

Lorenz Road Over Middle Weaver Creek Bridge (No. 05C0036) Replacement Project

Initial Study/Mitigated Negative Declaration — Public Draft

November 11, 2022

Prepared for:

Trinity County Department of Transportation Attn: David Colbeck P.O. Box 2490/31301 State Highway 3, Weaverville, CA 96093

Prepared by:

Stantec Consulting Services Inc. Connie MacGregor, Project Manager 376 Hartnell Avenue, Suite B Redding, California 96002 Phone: (530) 280-8376

Fax: (530) 222-4958 STN #2272020013

Project Information

1. Project Title: Lorenz Road Over Middle Weaver Creek Bridge

Replacement Project

2. Lead Agency Name and Address Trinity County Department of Transportation

P.O. Box 2490/31301 State Highway 3

Weaverville, CA 96093

(530) 623-1365

3. Contact Person, Phone Number/Email David Colbeck, Environmental Compliance

Specialist

(530) 623-1365 ext. 3409/ dcolbeck@trinitycounty.org

4. Project Location City of Weaverville, Trinity County, California;

Township 33 North, Range 9 and 10 West, Sections 7 and 12, *Weaverville, California*, U.S. Geological Survey quadrangle, Mount Diablo Base and

Meridian;

Assessor Parcel Numbers: 001-130-18, 001-130-19, 002-021-01, 002-021-03, 002-021-25, and 002-050-

10.

5. Project Sponsor's NameTrinity County Department of Transportation

6. General Plan Designation PF (Public Facility)

7. Zoning PF (Public Facility)

8. Description of Project

The Trinity County Department of Transportation (County) proposes to improve public safety and increase hydraulic capacity by replacing the existing bridge (No. 05C-0036) on Lorenz Road over Middle Weaver Creek (project) in Weaverville, Trinity County, California and construct the necessary roadway approach improvements. The project would be federally funded through the Federal Highway Bridge Program, which is administered by the California Department of Transportation (Caltrans) on behalf of the Federal Highway Administration. Caltrans is responsible for federal oversight of the project, which would be locally administered by the County. The Middle Weaver Creek bridge is County owned and maintained.

The proposed new bridge would be a single-span concrete slab-type bridge, slightly wider and longer than the current bridge and aligned in the existing alignment. The new approach roadways on both sides of the new bridge would be slightly wider than the existing. The north abutment would have wingwalls extending to existing retaining structures, including a gabion wall at the northeast corner and a culvert wingwall—this culvert conveys Ten Cent Gulch under State Route (SR) 299—at the southeast corner. The replacement bridge design would be context sensitive due to it being located in a designated historic district and because of its adjacency to state and local historic parks. The new bridge would have architectural features that would complement the visual and historic character of the surrounding historical area. Aesthetic features and designs will be determined by the County and included in the final bridge design. Possible options might include form liner relief textures, concrete surfaces stains, and decorative railing treatments.

9. Surrounding Land Uses and Setting

Land uses in and around the project area include the Weaverville Historic Downtown (a historic district listed in the National Register of Historic Places [NR#71000209]), Trinity County right-of-way (ROW), Caltrans ROW including SR 299, Middle Weaver Creek, the Joss House State Historic Park, and the Jackson Memorial Museum/Trinity County Historical Park.

10. Other Public Agencies Whose Approval May Be Required (e.g., permits, financing approval, or participation agreement.)

- Federal Highway Administration
- U.S. Army Corp of Engineers (San Francisco District)
- U.S. Fish and Wildlife Service (Yreka Fish And Wildlife Office)
- California Department of Fish & Wildlife (Region 1)
- California State Regional Water Quality Control Board (North Coast Region)
- California Department of Transportation (District 2)
- Trinity County Planning Department

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Acronyms and Abbreviations

°F degrees Fahrenheit
ADT averaged daily traffic
APE Area of Potential Effects

AQMD Air Quality Management District

BA/EFHA Biological Assessment/Essential Fish Habitat Assessment

BSA biological study area
BMP Best Management Practice

Caltrans
California Department of Transportation
CDFW
California Department of Fish and Wildlife
CEQA
California Environmental Quality Act

County Trinity County Department of Transportation

dBA decibels A-weighted

ESU evolutionarily significant unit

GHG greenhouse gas IS Initial Study

MMRP Mitigation Monitoring and Reporting Program

MND Mitigated Negative Declaration

NAHC Native American Heritage Commission
NEPA National Environmental Policy Act
NMFS National Marine Fisheries Service

NOx oxides of nitrogen PM particulate matter

PM₁₀ particulate matter 10 microns or less PM_{2.5} particulate matter 2.5 microns or less

project Lorenz Road Over Middle Weaver Creek Bridge Replacement Project

Q100 probable 100-year flood ROG reactive organic gases

ROW right-of-way

RSP rock slope protection

RWMMP Riparian Wetland Mitigation and Monitoring Plan

RWQCB Regional Water Quality Control Board SONCC Southern Oregon/Northern California Coast

SR State Route

SSC species of special concern
USACE U.S. Army Corps of Engineers

1. INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study (IS) that summarizes the technical studies prepared for the proposed Lorenz Road Over Middle Weaver Creek Bridge Replacement Project (project). It includes an evaluation of potential environmental impacts that could result from project implementation and provides justification for a Mitigated Negative Declaration (MND) for the project. This document was prepared in accordance with the current California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., and the State CEQA Guidelines (14 California Code of Regulations 1500 et seq.) that require all state and local government agencies to consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. Mitigation measures are proposed to avoid or minimize any significant impacts that are identified.

1.2 LEAD AGENCY

The Lead Agency is the public agency with primary responsibility for carrying out or approving a project. The Trinity County Department of Transportation (County) is the CEQA Lead Agency. The project would receive funding through federal and state sources and would require approvals from Federal Highway Administration and California Department of Transportation (Caltrans). The Federal Highway Administration 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

The technical studies listed below are available for review at the County. Please contact:

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

Technical studies conducted for this project are available to the public upon request (with the exception of the Archeological report) include:

- Archeological Survey Report/Historic Property Survey Report (This report is confidential and available to qualified readers only)
- Natural Environment Study Report
- Biological Assessment/Essential Fish Habitat Assessment Report
- Delineation of Potential Waters of the United States Report
- Visual Resources Impact Assessment Report
- Section 4(f) De Minimis Finding

1.4 DOCUMENT ORGANIZATION

The IS consists 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 project, tentative schedule, required permit approvals, and project alternatives.

Chapter 3.0 – Environmental Impacts and Mitigation Measures describes the environmental impacts of the project using 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 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.

2. PROJECT DESCRIPTION

2.1 LOCATION

Lorenz Road at the Middle Weaver Creek bridge (No. 05C-0036) is located just west of State Route (SR) 299 and provides access across Middle Weaver Creek to Lee Fong Park managed by the Weaverville/Douglas City Parks and Recreation District. Additionally, the project is located in the Weaverville Historic Downtown (a historic district listed in the National Register of Historic Places [NR#71000209]) and adjacent to the Joss House State Historic Park and the Jackson Memorial Museum/Trinity County Historical Park. The project study area encompasses 1.79 acres, extending approximately 850 feet along Lorenz Road over Middle Weaver Creek as shown on the Weaverville, California U.S. Geological Survey 7.5-minute topographic quadrangle (Township 33 North, Range 9 West, Section 7/Township 33 North, Range 10 West, Section 12, Humboldt Base and Meridian: latitude 40.731038° North by longitude -122.940309° West (Figure 1).

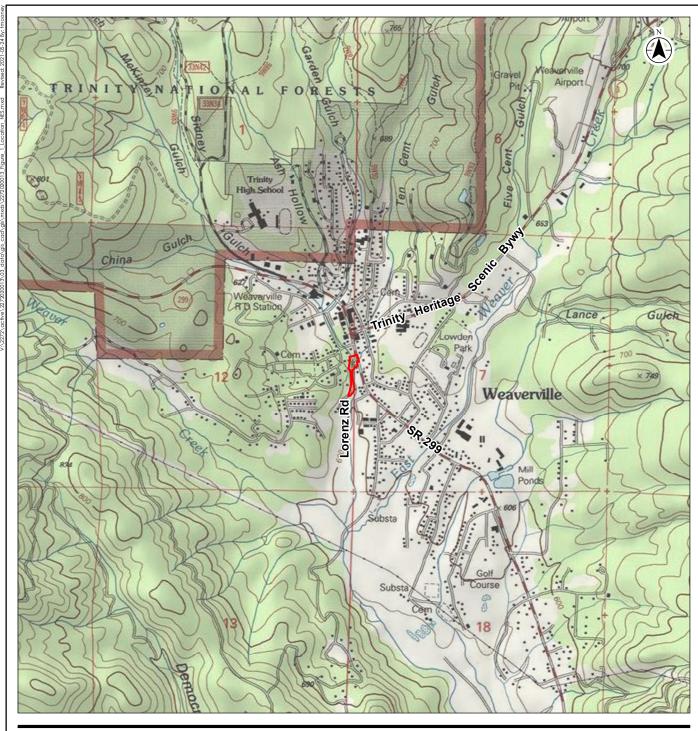
The alignment for the proposed new bridge and roadway approaches would follow the existing alignment, but with minor encroachments requiring the take of additional right-of-way (ROW) on both sides of the southern bridge approach. The majority of the project study area corresponds to an existing Trinity County ROW easement through portions of adjacent parcels (Figure 2). Assessor Parcel Numbers included in the project area are 001-130-18, 001-130-19, 002-021-01, 002-021-03, 002-021-25, and 002-050-10.

