hall City creeks provides suitable nesting habitat for little willow flycatcher. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or nestlings, or any activities resulting in nest abandonment may adversely affect this species. However, due to the small and temporary nature of the impacts and the regional abundance of similar habitats, the project is not expected to have an adverse effect on foraging habitat for these species. Mitigation Measure #4 will be used to reduce the effects of the loss of riverine and riparian habitat on this species to a less-than-significant level. *Mitigation Measure #8 – Little Willow Flycatcher* will also be used to reduce any impacts to this species to a less-than-significant level.

**Yellow warbler, Yellow-breasted chat, Olive-sided flycatcher, and Long-eared owl.** Riparian habitat adjacent to Hayfork and Hall City creeks provides suitable nesting habitat for yellow warbler, yellow-breasted chat, olive-sided flycatcher, and long-eared owl. In particular, open woodlands in the eastern and western portions of the project area provide suitable nesting habitat for the olive-sided flycatcher. Yellow-breasted chat was observed in the project vicinity, south of the project area, during the field visit in July 2010.

Any of these bird species may nest in or adjacent to the project area. Thus, construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or nestlings, or any activities resulting in nest abandonment, may adversely affect these species. The proposed project may also result in a small, temporary reduction of foraging and/or roosting habitat for these bird species. Mitigation Measure #4 will be used to reduce the effects of the loss of riverine and riparian habitat on these species to a less-than-significant level. *Mitigation Measure #9 – Yellow Warbler, Yellow-breasted Chat, Olive-sided Flycatcher, and Long-eared Owl* will also be used to reduce any impacts to this species to a less-than-significant level.

**Bald eagle.** Bald eagle was not observed during the field assessments/surveys (North State Resources 2012a); There is no suitable nesting habitat within the project area; however, riparian habitat along Hayfork Creek provides suitable foraging habitat for the species. The project may result in a temporary disturbance to foraging habitat for this species. Due to the small and temporary nature of the impact and the regional abundance of similar habitats, the project is not expected to have an adverse effect on bald eagles. Mitigation would not be needed to compensate for project impacts to bald eagles.

**Northern spotted owl.** A northern spotted owl pair occurs within 1 mile of the project vicinity. Suitable foraging habitat occurs in the forests east and west of the project area.
habitat assessment (North State Resources 2010), including sound and visual disturbance analyses, was conducted to determine if the project would have adverse effects on the known northern spotted owl pair. Based on the proposed project actions, it was concluded that the project would have no impact on northern spotted owl, so no mitigation is required.

**Pacific fisher.** Suitable denning habitat for Pacific fisher does not occur within the project area. Although Hayfork Creek may be used as a travel corridor, this species is primarily nocturnal and its presence in the project area during construction hours (approximately 7:00 am to 7:00 pm) would be unlikely. While construction may temporarily disturb a fisher travel corridor, the potential for disturbance would be temporary, occurring only during project construction, and similar habitat is abundant throughout the region. Project-related impacts to Pacific fisher would be less than significant, so no mitigation is required.

**American badger.** Suitable denning habitat for badgers is not present in the project area. Thus, the project is not expected to result in a loss of badgers. Project construction may result in a temporary disturbance of a badger travel corridor; however, given the short duration of the impact and the presence of alternative corridors in the vicinity, this impact is not expected to have an adverse effect on American badgers. Project-related impacts to American badger would be less than significant, so no mitigation is required.

**Ringtail cat.** Montane riparian habitat found within the project area provides suitable foraging habitat for the ringtail cat; however, there is no suitable denning habitat present. Construction-related impacts are not likely to have an adverse effect on ringtails as no potential denning trees would be removed. The potential for disturbance would be temporary, occurring only during project construction, and similar habitat is abundant throughout the region. Project-related impacts to ringtail cat would be less than significant, so no mitigation is required.

**Townsend’s big-eared bat.** A daytime inspection of the existing bridge found no evidence of its use as a bat roost (i.e., no bats were seen or heard and no bat guano was observed on or under the structure) (North State Resources 2012a). Further, no trees in the project area were observed to have large cavities suitable for use as potential hibernacula sites. Due to the lack of breeding sites, implementation of the proposed project is not expected to result in the loss of Townsend’s big-eared bats. Project construction may result in a temporary disturbance of foraging habitat; however, given the short duration of the impact and the abundance of suitable habitat in the project vicinity, the project would have a less-than-significant impact on Townsend’s big-eared bats, so no mitigation is required.

**Western red bat.** Riparian habitat along Hayfork and Hall City creeks provide suitable breeding and roosting habitat for western red bat. Because this species roosts and breeds solitarily, direct impacts to individuals may occur if roost trees are removed. Additionally, the presence of construction activity and noise may deter the bats from roosting or result in relocation (including young) from the construction area. Construction activities are restricted to a localized area and tree removal would be avoided or minimized during the construction of the new bridge or demolition of the old bridge. Because the short duration of the impact, the abundance of suitable habitat, and the ability of bats to move their young reduce the likelihood
of impacts to western red bats in the vicinity, this impact is not expected to have an adverse effect on western red bats. Mitigation would not be required.

Other Sensitive Biological Resources

Nesting Birds. No evidence of previous cliff swallow or black phoebe nesting was observed under the existing bridge. However, given that the existing bridge structure provides suitable nesting habitat for migratory birds, there is a potential for active nests to be disturbed during project construction if they are present. Adverse impacts on cliff swallows or black phoebes could occur if they are actively nesting under the existing bridge during project construction. Mitigation Measure #10 – Nesting Birds will be used to reduce any impacts to these species to a less-than-significant level.

Raptors. No raptor nests were observed in the project area; however, given that the riparian and forest habitats in and near the project area provide suitable nesting habitat for raptors, there is a potential for active nests to be disturbed during project construction if they are present. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Loss of fertile eggs or nesting raptors, or any activities resulting in raptor nest abandonment or premature fledging, may adversely affect the species. However, due to the abundance of suitable habitat in the area, this is not likely to adversely impact these species. Mitigation Measure #11 – Raptors will be used to reduce any impacts to these species to a less-than-significant level.

b) Less than Significant with Mitigation Incorporated. Both montane riparian habitat (upland) and riparian wetland (wetland) were mapped in the project area, in and adjacent to Hayfork Creek. Montane riparian habitat is considered a sensitive natural community by the Corps, CDFG, and the County. Construction of the new bridge alignment would permanently impact 0.002 acre and temporarily impact 0.054 acre of riparian wetland. Approximately 0.102 acre (212 linear feet) of perennial stream would also be temporarily impacted. Revegetation of the area where the existing bridge alignment exists would result in up to 0.005 acre of restored riparian wetland. A draft riparian wetland mitigation plan has been prepared to address impacts (Appendix A). The level of disturbance associated with the proposed project is small and provided all conservation, minimization, and avoidance measures are fully implemented, the impact to riparian habitat, including shaded riverine aquatic habitat, would be temporary and minimal.

Mitigation measures for temporary and permanent impacts to riparian wetland habitat and permanent impacts to perennial stream are described under Mitigation Measure #4.

c) Less than Significant with Mitigation Incorporated. The proposed project would permanently impact wetland features under Corps jurisdiction, pursuant to Section 404 of the Clean Water Act. The project would result in the permanent discharge of fill into 0.002 acre of riparian wetland, and temporary impacts to 0.102 acre (212 linear feet) of perennial stream (Hayfork Creek) and 0.054 acre of riparian wetland. A draft riparian wetland mitigation plan has been prepared to address impacts (Appendix A). Mitigation Measure #4 and Mitigation Measure #12 – Waters of the United States will be used to reduce any potential impacts to waters to a
less-than-significant level. Mitigation measures #2 and #3 will be used to maintain water quality.

d) **Less than Significant with Mitigation Incorporated.** The project area does not encompass any wildlife nursery sites. Temporary instream work platforms could temporarily disrupt fish passage during the instream construction phase of the project. Following installation of RSP, the stream channels would be restored to pre-construction contours. Therefore, instream movement corridors following completion of the project would not be significantly different from existing conditions.

Although bird species such as cliff swallows and black phoebes, and many species of bats are known to build nests under artificial structures such as bridges, the existing bridge structure was visually surveyed for evidence of previous bat roosting and/or bird nesting activity (e.g., remnant mud nests) during the field assessment (North State Resources 2012a). No evidence of previous use by bats or birds was observed. However, adverse impacts on cliff swallows or black phoebes could occur if they are actively nesting under the existing bridge during project construction. **Mitigation Measure #10 – Nesting Birds** will be used to reduce any impacts to these species to a less-than-significant level.

e) **No Impact.** Currently, there are no local policies or ordinances specific to biological resources that cover the project area.

f) **No Impact.** Currently, there are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved habitat conservation plans that cover the project area.

**Mitigation Measures**

**Mitigation Measure #2–Erosion and Sediment Control**

- Type D erosion control measures (i.e., hydroseeding) shall be implemented during construction of the proposed project in non-riparian upland areas. These measures shall conform to the provisions in Section 21-1 of the Caltrans Standard Specifications (California Department of Transportation 2010b) and the special provisions included in the contract for the project.

- Erosion control work shall consist of at least one application of erosion control materials to embankment slopes, excavation slopes, and other areas in non-riparian uplands designated by the project engineer. These materials shall consist of fiber, seed, commercial fertilizer, and water, and shall conform to Section 21-1 of the Caltrans Standard Specifications and the specifications discussed below. Commercial fertilizer used for non-riparian upland areas shall conform to the provisions in Section 20-2.02 of the Caltrans Standard Specifications (California Department of Transportation 2010b). Additional erosion control measures that shall be implemented by the County include the following:
  - To the maximum extent practicable, activities that increase the erosion potential in the proposed action area shall be restricted to the relatively dry summer and early fall period to minimize the potential for rainfall events to transport sediment to surface...
water features. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place.

− Areas where wetland and upland vegetation need to be removed shall be identified in advance of ground disturbance and limited to only those areas that have been approved by the County.