2.2 EXISTING FACILITY CONDITIONS

Lorenz Road is classified as an Off-System Local Road by Caltrans. The Middle Weaver Creek bridge is located on Lorenz Road less than 75 feet south of SR 299 (which is also Main Street) in the Historic District of Weaverville. The relatively narrow paved road runs for a length of approximately 750 feet to the south of the bridge before intersecting with Bremer Street, which also intersects SR 299 east of the Lorenz Road/SR 299 intersection. The bridge's north approach tapers from approximately 15 feet at the bridge to nearly 28 feet at the intersection of SR 299. The bridge's south approach roadway varies in width from 16 feet to 20 feet. The current average daily traffic (ADT) is about 125 vehicles per day with a future ADT of 134 ADT (projected to 2035). The design speed for the proposed bridge would remain at the current 20 miles per hour.

2.3 PROJECT PURPOSE AND NEED

The purpose of this project is to provide a safe crossing of Middle Weaver Creek for the public by replacing the existing, structurally deficient bridge with a structure that meets current acceptable standards. Constructed in 1950, the existing single-lane bridge is too narrow for the daily traffic volumes in addition to pedestrian usage. The bridge barriers do not meet current safety standards. As indicated in the 2013 maintenance inspection reports, the rail car bridge girders have section loss of the web and flanges due to rust, significant reflective cracking in the AC deck overlay, as well as undetermined foundations which have local scour holes. These factors resulted in element codes that qualified this structure as structurally deficient. The latest Caltrans Bridge Inspection Report completed in 2019 evaluated the bridge with a sufficiency rating of 37.8.





☐ Biological Study Area (1.71 acres)

2.000 1 inch = 2,000 feet (At page size of 8.5"x11")



Project Location Trinity County, California

2272020013 Prepared by TM on 2021-05-24

Client/Project
Trinity County Department of Transportation Lorenz Road over Middle Weaver Creek Bridge Replacement Project

Project Location and Vicinity

Notes

1. Coordinate System: NAD 1983 StatePlane California I FIPS 0401 Feet

2. Base map: ESRI USA Topo Maps web mapping service

3. Public Land Survey: 133N, 09W, Sec. 7, 133N, 10W, Sec. 12

4. USGS 7.5 Quad: Weaverville 1982

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☐ Biological Study Area (1.71 acres)

Design Features

Bridge Abutments

- Bridge
- Bridge Drainage
- Curb, Gutter, Sidewalk
- Cut and Fill
- Pavement Edges
- Pavement Marker for Sidewalk
- Retaining Wall
- --- Rock Slope Protection
- Temporary Work Platform

Notes

1. Coordinate System: NAD 1983 StatePlane California I FIPS 0401 Feet

2. Aerial imagery: GigitalGlobe 2018-10-19



Client/Pioject
Trinity County Department of Transportation
Lorenz Road over Middle Weaver Creek
Bridge Replacement Project

Project Design Features

The current Lorenz Road at Middle Weaver Creek Bridge does not meet the federal or local design standards and is not adequate for multi-modal traffic using the bridge. The proposed project is intended to expand the road to accommodate the volume of vehicle and pedestrian traffic that uses the road, expand the shoulders and sidewalks along the corridor, and add external barriers to each side of the bridge.

2.4 PROPOSED PROJECT

Replacement of Existing Structure

The proposed new bridge would be a single-span concrete slab-type bridge, slightly wider and longer than the current bridge and aligned in the existing alignment. The new approach roadways on both sides of the new bridge would be slightly wider than the existing. The north abutment would have wingwalls extending to existing retaining structures, including a gabion wall at the northeast corner and a culvert wingwall—this culvert conveys Ten Cent Gulch under SR 299—at the southeast corner. The replacement bridge design would be context sensitive due to it being located in a designated historic district and because of its adjacency to state and local historic parks. The new bridge would have architectural features that would complement the visual and historic character of the surrounding historical area. Aesthetic features and designs will be determined by the County and included in the final bridge design. Possible options might include form liner relief textures, concrete surfaces stains, and decorative railing treatments.

The proposed roadway profile includes a sag vertical curve at the southern conform of Lorenz Road leading into a crest vertical curve at the bridge. The profile then transitions to a constant negatively sloping grade to the north, over the bridge, and concludes with a sag curve before intersecting with SR 299. The northern sag curve will facilitate the conform with a driveway and SR 299. In addition, the bridge is located in a floodway and special considerations will need to be made to ensure that there are no changes in water surface elevations that could potentially affect the surrounding historical structures. The existing bridge depth is approximately 48 inches and hydraulic analysis shows the water surface elevation to have insufficient freeboard for the 100 year design storm. The proposed bridge would raise the profile of the road over Middle Weaver Creek and meet the design freeboard criteria. Scour countermeasures including a permanent retaining wall on the channel bank near the southwest corner of the bridge and installation of rock slope protection in the channel and along the bank at both bridge abutments would require work in the creek. Bridge work limits around the structure would extend 30 feet either side of the bridge centerline. Owing to the vibration sensitive historic properties close to the project, the project would use cast-in drilled hole piles as opposed to driven concrete piles. The bridge railings would be top-mounted Caltrans Concrete Barrier Type 85 and Type 85SW. No approach guardrail is proposed.

No designated disposal or borrow sites would be required to complete the project. All construction debris, including wash water and removed paint, would be disposed of per state and county codes.

Demolition of the existing bridge will be performed in accordance with the Caltrans Standard Specifications modified to meet environmental permit requirements. All concrete and other debris resulting from the demolition of the existing bridge would be removed from the project site and disposed of by the contractor. The construction contractor will be responsible for preparing a bridge demolition plan that conforms to the permit requirements.

It is anticipated that excavators, dozers, cranes, dump trucks, concrete trucks, concrete pumps, and drill rigs may be required to construct the new crossing.

Right of Way

Construction would require minor permanent takes of additional ROW to accommodate the bridge and approach roadway from both adjacent properties. Encroachments into the state parks parcel for temporary construction easements would be required and additional land rights for Lorenz Road may also be required. Encroachment into the Caltrans ROW would be under a Caltrans Encroachment Permit. Construction encroachments on adjacent County-owned parcels will be coordinated with the responsible County departments.

Utilities

There are existing utility poles carrying overhead electric (Trinity Public Utilities District) and communication (Verizon) lines located along Lorenz Road and across the stream. The Trinity Public Utilities District overhead line carries power service to the Jackson Memorial Museum/Trinity County Historical Park's picnic area downstream from the bridge. The service line is attached to a tree that would be removed as part of the project. The Verizon line that runs along the northwest side of Lorenz Road may be in conflict with construction equipment. It is anticipated that the overhead utilities would need to be relocated or temporarily deactivated due to low vertical clearance to avoid conflicts with construction equipment.

Other Construction Activities

Temporary Detour

Lorenz Road would be closed at the bridge site for the duration of construction, which is anticipated to be limited to one construction season. Access to the Joss House parking lot northwest of the bridge would be maintained. Bremer Street, south of the SR 299/Lorenz Road intersection would remain open, providing access to areas south of the bridge, including Lee Fong Park.

Construction Access and Contractor Staging

Existing roads would be used by the contractor to access the project site from both embankments and construction staging would occur in the existing Lorenz Road corridor on both sides of the bridge.

Temporary Stream Diversion

Depending on the flows during construction, temporary stream diversion may be required. The diversion system would likely involve constructing a temporary dam upstream of the bridge construction activities and diverting the water through a series of pipes, sized to handle the anticipated flows, that run parallel down the center of the stream and discharge downstream of the project study area. A stream diversion plan will be developed during the final design and will be consistent with environmental commitments and permit requirements.