− Within 10 days of completion of construction, weed-free mulch shall be applied to disturbed areas to reduce the potential for short-term erosion. Prior to a rain event or when there is a greater than 50 percent possibility of rain within the next 24 hours, as forecasted by the National Weather Service, weed-free mulch shall be applied to all exposed areas upon completion of the day’s activities. Soils shall not be left exposed during the rainy season.

− Filter fences, straw wattles, or catch basins shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures shall be installed prior to any clearing or grading activities.

− If spoil sites are used, they shall be located such that they do not drain directly into a surface water feature, if possible. If a spoil site drains into a surface water feature, catch basins shall be constructed to intercept sediment before it reaches the feature. Spoil sites shall be graded and vegetated to reduce the potential for erosion.

− Sediment control measures shall be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated.

  Timing/Implementation: Prior to, during, and after construction
  Enforcement: Corps, North Coast RWQCB, CDFG
  Monitoring: County and/or its contractor

**Mitigation Measure #3–Prevention of Accidental Spills of Pollutants**

Construction specifications shall include the following measures to reduce potential impacts to vegetation and aquatic habitat resources in the proposed action area associated with accidental spills of pollutants (e.g., fuel, oil, and grease):

- A site-specific spill prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms shall be constructed to prevent spilled materials from reaching surface water features.

- Equipment and materials shall be stored 50 feet away from surface water features.
- Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted in an area at least 75 feet away from Hayfork or Hall City creeks or within an adequate fueling containment area.

  Timing/Implementation: Prior to and during construction  
  Enforcement: Corps, North Coast RWQCB, CDFG  
  Monitoring: County and/or its contractor

**Mitigation Measure #4–Replacement of Lost Riparian Habitat**

The following measures shall be implemented to reduce potential impacts to riparian habitat in the project area:

- The width of the construction disturbance zone in the riparian habitat shall be minimized through careful pre-construction planning.

- Exclusionary fencing shall be installed along the boundaries of all riparian areas to be avoided to ensure that impacts on riparian vegetation outside of the construction area are minimized.

- Riparian habitat areas temporarily disturbed shall be replanted using riparian species that have been recorded along Hayfork Creek in the project area, including white alder (Alnus rhombifolia), black cottonwood (Populus deltoides), big-leaf maple (Acer macrophyllum), arroyo willow (Salix lasiolepis), narrowleaf willow (Salix exigua), American dogwood (Cornus sericea ssp. sericea), Sierra plum (Prunus subcordata), and western choke cherry (Prunus virginiana).

- Onsite creation/restoration shall occur in areas disturbed during project construction and the amount of habitat created/restored shall be at a 3:1 ratio, new plantings per large (≥ 6 inches or greater in diameter at breast height) woody plant removed. These replanting ratios will help ensure successful establishment of at least one vigorous plant for each plant removed to accommodate the project (see Appendix A).

- Plant spacing intervals will be determined as appropriate based on site conditions following construction.

- Non-native tree species removed during project construction will be replaced with native riparian species.

  Timing/Implementation: Prior to, during, and after construction  
  Enforcement: CDFG  
  Monitoring: County

**Mitigation Measure #5–Anadromous Fish**

The following avoidance and minimization efforts have been designed to minimize direct and indirect project effects on coho salmon, Chinook salmon, and steelhead, coho salmon critical habitat, and EFH
in the project area. Due to the seasonal presence of UKT Chinook salmon and Klamath Mountains Province DPS steelhead, a seasonal work window is an appropriate avoidance measure to minimize impacts on direct impacts and EFH for all species. In addition to mitigation measures #’s 2, 3 and 4, the following measures shall be implemented:

- Instream construction activities are proposed to occur between June 15 and October 31.
- Any new or previously excavated gravel material placed in the channel shall meet Caltrans’ Gravel Cleanliness Specification #227 with a value of 85 higher.
- Prior to October 31, any temporary work platforms or trestles shall be removed from the stream corridor. At no time shall any structure or fill become a barrier to the free passage of water, or the movement of fish and aquatic animals.
- If a temporary work trestle or gravel work pad is required, they shall not substantially change the flow characteristics (i.e., velocity, depth, width) of the water as it flows through the project area. No ponding of flow shall occur unless this type of ponding is typical of the area such as the habitat immediately upstream of the existing bridge structure.
- The new bridge will be constructed as a three-span bridge with the central piers located outside of the OHWM, minimizing the potential for the bridge to affect fish passage and minimizing the potential hydraulic and hydro geomorphic affects.
- Equipment and materials shall be stockpiled outside of the riparian habitat.
- Impacts to herbaceous cover will be offset by reseeding any unvegetated and impacted areas with a suitable seed mixture post construction.
- Any construction equipment operating upon work pads or trestles (if required) or adjacent to Hayfork Creek will be inspected daily for leaks. External oil, grease, and mud will be removed from equipment and disposed of properly. Spill containment booms will be maintained onsite at all times during construction operations and/or staging of equipment or fueling supplies. Fueling trucks will maintain adequate spill containment materials at all times.
- The contractor will develop and implement site-specific BMPs, a water pollution control plan, and emergency spill control plan. The contractor will be responsible for immediate containment and removal of any toxins released.

Timing/Implementation: Prior to, during, and after construction
Enforcement: NMFS, CDFG
Monitoring: County

Mitigation Measure #6–Frogs

The following measures shall be implemented to avoid or minimize project-related impacts to the foothill yellow-legged frog and western tailed frog:
Any project activities in the riverine or riparian habitat will be preceded by a preconstruction survey. Surveys will be conducted by a qualified biologist. If a foothill yellow-legged frog or western tailed frog is found, it will be moved to appropriate habitat either up or downstream of the project area.

If a foothill yellow-legged frog or western tailed frog is encountered during instream or riparian zone construction, activities in the vicinity shall cease until appropriate corrective measures have been implemented (e.g., relocation of the frog, by a qualified biologist, to appropriate habitat either up or downstream of the project area) or it has been determined that the frog will not be harmed. Any trapped, injured, or killed frogs shall be reported immediately to the CDFG.

Timing/Implementation: Prior to and during construction
Enforcement: CDFG
Monitoring: County

Mitigation Measure #7–Western Pond Turtle
The following measures shall be implemented to avoid or minimize project-related impacts to the western pond turtle:

- Any project activities in aquatic or riparian habitat will be preceded by a pre-construction survey. Surveys will be conducted by a qualified biologist. If a western pond turtle is found it will be moved to appropriate habitat either up or downstream of the BSA. If a 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 construction impact zone by a qualified biologist.

- If a western pond turtle is encountered during construction, activities in the vicinity shall cease until appropriate corrective measures have been implemented (e.g., relocation of the turtle to appropriate habitat identified by a qualified biologist, either up or downstream of the BSA) or it has been determined that the turtle will not be harmed. Any trapped, injured, or killed turtles shall be reported immediately to the CDFG.

Timing/Implementation: Prior to and during construction
Enforcement: CDFG
Monitoring: County

Mitigation Measure #8–Little Willow Flycatcher
In addition to Mitigation Measure #4–Replacement of Riparian Habitat, the following shall be implemented to avoid or minimize the potential for project-related impacts to nesting little willow flycatcher:

- Grading and other construction activities, including vegetation removal, should be scheduled to avoid the nesting season to the extent possible. If construction occurs outside
of the breeding season, no further mitigation is necessary. If the nesting season cannot be completely avoided, the following measure shall be implemented:

- If construction activities are conducted within the breeding season for little willow flycatcher (May 15 through August 31), a qualified biologist shall conduct a minimum of one preconstruction survey in the project area and a 250-foot buffer around the site, where accessible. The survey should be conducted no more than 15 days prior to the initiation of construction in any given area (the survey may be conducted at the same time as the preconstruction survey for the western pond turtle and foothill yellow-legged frog). The preconstruction survey will be used to ensure that no willow flycatcher nests within or immediately adjacent to the project area will be disturbed during project implementation. If an active nest is found, a qualified biologist in consultation with CDFG shall determine the extent of a construction-free buffer zone to be established around the nest until nestlings have fledged or breeding has failed, based on field verification by a qualified biologist.

Timing/Implementation: Prior to and during construction  
Enforcement: CDFG  
Monitoring: County

**Mitigation Measure #9–Yellow Warbler, Yellow-breasted Chat, Olive-sided Flycatcher, and Long-Eared Owl**

In addition to Mitigation Measure #4–Replacement of Riparian Habitat, the following measures shall be implemented to avoid or minimize the potential for project-related impacts to nesting yellow warbler, yellow-breasted chat, olive-sided flycatcher, and long-eared owl:

- Grading and other construction activities, including vegetation removal, should be scheduled to avoid the nesting season to the extent possible. If construction occurs outside of the breeding season, no further mitigation is necessary. If the nesting season cannot be completely avoided, the following measure shall be implemented:

  - To avoid the direct loss of any California-designated species of special concern, the County will remove vegetation outside of the nesting season. In Trinity County, the nesting season for yellow warbler, yellow-breasted chat, long-eared owl, and olive-sided flycatcher extends from March 1 through August 31. If vegetation removal is scheduled to occur within the nesting season, a preconstruction survey for all special-status birds will be conducted 15 days prior to construction activities. If an active nest is found, a qualified biologist, in consultation with CDFG, shall determine the extent of a construction-free buffer zone to be established around the nest until nestlings have fledged or breeding has failed, based on field verification by a qualified biologist.

Timing/Implementation: Prior to and during construction  
Enforcement: CDFG  
Monitoring: County
Mitigation Measure #10—Nesting Birds

If birds are observed nesting under the existing bridge, the following measure shall be implemented to avoid or minimize project-related impacts on birds nesting under the existing bridge:

- Construction activities on, and removal of, the existing bridge should be scheduled to avoid the nesting season to the extent feasible. The typical nesting season in northern California extends from March through July. Thus, if bridge demolition can be scheduled to occur between August and December, or the period before nesting begins and after nesting is complete, the nesting season would be avoided, and no impacts would be expected. If it is not possible to schedule bridge removal to avoid nesting, any existing unoccupied and inactive nests shall be removed from the existing bridge before March 1 of the construction year. Removal of empty or unfinished nests should be repeated as frequently as necessary (can be up to three times per week) to prevent nest completion. A nest exclusion device can be installed (e.g. netting or similar mechanism that keeps birds from building nests), if desired, prior to March 1 or after August 1. Any nest exclusion devices should be approved by CDFG prior to installation. Exclusion efforts should be continued until actual removal of the bridge structure.