Construction of bridge abutment foundations may require specialized construction techniques for excavation and dewatering. This could involve water control through pumping, cofferdams, or a seal course. Shoring of the hillside at the northwest bridge corner would also be an important constructability consideration during final design. The design of the southern abutment and wingwall would intentionally limit disturbance to this hillside. Conventional shoring may be required such as cantilevered sheet piles, but the need for extensive temporary shoring would be avoided.

Falsework

Falsework consisting of timber posts and steel beams would be required in the stream to temporarily support concrete forms until the structural concrete is sufficiently cured. Construction in the stream may be subject to allowable work period windows for both environmental and flood control considerations. Based on similar projects, the construction window for work in the stream would likely be restricted to the months of May through October.

2.5 CONSERVATION MEASURES

The following conservation measures and best management practices (BMPs) will be followed during project construction to avoid or minimize potential environmental impacts:

Conservation Measure #1: Air Quality/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:

- 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.
- Equipment or manual watering shall be conducted on all stockpiles, dirt/ gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.

Conservation Measure #2: Erosion and Sedimentation Control

Erosion control measures shall be implemented during construction of the project. These measures shall conform to the provisions in Section 21 of the Caltrans Standard Specifications (Caltrans 2018) and the special provisions included in the contract for the project. Such provisions include the preparation of a Storm Water Pollution Prevention Plan or Water Pollution Control Program depending on size of the area of disturbance, these plans would describe and illustrate the use of BMPs to be implemented at the project site.

Erosion control measures to be included in the Storm Water Pollution Prevention Plan, Water Pollution Control Program, or to be implemented by the County include the following:

- Activities that may increase the erosion potential in the biological study area (BSA) shall be restricted to the relatively dry summer and early fall period to minimize the potential for rain events to transport sediment to nearby surface waters (i.e., Middle Weaver Creek, Ten Cent Gulch). Therefore, any in-channel construction would be conducted between June 1 and October 31; upland construction may occur throughout the year if work activities comply with the conservation and avoidance and minimization measures identified herein for the protection of sensitive or special-status plant or animal species. For construction activities that must take place during the late fall, winter, or spring, 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 installed.
- Areas where vegetation needs to be removed shall be identified in advance of ground disturbance and limited to only those areas that have been approved by the County. Exclusionary fencing would be installed around areas that are not to be disturbed.

- Within 10 days of completion of construction in areas where subsequent ground disturbance would not occur for 10 calendar days or more, 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 or secured plastic sheeting, as outlined in the Storm Water Pollution Prevention Plan, shall be applied to all exposed areas upon completion of the day's activities. Soils shall not be left exposed during the rainy season.
- Suitable BMPs, such as silt 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. Further, sediment built up at the base of BMPs would be removed before BMP
 removal to avoid any accumulated sediments from mobilizing post-construction.
- 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. Any spoil sites shall be graded and vegetated with native species to reduce the potential for erosion.
- Sediment control measures shall be in place prior to the onset of the rainy season and would be monitored and maintained in good working condition until disturbed areas have been revegetated with native species.

Conservation Measure #3: Prevention of Accidental Spills

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

- A site-specific spill prevention plan would be completed and implemented for all potentially hazardous materials. This would include containment methods for any use of concrete or other hazardous materials according to Caltrans Standard Specifications (2018) Section 14-11.03. The plan would include the proper handling and storage of all potentially hazardous materials including concrete, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms would be constructed to prevent spilled materials from reaching surface water features.
- Equipment and hazardous materials would be stored at least 50 feet away from all waterways.
- Vehicles and equipment used during construction would receive proper and timely
 maintenance to reduce the potential for mechanical breakdowns leading to a spill of
 materials. Maintenance and fueling would be conducted in an area at least 50 feet away from
 waterways or within an adequate fueling containment area.
- For removal of the existing bridge, it would be required to submit a debris containment and
 collection plan per Caltrans Standard Specifications (2018) section 14-11.13B (2). The plan
 must include shop drawings of containment systems complying with section 59-2.01C (2) and
 include the name and location of the disposal facility that would accept any hazardous waste
 if determined to be present.

Conservation Measure #4. Protection 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 within 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 to riparian vegetation outside of the construction area are minimized.
- Riparian habitat areas temporarily disturbed by construction shall be replanted using native riparian species that have been recorded in Trinity County in the vicinity of the project area, using a replacement planting ratio and a monitoring and contingency program to ensure successful restoration of functional riparian vegetation in the project area, including interplanting of areas to be covered by rock slope protection (RSP). Details of planting methods, monitoring, and contingency actions will be specified in a Riparian Wetland Mitigation and Monitoring Plan (RWMMP) to be submitted to National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW) for review and approval prior to beginning construction.
- Non-native tree species removed during project construction will be replaced with native riparian species to the extent practicable.
- Revegetation monitoring will be implemented in compliance with regulatory permit conditions and be initiated immediately following completion of the planting and will be described in a RWMMP to be reviewed and approved by NMFS and CDFW. It is anticipated that this plan would provide for a five-year monitoring and contingency program to ensure successful restoration of riparian vegetation.

Conservation Measure #5: Prevention of Spread of Invasive Species

The following measures shall be implemented to prevent the spread of invasive species:

- All equipment would be weed-free prior to entering the BSA.
- Any vegetation removed for construction would be properly disposed of to prevent the spread of existing invasive species.
- If project implementation calls for mulches or fill, they would be weed free.
- Any seed mixes or other vegetative material used for re-vegetation of disturbed sites would consist of locally adapted native plant materials to the extent practicable.
- Any gravels or materials used/placed instream would be new, from a local source, or properly disinfected or cleaned prior to installation.
- Any equipment (including boots/waders) and construction equipment shall be properly
 disinfected or cleaned according to guidance provided by the State of California Aquatic
 Invasive Species Management Plan (California Department of Fish and Game 2008) prior to
 in-water work to prevent the spread of aquatic invasive species.

Conservation Measure #6: Tree Removal

The following measures shall be implemented to reduce potential impacts on trees in the project area:

 Through careful preconstruction planning tree removal would be limited to the minimum amount necessary to facilitate demolition of the old bridge and construction of the new bridge.

Conservation Measure #7: Cultural Resources and Human Remains

Surface surveys are not infallible and buried resources may be overlooked. Implementation of the following conservation measures will avoid or minimize the potential for significant effects to newly discovered resources:

- Per Caltrans Exhibit 5.1 in Volume 2 of the Standard Environmental Reference, it is Caltrans' policy to avoid cultural resources whenever possible. If buried cultural materials are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the undertaking changes to include areas not previously surveyed. Per Attachment 4 of the Section 106 Programmatic Agreement, isolated prehistoric or historic finds of fewer than three items per 100 square meters are properties exempt from evaluation.
- If human remains are discovered during project activities, all activities near the find will be suspended and the Trinity County Sheriff–Coroner will be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission (NAHC). Treatment of the remains will be conducted in accordance with the direction of the County Coroner and/or NAHC as appropriate.

Conservation Measure #8: Greenhouse Gas Emissions

Construction contract documents include provisions to minimize project-related greenhouse gas (GHG) emissions. The following measures will be implemented to reduce construction-related GHG emissions:

- Reuse and recycle construction and demolition waste including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard.
- Ensure that the project enhances, and does not disrupt or create barriers to, non-motorized transportation (e.g., bicycles, pedestrians) through proper pre-construction planning.
- Protect existing trees to the extent possible and encourage the planting of new trees.

Conservation Measure #9: Wildfire Potential

Construction contract documents include measures to minimize project-related potential for wildfire ignition:

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

Conservation Measure #10: Construction Noise

Construction contract documents include provisions to minimize project-related noises. The following measures will be implemented to reduce construction-related noises generated:

- Construction activities (excluding activities that would result in a safety concern to the public
 or construction workers) will be limited to between the daylight hours of 7:00 A.M. and 7:00
 P.M., Monday through Friday, and 8:00 A.M. and 5:00 P.M. on Saturdays. Construction
 activities will be prohibited on Sundays and federal/state recognized holidays.
- Construction equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers in accordance with manufacturers' recommendations.
- When not in use, motorized construction equipment will not be left idling for more than 5 minutes.
- Stationary equipment (generators, compressors, etc.) will be located at the furthest practical
 distance from nearby noise-sensitive land uses. If necessary, noise attenuation measures
 sufficient to achieve compliance with the Trinity County General Plan Noise Element (Trinity
 County 2003) will be implemented.