  Timing/Implementation: Prior to and during construction
  Enforcement: CDFG
  Monitoring: County

Mitigation Measure #11—Raptors

The following measures shall be implemented to avoid or minimize project-related impacts on raptors nesting in or near the vicinity of the project area:

- Vegetation removal, grading, and other construction activities shall be scheduled to avoid the breeding season to the extent practicable. The breeding season for most raptors in Trinity County generally extends from March 1 through August 31.

- If construction is to occur during the breeding season, a qualified biologist shall conduct preconstruction raptor surveys of the project site and a surrounding 300-foot buffer (where accessible) 15 days prior to the initiation of construction in any given area to ensure that no raptor nests will be disturbed during project implementation. Surveys may be conducted concurrently with other special status species requiring preconstruction surveys.

- If an active nest more than half completed is found, a construction-free buffer zone shall be established around the nest until nestlings have fledged or breeding has failed (based on field verification by a qualified biologist). The size of the buffer zone shall be determined by a qualified biologist in consultation with CDFG.

  Timing/Implementation: Prior to and during construction
  Enforcement: CDFG
  Monitoring: County
Mitigation Measure #12–Waters of the United States

In addition to Mitigation Measure #2–Erosion and Sedimentation Controls and Mitigation Measure #4–Replacement of Riparian Habitat, the following measures shall be implemented to avoid or minimize the potential for project-related impacts on waters of the United States:

- To the extent practicable, the discharge of dredged or fill material into waters of the United States, including wetlands shall be avoided (this also includes waters not subject to Corps jurisdiction, but subject to RWQCB jurisdiction). However, if complete avoidance is not feasible due to the need for the placement of new piers, the following measures shall be implemented:
  - Prior to any discharge of dredged or fill material into waters of the United States, including wetlands, authorization under a Nationwide Permit shall be obtained from the Corps. For any features determined not to be subject to Corps jurisdiction during the verification process, authorization to discharge shall be obtained from the RWQCB. For fill requiring a Corps permit, water quality certification shall be obtained from the RWQCB prior to discharge of dredged or fill material.
  - Prior to any activities that would obstruct the flow of, or alter the bed, channel, or bank of any intermittent or ephemeral creeks, notification of streambed alteration shall be submitted to the CDFG; and, if required, a streambed alteration agreement shall be obtained from CDFG.
  - Construction activities that will affect any water of the United States shall be conducted during the dry season to minimize erosion.
  - Appropriate sediment control measures to protect avoided waters of the United States shall be in place prior to the onset of construction and shall be monitored and maintained until construction activities have ceased. Temporary stockpiling of excavated or imported material shall occur only in approved construction staging areas. Excess excavated soil shall be used on site or disposed of at a regional landfill or other appropriate facility. Stockpiles that are to remain on the site through the wet season shall be protected to prevent erosion (e.g., silt fences, straw bales).
  - Any loss of riparian wetland will be mitigated for onsite (see Appendix A).
  - Any monitoring, maintenance, and reporting required by the regulatory agencies (i.e., Corps, RWQCB, and CDFG) shall be implemented and completed. All measures contained in the permits or associated with agency approvals shall be implemented.

Timing/Implementation: Prior to, during, and after construction
Enforcement: Corps, North Coast RWQCB, CDFG
Monitoring: County
V. CULTURAL RESOURCES — Would the project:

| a) | Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? | ☐ | ☐ | ☐ | ☒ |
| b) | Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | ☐ | ☐ | ☐ | ☒ |
| c) | 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? | ☐ | ☒ | ☐ | ☐ |

Discussion of Impacts

a, b) No Impact. The Wildwood Road Bridge (5C-086) at Hayfork Creek Replacement Project Geoarchaeological Study Report (North State Resources 2011a) concluded that the project area of potential effect rests in a depositional environment; however no significant historical properties were encountered during excavation of the two proposed abutment sites. Although isolated historic-era artifacts were found in the upper five feet of an area excavated at the site of the proposed eastern abutment, it was determined that they were in a secondary depositional context. It also appears that the area around the proposed eastern abutment location has been modified and built-up by human activity during the 20th century (North State Resources 2011).

The Archaeological Survey Report (North State Resources 2012b) prepared for the proposed project states that no archaeological sites were recorded and no isolated artifact and/or feature locations were found within or immediately adjacent to the proposed project area. The archaeological survey report concludes that the bridge does not meet the criteria for listing on the National Register of Historic Places. No other eligible properties occur in the project area (JRP Historical Consulting 2010).

c) No Impact. The project area is not known to support any unique paleontological resources or unique geologic features.

d) Less than Significant with Mitigation Incorporated. Because soils in the project area are predominantly alluvial Xerofluvents-Riverwash, the likelihood of finding intact buried archeological deposits is low. However, soils found in terraces along stream channels have considerable depths and consequently any archaeological resources are likely buried, becoming visible only in cut banks or on scoured ground surfaces.
Although no impacts to known cultural resources are anticipated, currently undetected cultural resources or evidence of human remains could be exposed during project excavation activities. Such an impact would be considered significant. Mitigation Measure #13 – Cultural Resources and Mitigation Measure #14 – Human Remains will be used to reduce any potential impacts to cultural resources to a less-than-significant level.

**Mitigation Measures**

**Mitigation Measure #13–Cultural Resources**

- In the event archaeological deposits are discovered during project construction, all work in the immediate vicinity of the discovery shall be stopped immediately and the Trinity County Department of Transportation shall 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. The conservation measures shall be implemented prior to re-initiation of activities in the immediate vicinity of the discovery.

  | Timing/Implementation: | During construction |
  | Enforcement: | Native American Heritage Commission (NAHC), County |
  | Monitoring: | County and/or its contractor |

**Mitigation Measure #14–Human Remains**

- If human remains are discovered during project activities, all activities in the vicinity of the find shall be suspended and the Trinity County Sheriff-Coroner shall be notified. If the coroner determines that the remains may be those of a Native American, the coroner shall contact the NAHC. Treatment of the remains shall be conducted in accordance with the direction of the County Coroner and/or the NAHC, as appropriate. Work in the immediate vicinity of the remains shall not be re-initiated until the remains have been removed from the site in accordance with the recommendations.

  | Timing/Implementation: | During construction |
  | Enforcement: | NAHC, County Coroner |
  | Monitoring: | County and/or its contractor |
VI. GEOLOGY AND SOILS — Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

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

c) Be located on 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?

f) Would the project result in disturbance of ultramafic rock or soils potentially containing naturally occurring asbestos?

Discussion of Impacts

a) i–iv) No Impact. The project site is not located within an Alquist-Priolo Earthquake Fault Zone (California Department of Conservation 2007) and there are no quaternary faults mapped in the immediate project vicinity (U.S. Geological Survey 2010). The nearest mapped faults include the Salt Creek fault and the Bear Wallow fault located approximately 1.3 and 10.3 miles southwest of the project area, respectively (Taber Consultants 2009). Neither fault is active. The nearest mapped fault considered to have the potential for a significant event (6.25
magnitude or greater) is the Lake Mountain Fault located approximately 23-mile southwest of the project area (Taber Consultants 2010).

The geotechnical report (Taber Consultants 2009) prepared for the proposed project concluded that the project area contains no over-riding geologic hazards, which include landslides, and has a low potential for soils liquefaction, lateral spreading, densification, and other seismically induced hazards. To ensure that potential seismically-induced hazards do not affect the proposed replacement bridge, Caltrans seismic design parameters are incorporated into the project design.

b) **Less than Significant with Mitigation Incorporated.** The potential for erosion in the project area ranges from moderate to severe, although the soils are well-suited to the mechanical site preparation activities that would occur under the proposed project (Natural Resources Conservation Service 2011). Ground-disturbing activities would expose soils and make them susceptible to erosion in the event of rain; however, once soils are surfaced or overlain with RSP, such as at the proposed pier and abutment locations, the potential for erosion would be significantly reduced. Mitigation Measure #2 has been incorporated into the project to minimize erosion pre- and post-construction, and reduces this impact to a less-than-significant level.

c, d) **Less-than-Significant Impact.** The project site is underlain by metamorphic rock considered to be capable of supporting heavy, concentrated pile foundation loads (Taber Consultants 2009). Soils in the project area are generally stable and well-suited to mechanical site preparation activities (Taber Consultants 2009; Natural Resources Conservation Service 2011). Onsite soils are not expansive (Natural Resources Conservation Service 2011) and have a low shrink-swell potential. The bridge footings would be founded on bedrock and the load factor design included considerations of bearing capacities. Construction of footings will be consistent with Caltrans Design Specifications (including safety factors of 3 for footings and 2 for piles).

e) **No Impact.** The proposed project does not involve septic or wastewater systems.

f) **No Impact.** Project implementation would not result in the disturbance of any ultramafic rock or soils that potentially contain naturally occurring asbestos (California Air Resources Board 2010; Taber Consultants 2010).

**Mitigation Measures**

Implement *Mitigation Measure #2–Erosion and Sedimentation Control* to prevent erosion and degradation of water quality.
### VII. GREENHOUSE GAS EMISSIONS — Would the Project:

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

### Discussion of Impacts

a) **Less-than-Significant Impact.** Construction of the proposed bridge replacement project would generate greenhouse gas (GHG) emissions. In order to determine the significance of the impact, a “carbon footprint” was estimated based on the proposed project’s anticipated generation of GHG emissions, primarily carbon dioxide (CO₂). Online calculator tools\(^1\) specifically developed to estimate GHG emissions generated by construction projects were used to derive an estimate of the carbon footprint for the proposed project. For purposes of the proposed project, the following constants for combustible fuel, area of vegetation disturbance, and project duration were used:

- an average of 200 gallons per day of diesel fuel would be used by heavy construction equipment\(^2\);
- onsite, mobile construction equipment\(^3\) would travel an average of approximately 5 miles per day each, as the vehicles work throughout the construction site;
- offsite construction equipment, including worker’s personal vehicles used to commute to the construction site (assuming three (3) personal diesel pick-up truck roundtrips) and equipment/materials haul trucks (assuming three (3) heavy duty diesel truck roundtrips) from Hayfork (40 miles roundtrip) would travel a total of approximately 120 miles per day;

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\(^1\) The mobile combustion CO₂ Emissions Calculation Tool was used to calculate GHG emissions for combustible fuel (Greenhouse Gas Protocol Initiative 2009) and the Construction Carbon Calculator (Build Carbon Neutral 2011) was used to calculate GHG emissions for vegetation loss.