2.6 TENTATIVE SCHEDULE

Construction would require one season to complete. It is anticipated that construction would occur between May 1, 2023 and October 31, 2023 pending completion of the CEQA and NEPA environmental review processes, funding availability, and receipt of any required resource agency permits and approvals.

2.7 REQUIRED PERMITS AND APPROVALS

The following permits will be required to implement the project:

- U.S. Army Corps of Engineers San Francisco District: Section 404 Nationwide Permit 14 (Linear Transportation Projects)
- U.S. Fish and Wildlife Service Pacific Southwest Region (Yreka Fish And Wildlife Office):
 Federal Endangered Species Act Compliance
- Caltrans Encroachment Permit
- Caltrans National Environmental Policy Act Determination (Categorical Exclusion [pursuant to 23 CFR 221.117(c)] issued March 17, 2021)
- California Department of Fish and Wildlife Region 1: Section 1602 Streambed Alteration Agreement
- North Coast Regional Water Quality Control Board: Section 401 Water Quality Certification
- Trinity County CEQA Notice of Determination to adopt the Initial Study/Mitigated Negative Declaration

2.8 PROJECT ALTERNATIVES

Alternative 1 – Short Span, High Skew

Alternative 1 is a single-span bridge structure of 52-foot length supported on cast-in-drilled-hole piles. Bridge abutments for this alternative would be skewed to roughly match the stream. The proposed replacement bridge is on a curved alignment centered just downstream of the exiting bridge centerline. Alternative 1 was not chosen because of more challenging constructability, future channel

scour concerns, more foundation piles, wet foundation excavation within the channel, and tall temporary shoring at the northwest corner.

No Project Alternative

In addition to the proposed project, the County also considered a "No Project" alternative in its evaluation, pursuant to CEQA. Under the No Project alternative, the County would not proceed with the replacement of the existing Middle Weaver Creek bridge. However, Caltrans determined the existing bridge to be structurally deficient. Implementation of the No Project alternative could result in future public safety issues associated with its structural integrity.

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 to reduce potential impacts to a less-than-significant level. A discussion of cumulative impacts is included at the end of this chapter.

Addressed in this section are the following 20 environmental categories and mandatory findings of significance:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality

- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

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

Regional Setting

The dominant landform in the project study area and vicinity is the mountain valley. The relatively flat topography of the landform on which Weaverville is located is entirely surrounded by steep, mountainous terrain, including the dramatic rise of the Trinity Alps/Salmon Mountains to the northwest. The project area is located within the Weaver Creek-Trinity River watershed and the Weaver Creek subwatershed. Although the project study area is in the valley, several deeply incised drainages and gulches are mapped in and near the area. The confluence of Ten Cent Gulch, an

intermittent tributary to the perennial Middle Weaver Creek, is in the project study area. The southern part of Lorenz Road is subject to flooding during extreme weather events, while the northern part, near the bridge is aligned through forested uplands with some hillsides to the west.

Local Setting

The project is in the urbanized boundaries of the community of Weaverville and immediately adjacent to the SR 299 highway corridor, a major east/west route. Despite the presence of human-made landscape features throughout the project study area and vicinity, the Middle Weaver Creek and Ten Cent Gulch channels have retained substantial montane riparian vegetation. Most of the southern part of the project study area has been disturbed by recreational development, roadways, and historic homesteading. Natural land cover in the undeveloped areas is primarily annual grassland, dominated by weedy species such as yellow star-thistle (*Centaurea solstitialis*) and hairy chess (*Bromus commatatus*).

Climate

The regional climate is characterized as Mediterranean with cool, wet winters and hot, dry summers. Precipitation in the region primarily occurs as rain and snowfall. The average annual rainfall is approximately 35.5 inches, and the average annual snowfall is approximately 22.3 inches. Precipitation typically occurs between November 1 and April 30. The project study area, which typically exhibits a nine-month growing season from February 1 through October 31, is categorized as thermic. Most herbaceous growth occurs during spring and ceases as soil moisture depletes in early summer. Air temperatures range from an average January high of 47.3° Fahrenheit (°F) to an average July high of 94.1° F. The annual average high temperature is 70° F (Western Regional Climate Center 2018).

Existing Land Uses

Developed areas in the project area and vicinity are influenced by current land uses. The project is in the Weaverville Historic Downtown, which is a historic district listed in the National Register of Historic Places [NR#71000209]), near the Joss House State Historic Park and the Jackson Memorial Museum/Trinity County Historical Park. The state park is north of the bridge and contains two buildings at the north end of its parcel including the Joss House and a visitors' center. The Joss House building is the only contributor to the Weaverville Historic District on the state park's property. The county historical society's museum property is southeast of the bridge and contains six buildings: the main museum, blacksmith/tin shop, ditch tender's cabin, carriage barn, stamp mill, and a small residence. The property also has an outdoor exhibit area with mining equipment and a small picnic area north of the main museum building and near the Middle Weaver Creek bridge. The segment of Lorenz Road between its intersection with SR 299 and Lee Ranch House Visitors Center (approximately 525 linear feet) south of the bridge is paved but narrow with occasional pullouts to allow for two-way traffic. Near the visitors' center, the payement is expanded to create parking for both the center and farther to the south Lee Fong Park recreational facilities (e.g., frisbee golf, walking) managed by the Weaverville/Douglas City Parks and Recreation District. Bremer Street, which is the southern-most boundary of the project study area, is a two-lane paved road intersecting with Lorenz Road just north of the Lee Fong Park parking lot. The Lee Fong Ranch House Visitors Center is located immediately west of the large parking area that would be used for contractor staging. Varying amounts of vegetation buffer views of Lorenz Road from the parks and visitors center throughout the project study area.

There is only one private residence located along Lorenz Road. A small single-family house, about 165 linear feet southeast of the bridge is only about 12 feet away from the paved edge of Lorenz Road. Several single-family homes sit on the ridge to the west of Lorenz Road, but these are not

accessed via Lorenz Road and are buffered from the project study area by elevation and relatively dense tree stands.

Lands immediately adjacent to the project study area are zoned as Public Facility (Trinity County 2020) and are either State or County government owned.

Topography

Elevations in the project area range from approximately 2,015 to 2,030 feet. The primary topographic feature in the project area is Middle Weaver Creek, which flows in a southernly direction towards the main fork of Weaver Creek. Topography in the project area is nearly level.

Hydrological Setting

Middle Weaver Creek and Ten Cent Gulch are the primary hydrologic features in the project study area. Hydrology in the study area is provided by precipitation, sheet flow, groundwater, and snow melt. Drainage in the study area is generally north to south, towards the main fork of Weaver Creek, approximately 0.5 mile south of the study area. Weaver Creek eventually drains into the Trinity River approximately 6 miles south of the study area. The Trinity River is a tributary to the Klamath River which ultimately drains into the Pacific Ocean.

Soils

Two soil map units described in *Soil Survey of Trinity County, California, Weaverville Area* occurs in the project area (Natural Resources Conservation Service 2020).

Atter-Dumps, dredge tailings-xerofluvents complex, 2 to 9 percent slopes. This is a hydric, well-drained soil formed in alluvium. The depth to a restrictive layer is greater than 80 inches.

Urban land-xeralfs complex, 5 to 30 percent slopes. This is a non-hydric, well-drained soil formed in alluvium. The depth to a restrictive layer is greater than 80 inches.

Geology

The project study area is located within the Klamath mountains' geomorphic province. This province encompasses the Klamath Mountains, which have rugged topography reaching 6,000 to 8,000 ft above sea level and is bounded by the Cascade Range to the east, the Coast Ranges to the west, the Central Valley to the south, and the Oregon border to the north. The Klamath Mountains are considered to be a northern extension of the Sierra Nevada Mountains as they are composed of west-facing accreted terrane of oceanic crust, volcanic arcs, and mélange, which are intruded by plutons.

The site is shown as underlain by Quaternary aged Alluvium along the stream channel. Miocene to Oligocene age Weaverville Formation rock is mapped underlying the surrounding hills and likely underlies the project study area at depth (Irwin 2009). These units are described as:

- Alluvium (Qal, Holocene, and Pleistocene) Sand, Silt, and gravel in beds of present-day streams and on low terranes related to present-day stream. Includes debris from placer mining and dredging for gold.
- Weaverville Formation (Tw, Miocene and (or) Oligocene) Undivided continental sedimentary rocks similar to chiefly pebble and cobble conglomerate; generally, poorly bedded and weakly indurated; some interbeds of sandstone and mudstone that locally

contain sparse fossil plants (i.e., Twu); and/or chiefly sandstone, mudstone, and claystone; some tuffaceous beds; locally, contains well-preserved fossil plants (i.e., Twl).

Vegetation Community Types

Habitat communities in the project study area were classified based on habitat descriptions provided in *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988) and the results of the field survey. The habitat types in the project study area include annual grassland, barren, urban, riverine, and montane riparian. Descriptions of these habitats are provided below.

Annual Grassland

Annual grassland habitat occurs in the southeastern portion of the study area, along the edge of Lorenz Road. Vegetation in this habitat includes hairy chess (*Bromus commutatus*), wild oat (*Avena sativa*), Slim oat (*Avena barbata*), and yellow star-thistle (*Centaurea solstitialis*).

Barren

Barren habitat occurs as dirt and paved roads and their associated road shoulders throughout the study area. Vegetation is usually not present, although sparse opportunistic grasses and forbs, or weedy species may occur.

Urban

Urban habitat occurs as a small park in the northeast portion of the study area. Vegetation includes mowed grass, American sweetgum (*Liquidambar styraciflua*), English ivy (*Hedera helix*), and common periwinkle (*Vinca minor*).

Riverine

Riverine occurs in the study area as perennial stream in Middle Weaver Creek and as an intermittent stream in Ten Cent Gulch. Riverine habitat is dominated by run and riffle areas with cobble, gravel, and sand substrates. Within the study area, the creek channel has low sinuosity, and is homogenous, with little habitat complexity (i.e., no large woody debris). During the wet winter months, the creek channel is typically flowing; however, during the summer, water in the channel is typically reduced and is composed of standing pools. Vegetation occurs within the active stream channel as watercress (*Nasturtium officinale*).

Montane Riparian

Montane riparian habitat occurs on either side of the Middle Weaver Creek and Ten Cent Gulch. Vegetation in this habitat includes Oregon ash, white alder, Spearmint (*Mentha spicata*), black locust (*Robinia pseudoacacia*), Bolander's sedge (*Carex bolanderi*), and Himalayan blackberry (*Rubus armeniacus*).

3.2 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

	Potentially Significant Impact	Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
I. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista?				\boxtimes
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
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 areas or resources within the project area. The project consists of replacing the Middle Weaver Creek bridge and Lorenz Road approaches with similar structures and would be constructed in a manner consistent with the existing aesthetic.
- b) Less-than-Significant Impact. Lorenz Road is not designated as a scenic highway; however, SR 299 is eligible for listing as a State-designated scenic highway (Caltrans 2021). Despite being aligned through a historic district, no historic structures or buildings would be impacted, and the visual character of views would remain unchanged. Removal of montane riparian vegetation would be limited and localized to allow for the new bridge alignment. Vegetation removal impacts would be minimal, decreasing over time as vegetation re-establishes and viewers (e.g., recreationists, tourists, residents) acclimate to the changes associated with the new bridge and its approaches. Project impacts on existing scenic qualities would be less than significant.
- c) Less-than-Significant Impact. The project was designed to minimize impacts on visual resources and to be consistent with the existing aesthetic to the extent practicable. The proposed use of the existing bridge and roadway alignments and low structure profile would retain the qualities of the natural viewshed. Therefore, the project's impact on existing visual character and quality of existing views would be less than significant.
- d) Less-than-Significant Impact. The project would temporarily increase the potential for glare emanating from the project study area, in particular from the parking lot that would be used for contractor staging, during construction due to the presence of construction equipment. The minor removal of vegetation in a densely vegetated area would not increase the potential for glare from project area surfaces. The project would not introduce any new light sources or materials prone to glare. Because it would follow the existing alignment, headlights of vehicles traveling through the area would be buffered by surrounding vegetation, topography, and the

limited number of sensitive receptors (e.g., residences) in line with the road. Project impacts from light or glare would be less than significant.

Mitigation Measures

No project-specific mitigation is required under this subject.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	
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 (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project 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:				
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i	Significant Impact ermining wheth the California ament of Conseng whether implies may refer to te's inventory cent project; and alifornia Air Res	Potentially Significant with Mitigation Impact with Mitigation Incorporated ermining whether impacts to a the California Agricultural Larment of Conservation as an one of whether impacts to forest raises may refer to information of te's inventory of forest land, i ent project; and forest carbon elifornia Air Resources Board.	Potentially Significant with Mitigation Impact Primining whether impacts to agricultural research the California Agricultural Land Evaluation ament of Conservation as an optional modeling whether impacts to forest resources, includies may refer to information compiled by the enterior in the project; and forest carbon measurement alifornia Air Resources Board. Would the product of the project in the project	

Discussion of Impacts

- a) **No Impact.** No designated farmlands occur in the project area or vicinity (California Department of Conservation 2021). The project would have no impact on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.
- b) No Impact. The project area and vicinity are not designated under Williamson Act lands or agricultural uses (California Department of Conservation 2012). The project would have no impact on zoning for agricultural land uses.
- c) **No Impact.** The project would not cause rezoning of forestland, timberland, or timberland zoned for timber production. The project area is not zoned for timber production or as forest land (Trinity County 1988).

- d) **No Impact.** The project area does not include any designated forest land (Trinity County 1988). The project would not convert any forest land to non-forest uses and would not result in the loss of forest lands in Trinity County.
- e) No Impact. The project would have no additional direct or indirect impacts on farmland.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
III. AIR QUALITY — Where available, the significance criteri management or air pollution control district may be relied upon project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?				
c) Expose sensitive receptors to substantial pollutant concentrations?				
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			\boxtimes	

Discussion of Impacts

Less-than-Significant Impact. Trinity County is in the North Coast Air Basin. Currently, Trinity a) County is designated as "unclassified" or "attainment" for all federal and state ambient air quality standards, including ozone, particulate matter (PM) 2.5 and PM10 (i.e., fine airborne particles that are less than 2.5 microns and less than 10 microns in diameter, respectively), carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead (California Air Resources Board 2021a). The operation of project construction equipment would be contained within localized areas and emissions would be temporary (i.e., confined to short-term grading and construction activities). Temporary emissions from construction equipment may include reactive organic gases (ROG), oxides of nitrogen (NOx), and carbon monoxide. Specifically, ROG and NOx emissions are associated with construction activity vehicle trips, delivery of materials, and construction equipment exhaust. Additionally, earth moving activities could increase localized levels of fugitive dust and PM, including PM2.5 and PM10. Localized PM is generated during site grading, excavation, and exhaust from construction equipment. However, equipment used for construction and operation of the project will conform to Caltrans Standard Specifications and to the rules and regulations of the North Coast Unified Air Quality Management District (AQMD). The project would not conflict with or obstruct implementation of the current North Coast Unified Air Quality Management District Particulate Matter (PM10) Attainment Plan (North Coast Unified AQMD 1995) or any other applicable air quality plan. Temporary emissions resulting from the project would not exceed state or national Ambient Air Quality Standards (California Air Resources Board 2021b). Conservation Measure #1—Air

Quality/Dust Control (described in Section 2.5) will further reduce air quality impacts; the project's air quality impacts will be less than significant.

- b) Less-than-Significant Impact. Although Trinity County is designated as "unclassified" or "attainment" for all federal and state ambient air quality standards, construction activities associated with the project would result in a relatively minor net increase in PM10 and PM2.5. When the project is complete it will not significantly contribute PM into the air. However, construction activities that generate fugitive dust could contribute to the region's cumulative PM levels. Diesel particulates emitted from heavy equipment are identified as Toxic Air Contaminants. Construction emissions would be temporary and localized. In addition, project activities will be conducted according to Caltrans Standard Specifications. The Trinity County General Plan Safety Element requires that standard air quality measures be applied to all projects (Trinity County 2014). Conservation Measure #1 Air Quality/Dust Control (described in Section 2.5) includes these standard air quality measures and will further maintain air quality; project construction-related impacts would be less than significant.
- c) Less-than-Significant Impact. The nearest school is Weaverville Elementary School, which is approximately 0.15 mile east of the project site. There is one residence in the project area downstream of the existing bridge and a few widely spaced residences upslope west of Lorenz Road. These residents could temporarily be exposed to air pollutants such as fugitive dust, ROG, NOx, and carbon monoxide during construction. Replacement of the bridge would not increase operational traffic volumes on Lorenz Road. As discussed in a) and b) above, the volume of air pollutants generated by project construction would be minor and temporary, and project activities will be implemented according to Caltrans' Standard Specifications, applicable North Coast Unified AQMD rules and regulations, and Conservation Measure #1 Air Quality/Dust Control (see Section 2.5). Sensitive receptors would not be exposed to substantial pollutant concentrations. The impact would be less than significant.
- d) Less-than-Significant Impact. Construction activities would involve the use of gasoline or diesel-powered equipment that emits exhaust fumes. Construction could also involve asphalt paving, which has a distinctive odor during application. While persons near the construction work area may find these odors objectionable, emissions would be infrequent, would dissipate rapidly, and would be temporary. The effect of odors generated by project construction would be less than significant.