\(^2\) The amount of fuel used by the project is based on operating two (2) pieces of heavy equipment at any given time (e.g., a grader, an excavator, a large haul/dump truck, and crane) that each have an average fuel consumption of 100 gallons per day.
onsite miscellaneous combustion engine equipment, including generators, would operate 8 hours per day;

approximately 0.062 acre of riparian wetland vegetation could be removed at the site as a result of excavation and grading activities; and

project construction would require approximately 240 days (assuming two work seasons – June 15 through October 31) to complete.

Based on the above values, the proposed project would generate approximately 54-metric tons of GHG emissions (primarily CO_2) from construction equipment during project construction. The volume of vegetation (riparian wetland) that would be removed as a result of project implementation would generate approximately 53-metric tons of CO_2 emissions as a result of its absence. However, revegetation included as part of the project would create a net offset of CO_2 emissions of approximately 6-metric ton of CO_2 over a five to ten year period. Upon completion of the new bridge and roadway approaches, there would be no change from the existing volume of GHG emissions generated by vehicle use of Wildwood Road.

While the project’s GHG emissions would be measurable, they would be limited to the project construction period and would not be significant. Plantings of riparian trees and shrubs in the restored areas where the old bridge is located and within the interstices of the RSP would ultimately offset almost twice as much CO_2 as would be generated by project construction.

b) Less-than-Significant Impact. The North Coast Unified Air Quality Management District has not adopted a plan, policy, or regulation for reducing GHG emissions. However, the State of California has adopted several regulations related to GHG emissions reduction. These include efforts to reduce tailpipe emissions and diesel exhaust produced by fuel-combustion engines. Project operations would adhere to statewide efforts aimed at minimizing GHG emissions.

**Mitigation Measures**

No project-specific mitigation is required under this subject.
VIII. HAZARDS AND HAZARDOUS MATERIALS — Would the project:

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

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and 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?  
   ![ ] [ ] [ ]  

Discussion of Impacts

a, b) Less than Significant with Mitigation Incorporated. No hazardous materials are currently stored, or proposed for use or storage, at the proposed project area. However, a lead-based paint analysis found paint used on the existing bridge to exceed the federal Environmental Protection Agency’s threshold for hazardous classification (Taber Consultants 2010). Operation of the proposed project does not involve the use or storage of any hazardous
materials. Other than the demolition and removal of the existing bridge, which is known to contain lead-based paint, construction would not generate any additional hazardous materials. There would however, be a hazard associated with the use of diesel or gasoline powered construction equipment (trucks, excavators, etc.) and lubricants such as oil. The potential for public or environmental exposure to such a hazard would be temporary and mitigable since equipment would be routinely maintained and inspected to avoid leaks, and is similar to vehicles currently operating on nearby roads. Best management practices described in Mitigation Measure #3 will be specified in the project design construction specifications to reduce potential impacts associated with accidental spills of pollutants (i.e., fuel, oil, grease, etc.) on vegetation and aquatic habitat resources within the project area. Painted bridge surfaces will be removed, handled, and disposed of accordingly, as described in Mitigation Measure #15—Lead-based Paint.

c) **No Impact.** There are no known proposed or existing schools within one-quarter mile of the project area. The closest schools are located in Hayfork, approximately 13 air miles to the northwest.

d) **No Impact.** A search of the State Department of Toxic Substances Control EnviroStar database (California Department of Toxic Substances Control 2011) and the State Regional Water Quality Control Board’s GeoTracker database (State Water Resources Control Board 2011) found no record of any contaminated sites in the project vicinity. The project area is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5

e, f) **No Impact.** The project is not located near any public or private airstrip.

g) **Less-than-Significant Impact.** During construction of the new bridge, the existing bridge would remain open to allow two-way vehicular access through the project area. Although temporary, short duration disruptions to normal traffic operations may occur during construction. The project is not anticipated to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan because vehicular access will be maintained during construction.

h) **Less than Significant with Mitigation Incorporated.** The project area is aligned along Wildwood Road, one of the primary roads in the region. The stretch of Wildwood Road through the project area is lined with patches of annual grassland interspersed throughout montane riparian, ponderosa pine, and Klamath mixed conifer vegetation, and barren areas. The rural community of Wildwood and the surrounding vicinity is in a Very High Fire Hazard Zone (California Department of Forestry and Fire Protection 2006). While operation of the project, once completed, would have no effect on wildfire potential, the use of construction equipment in and around vegetated areas increases the potential for wildfire ignition. Mitigation Measure #16—Wildfire Potential will be implemented to reduce the risk of wildfire associated with project construction to a less-than-significant level.
Mitigation Measures

Implement Mitigation Measure #3–Prevention of Accidental Spills to prevent degradation of water quality.

**Mitigation Measure #15–Lead-based Paint**
- Lead-based paint will be removed using one of several methods approved by the Federal Environmental Protection Agency (EPA), at the contractor’s discretion. Acceptable methods include wet scraping or the use of a dustless needle gun connected to a vacuum unit with a high efficiency particulate air (HEPA) filter that empties directly into a waste container. The waste container will be properly documented and disposed of at a Class I landfill, such as the USS-Posco Industries Waste Management Unit II Landfill in Pittsburg, California (CalRecycle 2010).
  
  **Timing/Implementation:** During construction  
  **Enforcement:** County, EPA  
  **Monitoring:** County and/or its contractor

**Mitigation Measure #16–Wildfire Potential**
- Per the requirements of Public Resources Code 4442, the County shall include a note on all construction plans that internal combustion engines shall be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire.
  
  **Timing/Implementation:** Prior to and during construction  
  **Enforcement:** County  
  **Monitoring:** County and/or its contractor
### XI. HYDROLOGY AND WATER QUALITY — Would the project:

<table>
<thead>
<tr>
<th>a) Violate any water quality standards or waste discharge requirements?</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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)?</td>
<td>Potentially Significant Impact</td>
<td>Less than Significant Impact with Mitigation Incorporated</td>
<td>Less than Significant Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>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?</td>
<td>Potentially Significant Impact</td>
<td>Less than Significant Impact with Mitigation Incorporated</td>
<td>Less than Significant Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>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?</td>
<td>Potentially Significant Impact</td>
<td>Less than Significant Impact with Mitigation Incorporated</td>
<td>Less than Significant Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>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?</td>
<td>Potentially Significant Impact</td>
<td>Less than Significant Impact with Mitigation Incorporated</td>
<td>Less than Significant Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>f) Otherwise substantially degrade water quality?</td>
<td>Potentially Significant Impact</td>
<td>Less than Significant Impact with Mitigation Incorporated</td>
<td>Less than Significant Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>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?</td>
<td>Potentially Significant Impact</td>
<td>Less than Significant Impact with Mitigation Incorporated</td>
<td>Less than Significant Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</td>
<td>Potentially Significant Impact</td>
<td>Less than Significant Impact with Mitigation Incorporated</td>
<td>Less than Significant Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>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?</td>
<td>Potentially Significant Impact</td>
<td>Less than Significant Impact with Mitigation Incorporated</td>
<td>Less than Significant Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>j) Inundation of seiche, tsunami, or mudflow?</td>
<td>Potentially Significant Impact</td>
<td>Less than Significant Impact with Mitigation Incorporated</td>
<td>Less than Significant Impact</td>
<td>No Impact</td>
</tr>
</tbody>
</table>
Discussion of Impacts

a) **Less-than-Significant Impact.** Construction and operation of the proposed project would not violate any water quality standards or waste discharge requirements set forth by the North Coast RWQCB in its Water Quality Control Plan for the North Coast region (North Coast Regional Water Quality Control Board 2007). Water pollution control measures have been incorporated into the project design and are required according to Caltrans Standard Specifications (Section 7-1.01G). Additionally, project activities would comply with the requirements set forth in a 401 Water Quality Certification, which is required by the RWQCB prior to project implementation.

b) **No Impact.** Construction and operation of the proposed project would have no effect on groundwater supplies. There would be no net change in local aquifers or the local groundwater table as a result of the project.

c) **Less than Significant with Mitigation Incorporated.** Construction activities associated with the proposed project are not anticipated to alter the existing drainage pattern of the site or area in a way that would result in downstream erosion and/or sedimentation.

Bank protection measures would be required to stabilize the backfilled material on the banks in front of the abutments. This protection would consist of RSP of 2-Ton or 4-Ton Class using placement Method A (i.e., placement by heavy equipment; however, placement by dumping or dozing would not be allowed). It is estimated that approximately 80- to 110-lineal feet along each bank would be required to protect the abutments—this is the bridge width plus 25- to 40-feet upstream and downstream of the bridge. The toe of RSP would be buried with approximately 40 percent to 55 percent below finished grade. This material would be in and around the abutments, which are at least 20 feet away from the active stream channel and also outside of the OHWM. Temporary work areas (i.e., gravel pads) would extend up to 10-feet below the OHWM of the channel.

Dewatering may be required during the installation of piles and possibly during the installation of RSP. If dewatering becomes necessary, water would either be pumped to a temporary detention basin(s) isolated from the stream channel where it would be allowed to percolate into the ground or temporarily detained and then filtered through tanks to remove sediment prior to being returned to the stream.