Mitigation Measures

Conservation Measure #1 – Air Quality/Dust Control (described in Section 2.5) will be used if necessary. No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or 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 Biological Assessment/Essential Fish Habitat Assessment (BA/EFHA) report (Stantec 2020) and a delineation of Waters of the United States (Stantec 2019) were used to assess the project impacts on special-status biological resources known to occur in the project area and the results are outlined in the project's Natural Environment Study (Stantec 2021).

Special-Status Plants

A botanical survey conducted on May 21, 2019 concluded that no special status plant species occur in the project area. Based on habitat assessment, the project area provides potential habitat for three special status plant species, but these species were not observed during the botanical survey and are not likely to occur. The field survey was conducted at a time when all potentially occurring special-status plant species could be identified if they were present. Thus, implementation of the proposed project would not adversely affect special status plant species and impacts would be less than significant.

Special-Status Wildlife

The following species could use the habitats in the project area or immediate vicinity:

Fish

- Southern Oregon/Northern California Coast evolutionarily significant unit coho salmon (Oncorhynchus kisutch): Federally- and State-listed as Threatened
- Pacific Lamprey (Entosphenus tridentatus): State-listed species of special concern (SSC)
- Klamath River Lamprey (Lampetra ayresii): State-listed SSC

Amphibians and Reptiles

- Foothill yellow-legged frog (Rana boylii): State-listed SSC
- Western pond turtle (Emys marmorata): State-listed SSC

Mammals

- Pallid bat (Antrozous pallidus): State-listed SSC
- Western red bat (Lasiurus blossevillii): State-listed SSC

Anadromous Fish. A BA/EFHA (Stantec 2020) determined that the proposed project may affect and is likely to adversely affect Southern Oregon/Northern California Coast (SONCC) evolutionarily significant unit (ESU) coho salmon. On June 7, 2021, the National Marine Fisheries Service (NMFS) issued its biological opinion, concluding that the project, as proposed, is not likely to jeopardize the continued existence of the SONCC coho salmon. NMFS expects the proposed project would result in incidental take of SONCC Coho salmon. NMFS concludes that the project would temporarily, adversely affect EFH for coho salmon. Potential stressors that could result from project activities include increased turbidity and suspended sediment caused by erosion and stormwater runoff; exposure to hazardous materials (e.g., fuels, lubricants, concrete, asphalt, construction chemicals and coatings); physical changes to habitat conditions (e.g., destruction and alterations of stream bed and bank, and vegetation); injury resulting from handling during fish exclusion measures during any stream diversion or water pumping that may be necessary for construction; hydroacoustic impacts during percussive demolition of the existing bridge using a hoe ram; and impaired fish passage.

The proposed project contains adequate measures to avoid, minimize, mitigate, or offset the adverse effects on fish and EFH. Conservation measures #2 Erosion and Sedimentation Controls, #3 Prevention of Accidental Spills, and #4 Protection of Riparian Habitat provided in Section 2.6 will avoid or minimize effects to these species. In addition, Mitigation Measure #1 –Limited Operating Period, Mitigation Measure #2 – Pre-construction Fish Survey and Relocation, and Mitigation Measure #3 - Stream Diversion Bypass/Pumping/Dewatering Measures (described below) will be used to reduce any impacts on anadromous fish and EFH to a less than significant level. Project operation would be consistent with existing conditions and would have no impact on anadromous fish.

Klamath River Lamprey and Pacific Lamprey. Lamprey species presence have not been documented in Middle Weaver Creek. Pacific lampreys are anadromous and spend approximately a year in fresh water before spawning. The lifecycle of Klamath River Lamprey is not well known. Spawning requirements are thought to be similar to salmon for both species of lamprey. Freshly hatched lampreys (i.e., ammocetes) seek

out slow water with fine sediments habitat which was not observed in the BSA or vicinity. There is a low potential for Klamath River or Pacific lamprey to be present when flows are high, but the project area and vicinity lack habitat to support lamprey through the low flow months. There are no California Natural Diversity Database records for lampreys within 10 miles of the project area.

Mitigation Measure #1 Limited Operating Period described below will restrict work to the low flow months when lampreys would not be present in Middle Weaver Creek. No impacts are anticipated. Project operation would be consistent with existing conditions and would have no impact on lamprey.

Foothill Yellow-legged Frog. The project could adversely affect foothill yellow-legged frog if individuals are present in the project area during construction. Potential direct effects include harassment, injury, and mortality of individuals due to equipment and vehicle traffic. The species may also be affected if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, and accidental fuel leaks or spills. In addition, the disturbance of riverine and riparian habitat within the project area has the potential to negatively impact foothill yellow-legged frog.

Mitigation Measure #4 – Foothill Yellow-legged Frog described below will be used to reduce any impacts on frogs to a less-than-significant level. In addition, Conservation Measure #2 – Erosion and Sedimentation Control, and Conservation Measure #3 – Prevention of Accidental Spills described in Section 2.6 will be used to maintain water quality. Loss of riverine and riparian habitat may have a negative impact on this species; therefore, Conservation Measure #4 – Protection of Riparian Habitat will be used to reduce this impact to a less-than-significant level. Project operation would be consistent with existing conditions and would have no impact on foothill yellow-legged frog.

Western Pond Turtle. Project impacts on western pond turtle, if present along Middle Weaver Creek, would be similar to those described for foothill yellow-legged frog. Direct impacts could include injury or mortality of individual turtles; temporary impediments to dispersal along the stream channel, or the removal of vegetation from Middle Weaver Creek riparian areas where the turtle may be found. Indirect impacts could include potential sedimentation of downstream habitats where the turtle may occur or the reduction of suitable upland habitat for basking and nesting.

Mitigation Measure #5 – Western Pond Turtle will be used to reduce any impacts on turtles to a less-than-significant level. In addition, Conservation Measure #2 – Erosion and Sedimentation Control, and Conservation Measure #3 – Prevention of Accidental Spills will be used to maintain water quality. Loss of riverine and riparian habitat may have a negative impact on this species; therefore, Conservation Measure #4 – Protection of Riparian Habitat will be used to reduce this impact to a less-than-significant level. Project operation would be consistent with existing conditions and would have no impact on western pond turtle.

Migratory Birds and Raptors. Construction activities (e.g., vegetation removal and equipment noise) would occur during the avian breeding season (generally February through August, depending on the species) and could disturb nesting birds in or adjacent to the project area. Construction-related disturbance could result in the incidental loss of fertile eggs or nestlings or nest abandonment, which could affect local or regional populations of affected birds. Impacts on nesting birds could result from any of the following:

- Vegetation removal to accommodate the new bridge and road modifications
- Ground disturbing activities (e.g., grubbing and grading) that could affect ground-nesting birds
- Noise from construction activities

Foraging birds and birds present in or adjacent to the BSA outside of the avian breeding season would not be adversely impacted by construction activities due to their high mobility and available habitat outside of the BSA.

Construction of the new bridge and approaches would result in impacts on 0.102 acre of riparian habitat. However, abundant avian nesting and foraging habitat would be retained within the BSA and similarly suitable habitat occurs in the project vicinity.

The project was designed to minimize removal of native vegetation to the greatest extent practicable. *Mitigation Measure #6 – Migratory Birds and Raptors* will be used to ensure that any impacts on migratory birds, including raptors, would be reduced to a less-than-significant level. Project operation would be consistent with existing conditions and would have no impact on migratory birds and raptors.

Pallid Bat and Western Red Bat. Bat species may roost individually or in small groups in tree cavities, in riparian vegetation, or under the bridge. Due to the ability of individual bats to move away from disturbance, direct impacts on bats are not expected when the bats are not in a maternity colony. While not historically documented in the project area, pallid bats may form maternity colonies under the bridge or in trees near the project area. While unlikely, western red bat could form maternity colonies in the riparian habitat along Middle Weaver Creek. If a tree is removed that contains a bat colony, the removal could result in mortality or injury of individuals. Mortality or injury could also occur if the bridge contains pallid bat maternity colonies when the bridge sections are removed. Western red bats use mature riparian vegetation and prefer cottonwood and sycamore trees. Direct impacts on western red bat maternity colonies could occur if large cottonwood trees are removed after young are born and before they can fly.