Erosion control measures will be implemented during construction of the proposed project in accordance with Mitigation Measure #2. Instream construction work will be conducted in accordance with all measures contained in permits or associated with agency approvals.

d) **Less-than-Significant Impact.** The proposed project would not substantially alter the existing drainage pattern of the project site. The Design Hydraulic Study (Pacific Hydrologic Incorporated 2011) prepared for the proposed project concludes that construction of the new bridge and alignment would decrease the risk of flooding.
e) **Less-than-Significant Impact.** The longer and wider new bridge structure and roadway approaches would increase the amount of impervious surface in the project area. The additional surface area would result in a slight, but less-than-significant, increase in storm water runoff leaving the bridge deck and being channeled into the roadway drainage system. Runoff would not drain directly from the bridge deck into the stream. The proposed project profile would provide sufficient gradient for drainage of roadway and bridge surfaces. It is anticipated that roadway and bridge deck drainage for this project would be diverted away from the approach fills, directly into the natural drainage swales within the 100-year flood plain of Hayfork Creek. Once the water is within the drainage swales, it is expected to infiltrate into the ground following typical rainfall events. Runoff would not flow directly from either the road or the bridge deck into the stream.

The volume and types of pollutants (e.g., lubricants) would not increase, since the proposed project would not affect the amount or type of traffic using Wildwood Road. The existing bridge structure and roadway approaches would be removed and their footprints would be restored to natural conditions.

f) **Less than Significant with Mitigation Incorporated.** Construction of the proposed project would involve the use of hazardous materials (i.e., petroleum-based fuels and lubricants) in and adjacent to waterways. Construction activities could also temporarily increase the potential for minor amounts of sediment to enter Hayfork Creek.

Water pollution control measures have been incorporated into the project description and will be included in the construction contract pursuant to Caltrans Standard Specifications (Section 13). Erosion control measures will be implemented during construction of the proposed project in accordance with Mitigation Measure #2. Construction specifications will also include Mitigation Measure #3 to reduce potential impacts associated with hazardous materials. Instream construction work will be conducted in accordance with all measures contained in permits or associated with agency approvals.

g) **No Impact.** The project does not involve the construction of new housing in a flood hazard area.

h) **Less-than-Significant Impact.** The hydraulic study (Pacific Hydrologic Incorporated 2011) conducted for the proposed project concludes that the replacement bridge project is not expected to increase the water surface elevations during a 100-year flood event; rather it would result in a slightly lower base flood elevation than what currently exists. The length, height, and structural design of the proposed bridge meet the *Caltrans Bridge Design Specifications* for hydraulic capacity requirements and scour depth. The new bridge and the approach embankments would not encroach into the low flow channel of Hayfork Creek.

Project materials that would be placed in the 100-year floodplain of Hayfork Creek include RSP, bridge abutments, piers, temporary gravel work pads or trestles, and temporary falsework. Bridge abutments, including footings, would be outside of the OHWM, but within the 100-year floodplain. Abutments would be subjected to high seasonal flows; therefore, scour protection in the form of RSP would be required to avoid undercutting.
Temporary materials and structures would be in place during the instream construction window (June 15 through October 31) and would be removed following construction and prior to October 31. The area disturbed by the temporary gravel construction pad would be restored to pre-construction contours. Falsework—temporary bridge structure support—would be placed in the 100-year floodplain of Hayfork Creek during construction. Falsework would be used to support the concrete forms for the bridge deck and work trestle (if needed), and would be constructed using instream, cross-braced towers or a clearspan, beam-supported deck atop the pier walls.

i) **Less-than-Significant Impact.** Although the 100-year flood zone has not been mapped by the Federal Emergency Management Agency (Federal Emergency Management Agency 2010), the Hayfork Creek channel, and possibly its adjacent uplands, may be subject to seasonal flooding. Hydraulic Design Criteria prescribed in Caltrans’ *Local Procedures Manual* (California Department of Transportation 2009) have been incorporated into the project design to ensure that the new structure would be capable of conveying the base or 100-year flood. The new bridge would be designed to avoid problems stemming from the transport of woody debris in the channel during periods of high flow by providing the minimum drift clearance recommended by Caltrans and FHWA. Temporary falsework clearance is anticipated to be adequate to pass typical river flows during the construction season.

j) **No Impact.** The project site is not at risk of seiche, tsunami, or mudflow.

**Mitigation Measures**

Implement *Mitigation Measure #2–Soil Erosion and Sedimentation Control* and *Mitigation Measure #3–Prevention of Accidental Spills* to prevent degradation of water quality.
Environmental Setting, Impacts, and Mitigation Measures

North State Resources, Inc.
September 2012

Trinity County Department of Transportation
Hayfork Creek Bridge (No. 5C-086) Replacement Project

X. LAND USE AND PLANNING — Would the project:

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Physically divide an established community?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion of Impacts

a) **Less-than-Significant Impact.** The proposed bridge would replace the existing bridge over Hayfork Creek on Wildwood Road in the community of Wildwood. Wildwood Road serves as a major collector between State Highway 36 and State Highway 3. Although the road goes through the community, the project would not divide the community because it would follow essentially the same route as the existing road. While there may be minor traffic delays on Wildwood Road during construction, they would be temporary, of short duration, and less than significant. The primary purpose of the project is to replace a bridge that has been designated as functionally and structurally obsolete by Caltrans and to provide a safe crossing over Hayfork Creek.

b) **No Impact.** Construction of the proposed project is consistent with the Trinity County General Plan, including the Circulation, Safety, Noise, Land Use, Open Space, and Conservation elements. However, because this is a transportation project, this analysis focuses on the applicable goals and objectives of the Circulation Element of the General Plan (LSC Transportation Consultants 2005) and the Trinity County Regional Transportation Plan (Fehr & Peers 2011).

The overall transportation goal of the Circulation Element of the General Plan is to ensure the maintenance and safety of the county’s existing roadway system. A new bridge would reduce maintenance and improve public safety for traffic crossing Hayfork Creek by replacing a functionally obsolete and structurally deficient bridge that is damaged in several places.

The proposed project is consistent with Transportation System Goal 1 as described in the Trinity Circulation Element (LSC Transportation Consultants 2002). This goal includes a provision for the long-range development of the county’s roadway system to ensure the safe and efficient movement of people and goods. The county’s roadway system must also meet environmental and circulation objectives, and utilize funding strategies for construction,
improvement, and maintenance of existing roadways. Replacement of the structurally deficient Hayfork Creek bridge would be consistent with this goal. Project design and mitigation measures address local, state, and federal environmental and circulation objectives.

Goal #1 of the Trinity County Regional Transportation Plan is to “develop and maintain an efficient and safe system of streets, highways and bridges” that promotes “reliable access to communities”. The Action Element of the Transportation Plan places a high priority on safety projects and the replacement of structurally deficient bridges.

c) **No Impact.** Currently, there are no adopted Habitat Conservation Plans (HCP), Natural Community Conservation Plans (NCCP), or other approved habitat conservation plans that cover the project area.

**Mitigation Measures**

No project-specific mitigation is required under this subject.
XI. MINERAL RESOURCES — Would the project:

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? ☐ ☐ ☐ ☒

Discussion of Impacts

a) No Impact. The project area has not been mapped by the State Division of Mines and Geology (California Department of Conservation 2001). Gravel mining activities do not occur at this location and it is unlikely that the project area or this stretch of Hayfork Creek would be considered an important aggregate resource. Although there are numerous gold mining claims in the general vicinity, there is no record of gold ever being discovered at the project site (North State Resources 2012b).

b) No Impact. No locally important mineral resource recovery sites are located within the project area.

Mitigation Measures

No project-specific mitigation is required under this subject.
XII. NOISE — Would the project result in:

<table>
<thead>
<tr>
<th>Description</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact with Mitigation Incorporated</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Exposure of persons to or generation of noise levels in excess of standards</td>
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<tr>
<td>established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
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<tr>
<td>b) Exposure of persons to or generation of excessive groundborne vibration or</td>
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<tr>
<td>groundborne noise levels?</td>
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<tr>
<td>c) A substantial permanent increase in ambient noise levels in the project</td>
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<tr>
<td>vicinity above levels existing without the project?</td>
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<tr>
<td>d) A substantial temporary or periodic increase in ambient noise levels in</td>
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<tr>
<td>the project vicinity above levels existing without the project?</td>
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<tr>
<td>e) For a project located within an airport land use compatibility plan or,</td>
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<td>where such a plan has not been adopted, within two miles of a public airport</td>
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<td>of public use airport, would the project expose people residing or working</td>
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<td>in the project area to excessive noise levels?</td>
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<tr>
<td>f) For a project within the vicinity of a private airstrip, would the</td>
<td>☐</td>
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<tr>
<td>project expose people residing or working in the project area to excessive</td>
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<td></td>
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<tr>
<td>noise levels?</td>
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</table>

Discussion of Impacts

a) **Less-than-Significant Impact.** Noise from construction of the proposed project is not anticipated to exceed standards established in the Noise Element of the General Plan (Brown-Buntin Associates, Inc). Construction activities occurring near homes in the area may expose residents to short-term noise. During construction, a minor increase in ambient noise levels is anticipated at the project site. Noise generated by construction of the project from sources such as heavy equipment, stationary pumps, and truck traffic are common to the existing daily activities that occur in and around the project area. Wildwood Road is a permanent contributor to the project vicinity’s ambient noise levels. Construction activities will be scheduled between 7:00 AM and 7:00 PM, Monday through Saturday. Operation of the new bridge would not generate noise above existing levels.

b) **Less-than-Significant Impact.** Construction-related groundborne vibration resulting from the movement of heavy equipment within the construction area would be temporary and localized, and would occur only during daylight hours (typically 7:00 AM to 7:00 PM, Monday through Saturday). There is no potential for persons outside of the immediate construction area to be affected by groundborne vibration. Although there are residential or commercial developments
in close proximity to the proposed project area, these are the same places that are subjected daily to vibrations generated by vehicle traffic and would therefore, be unlikely to appreciably notice the temporary increase in any construction-related groundborne vibrations generated by the proposed project. The project does not involve the use of explosives or pile driving activities.

c) **No Impact.** Construction and operation of the project would not result in a permanent (ongoing) increase in ambient noise. The existing Wildwood Road is a permanent contributor to the project vicinity’s ambient noise levels. Use of Wildwood Road is not expected to increase because of this project. Once construction is complete, permanent noise levels would be similar to existing noise levels.

d) **Less than Significant with Mitigation Incorporated.** Heavy equipment used during construction would contribute to short duration increases in ambient noise levels in the project vicinity that may be noticeable at nearby homes and commercial building. Mitigation Measure #17–Construction Noise will limit construction activities to between 7:00 AM and 7:00 PM, Monday through Saturday

e, f) **No Impact.** The proposed project is not located in an airport land use area or in the vicinity of an airstrip.

**Mitigation Measures**

**Mitigation Measure #17–Construction Noise**

Construction specifications shall include the following measures to reduce potential impacts associated with construction noise:

- Construction shall be limited to the hours between 7:00 AM and 7:00 PM, Monday through Saturday.

- Each internal combustion engine used for any purpose on the job site shall be equipped with a muffler of a type recommended by the manufacturer.

<table>
<thead>
<tr>
<th>Timing/Implementation:</th>
<th>During construction</th>
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<tbody>
<tr>
<td>Enforcement:</td>
<td>County</td>
</tr>
<tr>
<td>Monitoring:</td>
<td>County and/or its contractor</td>
</tr>
</tbody>
</table>
XIII. POPULATION AND HOUSING — Would the project:

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

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

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

Discussion of Impacts

a) **No Impact.** Replacement of the existing Hayfork Creek bridge structure would have no effect on population or housing in the Wildwood area. It would not increase traffic capacity or extend road access beyond what is available without the project.

b) **No Impact.** Existing housing within the community of Wildwood would not be displaced by the project and no replacement housing would be required.

c) **No Impact.** No people would be displaced as a result of the proposed project and no replacement housing would be required.

Mitigation Measures

No project-specific mitigation is required under this subject.
**XIV. PUBLIC SERVICES — Would the project:**

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:

<table>
<thead>
<tr>
<th>Facility</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
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</thead>
<tbody>
<tr>
<td>Fire protection?</td>
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<tr>
<td>Police protection?</td>
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<tr>
<td>Schools?</td>
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<tr>
<td>Parks?</td>
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</tr>
<tr>
<td>Other public facilities?</td>
<td>☐</td>
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</tbody>
</table>

**Discussion of Impact**

a) **Less-than-Significant Impact.** The proposed project would have a less-than-significant effect on public resources, including fire protection, police protection, schools, parks, and other public facilities. The proposed bridge would provide an improved, safer road and bridge across Hayfork Creek. During construction of the replacement bridge, traffic would be routed over the existing bridge, which would remain operational pending completion of the new bridge. Although traffic controls (flaggers, stop signs) may be used during construction, no significant adverse effect on service ratios, response times, or service objectives for any of the public services are anticipated.

**Mitigation Measures**

No project-specific mitigation is required under this subject.
XV. RECREATION — Would the project:

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?

[ ] Potentially Significant Impact
[ ] Less than Significant Impact
[ ] No Impact

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?

[ ] Potentially Significant Impact
[ ] Less than Significant Impact
[ ] No Impact

Discussion of Impacts

a, b) No Impact. The project would have no effect on existing recreational facilities.

Mitigation Measures

No project-specific mitigation is required under this subject.
XVI. TRANSPORTATION / TRAFFIC -- Would the project:

- 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?

- 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?

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

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

- Result in inadequate emergency access?

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

Discussion of Impacts

- **Less-than-Significant Impact.** The proposed project is not anticipated to increase either the number of vehicle trips, volume-to-capacity ratio, or congestion at intersections. The proposed project is consistent with the goals and policies of the Trinity County Regional Transportation Plan (Fehr & Peers 2011) and the Circulation Element of the County’s General Plan (LSC Transportation Consultants 2002)

- **Less-than-Significant Impact.** The primary purpose of the proposed project is to improve traffic safety. There is a potential for minor delays during construction. However, there would not be a lowered level of service during the construction phase of the project, as Wildwood Road would remain open and traffic would continue to be routed over the existing bridge. Based on current traffic levels in the project vicinity, traffic congestion along Wildwood Road
at the Hayfork Creek bridge crossing is not anticipated during the construction phase of the project. Any effects on traffic during construction would be temporary and less than significant.

c) **No Impact.** The proposed project would not result in a change in air traffic patterns.

d) **No Impact.** The proposed project would not result in the creation of sharp curves, dangerous intersections, or incompatible uses. The project is designed to provide an improved alignment and a safer bridge across Hayfork Creek.

e) **Less-than-Significant Impact.** During construction of the replacement bridge, traffic would be routed over the existing bridge. Stop signs during non-construction times and flagging during construction are anticipated. Although short duration, temporary disruptions to normal traffic operation may be necessary during project construction, Wildwood Road would remain open to traffic and no adverse impacts to emergency access is anticipated.

f) **No Impact.** The project does not conflict with any alternative transportation plan or policy.

**Mitigation Measures**

No project-specific mitigation is required under this subject.
XVII. UTILITIES AND SERVICE SYSTEMS — Would the project:

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

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

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

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

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

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

Discussion of Impacts

a, b) No Impact. The project does not in involve any actions that would generate wastewater.

c) Less-than-Significant Impact. Construction and operation of the proposed project would not require new facilities or alterations to existing storm water facilities. The proposed project profile would provide sufficient gradient for drainage of roadway and bridge surfaces. It is anticipated that roadway and bridge deck drainage for this project would be diverted away from the approach fills, directly into the natural drainage swales within the 100-year flood plain of Hayfork Creek. Once the water is within the drainage swales, it is expected to infiltrate into the ground following typical rainfall events. Runoff would not flow directly from either the road or the bridge deck into the stream.
d) **No Impact.** No new or expanded water entitlements would be required for the proposed project.

e) **No Impact.** The proposed project would be limited to improvements to the existing bridge and approaches, and would not result in a change in the current demand for wastewater treatment.

f) **Less-than-Significant Impact.** Construction activities associated with the proposed project would generate solid waste in the form of demolished materials, metal pilings, and other trash. The proposed project is not likely to generate solid waste in amounts that would adversely affect the existing capacity of the local landfill, and all solid waste generated by the proposed project would be disposed of at an approved landfill in compliance with local, state, and federal regulations pertaining to solid waste disposal. Hazardous waste material (lead-based paint) would be disposed of at a Class I landfill having sufficient capacity to accommodate the volume of contaminated materials that would result from demolition of the existing bridge. Uncontaminated solid waste generated by demolition and construction activities at the project site would likely be disposed of a municipal landfill. The contractor would be responsible for removing the existing bridge from the site and disposing of it as previously described.

g) **Less than Significant with Mitigation Incorporated.** Contaminated and uncontaminated solid waste generated by the proposed project would be disposed of at an approved landfill in compliance with local, state, and federal regulations pertaining to solid waste disposal. Any parts of the existing bridge coated with lead-based paints shall be disposed of at a Class I landfill as described previously under Mitigation Measure #15. Implementation of this measure will reduce the effect of lead-based paint removal to a less-than-significant level.

**Mitigation Measures**

Implement *Mitigation Measure #15–Lead-based Paint* will be used to avoid any adverse environmental effects debris coated with lead-based paint.
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE
(To be filled out by Lead Agency if required)

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

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 resources and cultural resources. Special status wildlife species that could be affected by the project are SONCC ESU coho salmon, Klamath Mountains province ESU steelhead salmon, UKT rivers ESU Chinook salmon, foothill yellow-legged frog, tailed frog, western pond turtle, little willow flycatcher, yellow warbler, yellow-breasted chat, olive-sided flycatcher, long-eared owl, and other species of nesting birds and raptors. If present, project construction would have the potential to impact these species. Mitigation measures presented in Section 3.2, IV Biological Resources, will be implemented to reduce potential impacts to these species to a less-than-significant level.

Although a reconnaissance-level survey, database searches, and tribal consultation did not result in any findings of cultural or archaeological significance in the project area, the project will comply with state laws relating to archaeological resources and Native American remains (Mitigation measures #13 and #14).

b) **Less-than-Significant Impact.** The project would include improvements to an existing transportation system by replacing an existing bridge structure with a new bridge and creating
safer roadway approaches. The project would not introduce new development into a previously undeveloped area. The project site is near commercial and rural residential uses. Existing open space will be retained. Impacts associated with the project would be limited for the most part to the construction phase and can be fully mitigated for at the project level. As a result, cumulative impacts are considered to be less than significant.

c) **Less-than-Significant with Mitigation Incorporated.** The proposed Hayfork Creek Bridge Replacement Project could result in a variety of impacts to human beings, particularly during the construction phase. Potential adverse effects are related to temporary decreases in air quality and water quality, and increases in erosion, noise levels, and risk of hazard (such as wildfire) resulting from construction activities. All impacts assessed in this study can be mitigated to a less-than-significant level. Adverse effects to air quality will be mitigated by implementing Mitigation Measure #1. Impacts to water quality will be mitigated by implementing mitigation measures #’s 2 through 4. Hazards associated with demolition and removal of the existing bridge, which is known to contain lead-based paint, would be mitigated to a less-than-significant level by implementing Mitigation Measure #15. Fire hazards associated with project construction will be mitigated by implementing Mitigation Measure #16.
Chapter 4
Determination

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.

Signature
Richard Tippett, Director
Trinity County Planning Department

Date
Chapter 5
Summary of Mitigation Commitments

Trinity County is committed to implementing the following mitigation measures during construction of the Wildwood Road at Hayfork Creek Bridge (No. 5C-086) Replacement Project:

5.1 Air Quality

5.1.1 Mitigation Measure #1—Air Quality/Fugitive Dust Control

The County shall include provisions in the construction bid documents that the contractor shall implement a dust control program to limit fugitive dust emissions. The dust control program shall include, but not be limited to, the following elements, as appropriate:

- Water inactive construction sites at least twice daily when soils are not naturally moist. Water shall be applied in a manner that does not result in runoff.

- Pursuant to California Vehicle Code (State of California 2012), all trucks hauling soil and other loose material to and from the construction site shall be covered or should maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer).