Indirect impacts may occur from construction disturbance if a maternity colony is present in or adjacent to the project area. Significant noise disturbance could result in adults temporarily or permanently leaving the maternity colony of any of the bat species. Avoidance and minimization measures provided below reduce the potential for adverse impacts on pallid bat and western red bat. *Mitigation Measure #7 – Bats* will be used to reduce any potential impacts on these bat species to a less-than-significant level. Project operation would be consistent with existing conditions and would have no impact on bats.

b) Less-than-Significant Impact with Mitigation Incorporated. Riparian habitat (e.g., montane riparian) is considered a sensitive natural community by USACE, CDFW, and the County. The proposed project would result in direct permanent impacts on montane riparian habitat through bridge widening, new abutments placement, and placement of RSP around the new abutments. The proposed project would also result in temporary impacts on montane riparian habitat due to ground disturbance, excavation for construction of the new bridge abutments, falsework construction, and access to the creek channel. Impacts would include temporary impacts on 0.008 acre of riparian wetland, 0.034 acre of perennial stream, and 0.01 acre of intermittent stream. Permanent impacts on waters of the United States includes 0.004 acre of riparian wetland and 0.012 acre of perennial stream Mitigation Measure #8 – Waters of the United States will be used to reduce any potential impacts on riparian habitat to a less-than-significant level and to compensate for impacts to jurisdictional wetlands and waters. In

addition, Conservation Measure #2 – Erosion and Sedimentation Control, Conservation Measure #3 – Prevention of Accidental Spills and Conservation Measure #4 – Protection of Riparian Habitat will be used to reduce impacts on riparian vegetation to a less-than-significant level.

- c) Less-than-Significant Impact with Mitigation Incorporated. Stantec conducted a delineation of potential waters of the United States in the project area on September 27, 2018. A total of 0.13 acre of potential waters of the United States were mapped within the project study area and include riparian wetland (0.03 acre), perennial stream (0.09 acre, 260 linear feet), and intermittent stream (0.01 acre, 75 linear feet). The project would result in permanent impacts on riparian wetlands and the perennial stream (i.e., Middle Weaver Creek) through bridge widening, new abutments placement, and placement of RSP around the new abutments. The proposed project would also result in temporary impacts to these features through ground disturbance, excavation for construction of the new bridge abutments, falsework construction, temporary stream diversion system, and access to the creek channel. Mitigation Measure #8 - Waters of the United States will be used to reduce any potential impacts on waters to a less-than-significant level and to compensate for impacts to iurisdictional wetlands and waters. In addition, Conservation Measure #2 - Erosion and Sedimentation Control, Conservation Measure #3 - Prevention of Accidental Spills and Conservation Measure #4 - Protection of Riparian Habitat will be used to reduce projectrelated impacts on riparian wetlands and waters of the United States to a less-than-significant
- d) Less-than-Significant Impact with Mitigation Incorporated. All instream construction activities will be completed during the dry seasonal work window of June 1 through October 31. Depending on flows during construction within the stream channel, temporary stream diversion may be required. Any withdrawals/movement of water from the creek channel will use pump intakes with screens meeting NMFS/CDFW criteria to prevent entrainment injury and impingement of fish species. Mitigation Measure #1 –Limited Operating Period, Mitigation Measure #2 Pre-construction Fish Survey and Relocation, and Mitigation Measure #3 Stream Diversion Bypass/Pumping/Dewatering Measures (described below) will be used to reduce any impacts on fish to a less than significant level.

The project area does not encompass any wildlife nursery sites and would have no impact on terrestrial wildlife movement due to the surrounding urban habitat. Operational impacts would be consistent with existing conditions.

e) Less-than-Significant Impact. There is the potential that trees would need to be removed if they are in locations that conflict with the proposed new bridge structure and its approaches, staging areas, and in locations where access is necessary to facilitate the demolition and removal of the existing bridge structure. Potential tree species to be removed, both currently alive and dead, include American sweetgum, black locust, foothill pine (*Pinus sabiniana*), and ponderosa pine (*Pinus ponderosa*). Riparian trees removed would be replaced as established in the Riparian Wetland Mitigation and Monitoring Plan to be developed in coordination with regulatory agencies. Removal of any trees on County-owned land may require approval of community tree advisory committee, or its designee. The committee or designee may require replacement plantings.

Tree removal will comply with the County's tree ordinance (Code of Ordinances 13.15.120) and the goals and objectives described in the County's General Plan (Trinity County 1973), including measures for biological resources protection. The project would not conflict with any local biological resource policies or ordinances. *Conservation Measure #6 – Tree Removal* (described in Section 2.6) will be used ensure impacts on trees are less-than-significant.

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. The project would have no impact on local, regional, or state conservation plans.

Mitigation Measures

In addition to the use of Conservation Measure #2 – Erosion and Sedimentation Control, Conservation Measure #3 – Prevention of Accidental Spills, Conservation Measure #4 – Protection of Riparian Habitat and Conservation Measure #6 – Tree Removal, the following mitigation measures will be used:

Mitigation Measure #1 – LIMITED OPERATING PERIOD

Due to the seasonal occurrence of salmonids in the project area and vicinity, restricting construction activities that are proposed to occur within the channel to periods of the year when the potential for fish occurrence is lowest is an appropriate measure to avoid or minimize the potential for direct injury or mortality. Therefore, all work to be performed in the channel of the Middle Weaver Creek will occur in the dry season from late-spring to early-fall, from June 1 through October 31.

Timing/Implementation: Prior to and during construction

Enforcement: National Marine Fisheries Service, California Department of

Fish and Wildlife, California Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #2 - PRE-CONSTRUCTION FISH SURVEY AND RELOCATION:

Due to the low flows anticipated in the dry summer months, when the limited in-channel work window would occur, water will be diverted into a culvert using an upstream diversion dam constructed of a combination of sand or gravel bags and plastic sheeting. If crushed rock is allowed by permit, in this instance, plastic sheeting or other containment methods will be used to separate the fill rock from the channel bottom to facilitate complete removal of fill rock. Final design of the diversion will be included in the stream diversion plan and will be vetted by NMFS and CDFW.

- The potential for juvenile Southern Oregon/Northern California Coast (SONCC) evolutionarily significant unit (ESU) Coho salmon to occur in the project area during the spring through summer months varies from year to year and is dependent on the previous winter's hydrologic conditions providing adequate flow and water temperature for rearing salmon extending into the summer. While it is expected that restricting the proposed in-channel construction window to the dry summer months will reduce likelihood of SONCC ESU Coho salmon occurring in the creek, juveniles may be present in the project area through June, especially in years when suitable stream conditions persist into early summer. Because of this annual variation in potential for presence of juvenile salmon at the beginning of the proposed in-channel work period, their presence will be assumed, and fish will be carefully herded out of the area using a beach seine, with a minimum of three passes to clear as many as possible from the project area. Block nets and/or coffer dams/diversion berms will be used to exclude any fish from re-entering work areas.
- Any fish that cannot be herded away from the work areas and remain within or behind the block net or coffer dam/bermed areas will be captured using seines, dip nets, and electrofishers prior to complete dewatering and relocated to nearby suitable habitat. To minimize adverse effects of handling on aquatic organisms, all removal/translocation of fishes will be conducted by qualified and experienced biologists and all methods of removal and conditions of handling will be vetted and included in a fish rescue and relocation plan that will be completed and approved by CDFW and NMFS.

NMFS issued the following terms and conditions for fish relocation activities in its Biological Opinion:

- Qualified biologists with expertise in the areas of anadromous salmonid biology shall conduct
 fish relocation activities associated with construction. Caltrans will ensure that all biologists
 working on the project are qualified to conduct fish relocation in a manner which minimizes all
 potential risks to salmonids. A stream diversion and fish relocation plan that includes the
 qualifications of biologists conducting the fish relocation shall be submitted to the NMFS
 Arcata office not later than 30 days prior to stream diversion activities.
- Salmonids shall be handled with extreme care and kept in water to the maximum extent possible during rescue activities. All captured fish must be kept in cool, shaded, and aerated water protected from excessive noise, jostling, or overcrowding or potential predators any time they are not in the stream, and fish will not be removed from this water except when released. Captured salmonids will be relocated as soon as possible to an instream location in which suitable habitat conditions are present to allow for adequate survival for transported fish and fish already present. Fish will be distributed between multiple areas if biologists judge that overcrowding may occur in a single area.
- If any salmonids are found dead or injured, the biologist will contact NMFS biologist Mike Kelly by phone immediately at (707) 825-1622. The purpose of the contact is to review the activities resulting in the take and to determine if additional protective measures are required. All salmonid mortalities will be retained, placed in an appropriately-sized sealable plastic bag, labeled with the date and location, fork length, and be frozen as soon as possible. Frozen samples will be retained by the biologist until specific instructions are provided by NMFS. The biologist may not transfer biological samples to anyone other than the NMFS Northern California Office in Arcata, California without obtaining prior written approval from the South Coast Branch Chief. Any such transfer will be subject to such conditions as NMFS deems appropriate.