- Exposed stockpiles of soil and other fine backfill material shall be watered twice daily or have soil binders added.

- Any topsoil that is removed for the construction operation shall be stored on-site in piles not to exceed 4 feet in height to allow development of microorganisms prior to resoiling of the construction area. These topsoil piles shall be clearly marked and flagged. Topsoil piles that will not be immediately returned to use shall be revegetated with a non-persistent erosion control mixture.

- Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles. These soil piles shall also be surrounded by silt fencing, straw wattles, or other sediment barriers or covered unless they are to be immediately used.

  Timing/Implementation: During construction
  Enforcement: North Coast AQMD
  Monitoring: County and/or its contractor
5.2 Biological Resources

5.2.1 Mitigation Measure #2–Erosion and Sediment Control

- Type D erosion control measures (i.e., hydroseeding) shall be implemented during construction of the proposed project in non-riparian upland areas. These measures shall conform to the provisions in Section 21-1 of the Caltrans Standard Specifications (California Department of Transportation 2010b) and the special provisions included in the contract for the project.

- Erosion control work shall consist of at least one application of erosion control materials to embankment slopes, excavation slopes, and other areas in non-riparian uplands designated by the project engineer. These materials shall consist of fiber, seed, commercial fertilizer, and water, and shall conform to Section 21-1 of the Caltrans Standard Specifications and the specifications discussed below. Commercial fertilizer used for non-riparian upland areas shall conform to the provisions in Section 20-2.02 of the Caltrans Standard Specifications (California Department of Transportation 2010b). Additional erosion control measures that shall be implemented by the County include the following:
  - To the maximum extent practicable, activities that increase the erosion potential in the proposed action area shall be restricted to the relatively dry summer and early fall period to minimize the potential for rainfall events to transport sediment to surface water features. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place.
  - Areas where wetland and upland vegetation need to be removed shall be identified in advance of ground disturbance and limited to only those areas that have been approved by the County.
  - Within 10 days of completion of construction, weed-free mulch shall be applied to disturbed areas to reduce the potential for short-term erosion. Prior to a rain event or when there is a greater than 50 percent possibility of rain within the next 24 hours, as forecasted by the National Weather Service, weed-free mulch shall be applied to all exposed areas upon completion of the day’s activities. Soils shall not be left exposed during the rainy season.
  - Filter fences, straw wattles, or catch basins shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures shall be installed prior to any clearing or grading activities.
  - If spoil sites are used, they shall be located such that they do not drain directly into a surface water feature, if possible. If a spoil site drains into a surface water feature, catch basins shall be constructed to intercept sediment before it reaches the feature. Spoil sites shall be graded and vegetated to reduce the potential for erosion.
Sediment control measures shall be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated.

Timing/Implementation: Prior to, during, and after construction
Enforcement: Corps, North Coast RWQCB, CDFG
Monitoring: County and/or its contractor

5.2.2 Mitigation Measure #3–Prevention of Accidental Spills of Pollutants

Construction specifications shall include the following measures to reduce potential impacts to vegetation and aquatic habitat resources in the proposed action area associated with accidental spills of pollutants (e.g., fuel, oil, and grease):

- A site-specific spill prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms shall be constructed to prevent spilled materials from reaching surface water features.
- Equipment and materials shall be stored 50 feet away from surface water features.
- Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted in an area at least 75 feet away from Hayfork or Hall City creeks or within an adequate fueling containment area.

Timing/Implementation: Prior to and during construction
Enforcement: Corps, North Coast RWQCB, CDFG
Monitoring: County and/or its contractor

5.2.3 Mitigation Measure #4–Replacement of Lost Riparian Habitat

The following measures shall be implemented to reduce potential impacts to riparian habitat in the project area:

- The width of the construction disturbance zone in the riparian habitat shall be minimized through careful pre-construction planning.
- Exclusionary fencing shall be installed along the boundaries of all riparian areas to be avoided to ensure that impacts on riparian vegetation outside of the construction area are minimized.
- Riparian habitat areas temporarily disturbed shall be replanted using riparian species that have been recorded along Hayfork Creek in the project area, including white alder (Alnus rhombifolia), black cottonwood (Populus deltoides), big-leaf maple (Acer macrophyllum),
arroyo willow (*Salix lasiolepis*), narrowleaf willow (*Salix exigua*), American dogwood (*Cornus sericea* ssp. *sericea*), Sierra plum (*Prunus subcordata*), and western choke cherry (*Prunus virginiana*).

- Onsite creation/restoration shall occur in areas disturbed during project construction and the amount of habitat created/restored shall be at a 3:1 ratio, new plantings per large (≥6 inches or greater in diameter at breast height) woody plant removed. These replanting ratios will help ensure successful establishment of at least one vigorous plant for each plant removed to accommodate the project (see Appendix A).

- Plant spacing intervals will be determined as appropriate based on site conditions following construction.

- Non-native tree species removed during project construction will be replaced with native riparian species.

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<thead>
<tr>
<th>Timing/Implementation:</th>
<th>Prior to, during, and after construction</th>
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<tbody>
<tr>
<td>Enforcement:</td>
<td>CDFG</td>
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<tr>
<td>Monitoring:</td>
<td>County</td>
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### 5.2.4 Mitigation Measure #5–Anadromous Fish

The following avoidance and minimization efforts have been designed to minimize direct and indirect project effects on coho salmon, Chinook salmon, and steelhead, coho salmon critical habitat and EFH in the project area. Due to the seasonal presence of UKT Chinook salmon and Klamath Mountains Province DPS steelhead, a seasonal work window is an appropriate avoidance measure to minimize impacts on direct impacts and EFH for all species. In addition to mitigation measures #’s 2, 3, and 4, the following measures shall be implemented:

- Instream construction activities are proposed to occur between June 15 and October 31.

- Any new or previously excavated gravel material placed in the channel shall meet Caltrans’ Gravel Cleanliness Specification #227 with a value of 85 higher.

- Prior to October 31, any temporary work platforms or trestles shall be removed from the stream corridor. At no time shall any structure or fill become a barrier to the free passage of water, or the movement of fish and aquatic animals.

- If a temporary work trestle or gravel work pad is required, they shall not substantially change the flow characteristics (i.e., velocity, depth, width) of the water as it flows through the project area. No ponding of flow shall occur unless this type of ponding is typical of the area such as the habitat immediately upstream of the existing bridge structure.

- The new bridge will be constructed as a three-span bridge with the central piers located outside of the OHWM, minimizing the potential for the bridge to affect fish passage and minimizing the potential hydraulic and hydro geomorphic affects.
• Equipment and materials shall be stockpiled outside of the riparian habitat.

• Impacts to herbaceous cover will be offset by reseeding any unvegetated and impacted areas with a suitable seed mixture post construction.

• Any construction equipment operating upon work pads or trestles (if required) or adjacent to Hayfork Creek will be inspected daily for leaks. External oil, grease, and mud will be removed from equipment and disposed of properly. Spill containment booms will be maintained onsite at all times during construction operations and/or staging of equipment or fueling supplies. Fueling trucks will maintain adequate spill containment materials at all times.

• The contractor will develop and implement site-specific BMPs, a water pollution control plan, and emergency spill control plan. The contractor will be responsible for immediate containment and removal of any toxins released.

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<th>Timing/Implementation:</th>
<th>Prior to, during, and after construction</th>
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<tr>
<td>Enforcement:</td>
<td>NMFS, CDFG</td>
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<tr>
<td>Monitoring:</td>
<td>County</td>
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5.2.5 Mitigation Measure #6–Frogs

The following measures shall be implemented to avoid or minimize project-related impacts to the foothill yellow-legged frog and western tailed frog:

• Any project activities in the riverine or riparian habitat will be preceded by a preconstruction survey. Surveys will be conducted by a qualified biologist. If a foothill yellow-legged frog or western tailed frog is found, it will be moved to appropriate habitat either up or downstream of the project area.

• If a foothill yellow-legged frog or western tailed frog is encountered during instream or riparian zone construction, activities in the vicinity shall cease until appropriate corrective measures have been implemented (e.g., relocation of the frog, by a qualified biologist, to appropriate habitat either up or downstream of the project area) or it has been determined that the frog will not be harmed. Any trapped, injured, or killed frogs shall be reported immediately to the CDFG.

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<th>Timing/Implementation:</th>
<th>Prior to and during construction</th>
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<tr>
<td>Enforcement:</td>
<td>CDFG</td>
</tr>
<tr>
<td>Monitoring:</td>
<td>County</td>
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5.2.6 Mitigation Measure #7–Western Pond Turtle

The following measures shall be implemented to avoid or minimize project-related impacts to the western pond turtle:

• Western pond turtles will be protected from entanglement in project-related equipment and structures.

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<th>Timing/Implementation:</th>
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<tr>
<td>Enforcement:</td>
<td>NMFS, CDFG</td>
</tr>
<tr>
<td>Monitoring:</td>
<td>County</td>
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• The contractor will develop and implement site-specific BMPs, a water pollution control plan, and emergency spill control plan. The contractor will be responsible for immediate containment and removal of any toxins released.
Any project activities in aquatic or riparian habitat will be preceded by a pre-construction survey. Surveys will be conducted by a qualified biologist. If a western pond turtle is found it will be moved to appropriate habitat either up or downstream of the BSA. If a 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 construction impact zone by a qualified biologist.

If a western pond turtle is encountered during construction, activities in the vicinity shall cease until appropriate corrective measures have been implemented (e.g., relocation of the turtle to appropriate habitat identified by a qualified biologist, either up or downstream of the BSA) or it has been determined that the turtle will not be harmed. Any trapped, injured, or killed turtles shall be reported immediately to the CDFG.

5.2.7 Mitigation Measure #8–Little Willow Flycatcher

In addition to Mitigation Measure #4–Replacement of Riparian Habitat, the following measures shall be implemented to avoid or minimize the potential for project-related impacts to nesting little willow flycatcher:

- Grading and other construction activities, including vegetation removal should be scheduled to avoid the nesting season to the extent possible. If construction occurs outside of the breeding season, no further mitigation is necessary. If the nesting season cannot be completely avoided, the following measure shall be implemented:

  - If construction activities are conducted within the breeding season for little willow flycatcher (May 15 through August 31), a qualified biologist shall conduct a minimum of one preconstruction survey in the project area and a 250-foot buffer around the site, where accessible. The survey should be conducted no more than 15 days prior to the initiation of construction in any given area (the survey may be conducted at the same time as the preconstruction survey for the western pond turtle and foothill yellow-legged frog). The preconstruction survey will be used to ensure that no willow flycatcher nests within or immediately adjacent to the project area will be disturbed during project implementation. If an active nest is found, a qualified biologist in consultation with CDFG shall determine the extent of a construction-free buffer zone to be established around the nest until nestlings have fledged or breeding has failed, based on field verification by a qualified biologist.
5.2.8 Mitigation Measure #9–Yellow Warbler, Yellow-breasted Chat, Olive-sided Flycatcher, and Long-Eared Owl

The following measures shall be implemented to avoid or minimize the potential for project-related impacts to nesting yellow warbler, yellow-breasted chat, olive-sided flycatcher, and long-eared owl:

- Grading and other construction activities, including vegetation removal, should be scheduled to avoid the nesting season to the extent possible. If construction occurs outside of the breeding season, no further mitigation is necessary. If the nesting season cannot be completely avoided, the following measure shall be implemented:
  
  - To avoid the direct loss of any California-designated species of special concern, the County will remove vegetation outside of the nesting season. In Trinity County, the nesting season for yellow warbler, yellow-breasted chat, long-eared owl, and olive-sided flycatcher extends from March 1 through August 31. If vegetation removal is scheduled to occur within the nesting season, a preconstruction survey for all special-status birds will be conducted 15 days prior to construction activities. If an active nest is found, a qualified biologist, in consultation with CDFG, shall determine the extent of a construction-free buffer zone to be established around the nest until nestlings have fledged or breeding has failed, based on field verification by a qualified biologist.

Timing/Implementation: Prior to and during construction
Enforcement: CDFG
Monitoring: County

5.2.9 Mitigation Measure #10–Nesting Birds

If birds are observed nesting under the existing bridge, the following measure shall be implemented to avoid or minimize project-related impacts on birds nesting under the existing bridge:

- Construction activities on, and removal of, the existing bridge should be scheduled to avoid the nesting season to the extent feasible. The typical nesting season in northern California extends from March through July. Thus, if bridge demolition can be scheduled to occur between August and December, or the period before nesting begins and after nesting is complete, the nesting season would be avoided, and no impacts would be expected. If it is not possible to schedule bridge removal to avoid nesting, any existing unoccupied and inactive nests shall be removed from the existing bridge before March 1 of the construction year. Removal of empty or unfinished nests should be repeated as frequently as necessary (can be up to three times per week) to prevent nest completion. A nest exclusion device can be installed (e.g. netting or similar mechanism that keeps birds from building nests), if desired, prior to March 1 or after August 1. Any nest exclusion devices should be approved by CDFG prior to installation. Exclusion efforts should be continued until actual removal of the bridge structure.

Timing/Implementation: Prior to and during construction
Enforcement: CDFG
Monitoring: County
5.2.10 Mitigation Measure #11–Raptors

The following measures shall be implemented to avoid or minimize project-related impacts on raptors nesting in or near the vicinity of the project area:

- Vegetation removal, grading, and other construction activities shall be scheduled to avoid the breeding season to the extent practicable. The breeding season for most raptors in Trinity County generally extends from March 1 through August 31.

- If construction is to occur during the breeding season, a qualified biologist shall conduct preconstruction raptor surveys of the project site and a surrounding 300-foot buffer (where accessible) 15 days prior to the initiation of construction in any given area to ensure that no raptor nests will be disturbed during project implementation. Surveys may be conducted concurrently with other special status species requiring preconstruction surveys.

- If an active nest more than half completed is found, a construction-free buffer zone shall be established around the nest until nestlings have fledged or breeding has failed (based on field verification by a qualified biologist). The size of the buffer zone shall be determined by a qualified biologist in consultation with CDFG.

  Timing/Implementation: Prior to and during construction
  Enforcement: CDFG
  Monitoring: County

5.2.11 Mitigation Measure #12–Waters of the United States

In addition to mitigation measures #'s 2 through 4, the following measures shall be implemented to avoid or minimize the potential for project-related impacts on waters of the United States:

- To the extent practicable, the discharge of dredged or fill material into waters of the United States, including wetlands shall be avoided (this also includes waters not subject to Corps jurisdiction, but subject to RWQCB jurisdiction). However, if complete avoidance is not feasible due to the need for the placement of new piers, the following measures shall be implemented:
  - Prior to any discharge of dredged or fill material into waters of the United States, including wetlands, authorization under a Nationwide Permit shall be obtained from the Corps. For any features determined not to be subject to Corps jurisdiction during the verification process, authorization to discharge shall be obtained from the RWQCB. For fill requiring a Corps permit, water quality certification shall be obtained from the RWQCB prior to discharge of dredged or fill material.
  - Prior to any activities that would obstruct the flow of, or alter the bed, channel, or bank of any intermittent or ephemeral creeks, notification of streambed alteration shall be submitted to the CDFG; and, if required, a streambed alteration agreement shall be obtained from CDFG.
− Construction activities that will affect any water of the United States shall be conducted during the dry season to minimize erosion.

− Appropriate sediment control measures to protect avoided waters of the United States shall be in place prior to the onset of construction and shall be monitored and maintained until construction activities have ceased. Temporary stockpiling of excavated or imported material shall occur only in approved construction staging areas. Excess excavated soil shall be used on site or disposed of at a regional landfill or other appropriate facility. Stockpiles that are to remain on the site through the wet season shall be protected to prevent erosion (e.g., silt fences, straw bales).

− Any loss of riparian wetland will be mitigated for onsite (see Appendix A).

− Any monitoring, maintenance, and reporting required by the regulatory agencies (i.e., Corps, RWQCB, and CDFG) shall be implemented and completed. All measures contained in the permits or associated with agency approvals shall be implemented.

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<tr>
<td>Enforcement:</td>
<td>Corps, North Coast RWQCB, CDFG</td>
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<td>Monitoring:</td>
<td>County</td>
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### 5.3 Cultural Resources

#### 5.3.1 Mitigation Measure #13–Cultural Resources

In the event archaeological deposits are discovered during project construction, all work in the immediate vicinity of the discovery shall be stopped immediately and the Trinity County Department of Transportation shall 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. The conservation measures shall be implemented prior to re-initiation of activities in the immediate vicinity of the discovery.

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<tr>
<th>Timing/Implementation:</th>
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<tr>
<td>Enforcement:</td>
<td>Native American Heritage Commission</td>
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<tr>
<td>(NAHC), County</td>
<td>County and/or its contractor</td>
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#### 5.3.2 Mitigation Measure #14–Human Remains

If human remains are discovered during project activities, all activities in the vicinity of the find shall be suspended and the Trinity County Sheriff-Coroner shall be notified. If the coroner determines that the remains may be those of a Native American, the coroner shall contact the NAHC. Treatment of the remains shall be conducted in accordance with the direction of the County Coroner and/or the NAHC, as appropriate. Work in the immediate vicinity of the remains shall not be re-initiated until the remains have been removed from the site in accordance with the recommendations.
5.4 Geology and Soils

Implement *Mitigation Measure #2–Erosion and Sedimentation Control* to prevent degradation of water quality.

5.5 Hazards and Hazardous Materials

Implement *Mitigation Measure #3–Prevention of Accidental Spills* to prevent degradation of water quality.

5.5.1 Mitigation Measure #15–Lead-based Paint

- Lead-based paint will be removed using one of several methods approved by the Federal Environmental Protection Agency (EPA), at the contractor’s discretion. Acceptable methods include wet scraping or the use of a dustless needle gun connected to a vacuum unit with a high efficiency particulate air (HEPA) filter that empties directly into a waste container. The waste container will be properly documented and disposed of at a Class I landfill, such as the USS-Posco Industries Waste Management Unit II Landfill in Pittsburg, California (CalRecycle 2010).

Timing/Implementation: During construction  
Enforcement: County, EPA  
Monitoring: County and/or its contractor

5.5.2 Mitigation Measure #16–Wildfire Potential

- Per the requirements of Public Resources Code 4442, the County shall include a note on all construction plans that internal combustion engines shall be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire.

Timing/Implementation: Prior to and during construction  
Enforcement: County  
Monitoring: County and/or its contractor

5.6 Hydrology and Water Quality

Implement *Mitigation Measure #2–Erosion and Sedimentation Control* and *Mitigation Measure #3–Prevention of Accidental Spills* to prevent degradation of water quality.
5.7 Noise

5.7.1 Mitigation Measure #17–Construction Noise

Construction specifications shall include the following measures to reduce potential impacts associated with construction noise:

- Construction shall be limited to the hours between 7:00 AM and 7:00 PM, Monday through Saturday.

- Each internal combustion engine used for any purposed on the job site shall be equipped with a muffler of a type recommended by the manufacturer.

  Timing/Implementation: During construction
  Enforcement: County
  Monitoring: County and/or its contractor

5.8 Utilities and Service Systems

Implement Mitigation Measure #15–Lead-based Paint will be used to avoid any adverse environmental effects debris coated with lead-based paint.
Chapter 6  Report Preparation

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Connie MacGregor Carpenter  Environmental Analyst
Heather Kelly  Wildlife Biologist
Christine Hantelman  Botanist
Mike Gorman  Fisheries Biologist
Kristina Crawford  Principal Investigator/Archaeologist
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T.Y. Lin International. – Bridge Design Engineering

Chris Hodge, P.E.  Bridge Services Manager, Project Manager

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Norm Braithwaite  Principal

Taber Consultants – Geotechnical

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Chapter 7

References


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Taber Consultants. 2009. Foundation investigation - draft. Hayfork Creek Bridge on Wildwood Road, bridge no. 5C-0086, Trinity County, California. Taber Consultants. West Sacramento, California. November.


APPENDIX A

Riparian Wetland Mitigation and Monitoring Plan