Timing/Implementation: Prior to and during construction

Enforcement: National Marine Fisheries Service, California Department of

Fish and Wildlife, California Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #3 - STREAM DIVERSION BYPASS/PUMPING/DEWATERING MEASURES

- Dewatering of construction areas will occur by diversion of the stream through a temporary culvert bypass. Any gravel fill used to create water diversions and work pads will be smooth rounded "fish rock." Contractors will leave approximately one cubic yard of gravel spread out evenly in the channel as an aquatic habitat enhancement following construction. A stream diversion plan will be developed during the final design and will be consistent with Section 13-4.03G of Caltrans Standard Specifications and all environmental commitments and will be vetted with NMFS and CDFW prior to implementation. Any temporary diversion constructed for the project will be sized to handle flows for the specified in-water work period and will conform with Section 14-6.03C of Caltrans Standard Specifications (Caltrans 2018) and the NMFS and CDFW guidelines, which require accommodating passage for all life stages of fish. In the event that the creek is completely dry during construction and no diversion bypass is necessary, the Contractor will still be required to spread one cubic yard of fish rock as an aquatic habitat enhancement measure.
- Direct pumping of water from Middle Weaver Creek will not occur. If dewatering of cofferdam
 work areas by pumping is needed for the removal of nuisance water (likely to be ground
 water seeping into work areas), only where fish have been previously removed as described
 above, the water will be pumped to a temporary sediment retention basin outside of the

channel through a mechanized water filtration system or into Baker tanks or similar storage system and taken offsite to an authorized disposal site. If a temporary basin is constructed it shall be located outside of the active channel and include filter socks or similar sediment controls on the discharge.

Timing/Implementation: Prior to and during construction

Enforcement: National Marine Fisheries Service, California Department of

Fish and Wildlife, California Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #4 - Foothill Yellow-legged Frog

The following measures will be implemented to avoid or minimize the potential for significant impacts on foothill yellow-legged frog:

- Environmental awareness training for construction personnel will be conducted by a qualified biologist prior to onset of work to brief them on how to recognize foothill yellow-legged frog and other special-status animals that may occur in the project area.
- If foothill yellow-legged frogs are encountered in the project site during construction and could be harmed by construction activities, work will stop in the area and the County will notify CDFW. Upon authorization from CDFW, a qualified biologist may relocate the individual(s) the shortest distance possible to a location containing habitat outside of the work area.

Timing/Implementation: Prior to and during construction

Enforcement: California Department of Fish and Wildlife, California

Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #5 – Western Pond Turtle

The following measures will be implemented to avoid or minimize the potential for adverse impacts on western pond turtle:

- Environmental Awareness Training: Construction personnel training would be conducted by a
 qualified biologist prior to onset of work to brief them on how to recognize foothill yellowlegged frog and other special-status animals (e.g., Western pond turtle) that may occur in the
 BSA.
- Foothill Yellow-Legged Frog Relocation: If foothill yellow-legged frogs are encountered in the BSA during construction and could be harmed by construction activities, work would stop in the area and the County would notify CDFW. Upon authorization from CDFW, a qualified biologist may relocate the individual(s) the shortest distance possible to a location containing habitat outside of the work area.

Timing/Implementation: Prior to and during construction

Enforcement: California Department of Fish and Wildlife, California

Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #6 - Migratory Birds and Raptors

The following measures will be implemented to avoid or minimize the potential for adverse impacts on nesting migratory birds and raptors:

Vegetation Removal Prior to Nesting Season: If all necessary approvals have been
obtained, potential nesting substrate (e.g., shrubs and trees) that would be removed by the
project should be removed before the onset of the nesting season, which is March 1 through
September 31, if practicable. This would help preclude nesting and substantially decrease the
likelihood of direct impacts.

Vegetation Removal During the Nesting Season: If vegetation removal and construction activities occur within nesting bird habitat between March 1 and September 31, a qualified biologist would conduct a preconstruction survey no more than two weeks before construction activities begin in that area. If an active nest is found, the biologist would determine a construction-free buffer zone to be established around the nest until the young have fledged. If a raptor nest is found that buffer would be 250 feet, unless a smaller buffer is approved by CDFW. The biologist would monitor the nest to ensure construction activity would not disturb the reproductive process, and to determine when the young have fledged.

Timing/Implementation: Prior to and during construction

Enforcement: California Department of Fish and Wildlife, California

Department of Transportation County and/or its contractor

Mitigation Measure #7 - Bats

Monitoring:

The following measures will be implemented to avoid or minimize the potential for adverse impacts on bats:

- Construction During Volant Season: To the extent practicable, removal of large trees and removal of the existing bridge shall occur before maternity colonies form, prior to March 1, or after young are volant (i.e., capable of flying), after August 15.
- Construction During Non-Volant Season: If construction (including the removal of large trees and the existing bridge) occurs during the non-volant season, which is March 1 through August 15, a qualified biologist shall conduct a pre-construction survey of the project area to locate maternity colonies and identify measures to protect the colonies from disturbance. The pre-construction survey would be performed no more than 14 days prior to the implementation of construction activities. If a lapse in construction activities for 14 days or longer occurs between those dates, another pre-construction survey would be performed.

Timing/Implementation: Prior to and during construction

Enforcement: California Department of Fish and Wildlife, California

Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #8 - Waters of the United States

The following measures shall be implemented to reduce construction-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.
- 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 U.S. Army
 Corps of Engineers (USACE). For any features determined not to be subject to USACE
 jurisdiction during the verification process, authorization to discharge shall be obtained from
 the North Coast Regional Water Quality Control Board (RWQCB). For fill requiring a USACE

- permit, water quality certification shall be obtained from the North Coast 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
 CDFW and, if required, a streambed alteration agreement shall be obtained from CDFW.
- Any monitoring, maintenance, and reporting required by the regulatory agencies (i.e., USACE, North Coast RWQCB, and CDFW) 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: U.S. Army Corps of Engineers, North Coast Regional Water

Quality Control Board, California Department of Fish and

Wildlife

Monitoring: County and/or its contractor

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				\boxtimes
c) Disturb any human remains, including those interred outside of formal cemeteries?				

Discussion of Impacts

Less-than-Significant Impact. The Archeological Survey Report/Historic Property Survey a) Report (Pacific Legacy, Inc. 2020) indicates portions of the Weaverville Historic District extends into the Area of Potential Effects (APE). The Weaverville Historic District is listed in the National Register of Historic Places (NRHP) and two of the contributors—the Weaverville Joss House State Historic Park and the Trinity County Historical Society's Jake Jackson Museum—are in the architectural APE. The Weaverville Joss House State Historic Park is north of the Weaver Creek bridge and contains two buildings at the north end of the parcel: the Joss House and a visitor center. The Joss House building is the only contributor to the Weaverville Historic District on the property. Both buildings are outside of the architectural APE. The Trinity County Historical Society's Jake Jackson Memorial Museum property is south of the Weaver Creek Bridge and contains six buildings: the main museum, blacksmith / tin shop, ditchtender's cabin, carriage barn, stamp mill, and a small residence. The property also has an outdoor exhibit area with mining equipment, and a small picnic area north of the main museum building. The main museum building is the only building on the property that appears to be a contributor to the historic district. This building is within the architectural APE. The bridge (05C-0036) is listed as a Category 5 bridge by Caltrans and as such does not meet the criteria for listing on the National Register of Historic Places. In accordance with Section 106 of the National Historic Preservation Act and CEQA Article 5, subsection 15064.5, no historic

properties would be affected by project implementation and the project will have a less-thansignificant impact.

- b) **No Impact.** There are no known archaeological resources in the project area. In accordance with Section 106 of the National Historic Preservation Act and CEQA Article 5, subsection 15064.5, no known archaeological resources would be affected by project implementation. *Conservation Measure #7 Cultural Resources and Human Remains* (described in Section 2.5) was incorporated into the project design to address any inadvertent discovery of cultural resources during project excavation.
- c) **No Impact.** Human remains were not identified during the cultural study; however, the potential for encountering human remains during project construction can never be entirely ruled out. State law prescribes protective measure that must be taken in the event that any subsurface human remains are discovered. *Conservation Measure #7 Cultural Resources and Human Remains* (described in Section 2.5) was incorporated into the project design to address any inadvertent discovery of human remains during project excavation.

Mitigation Measures

Conservation Measure #7 – Cultural Resources and Human Remains (described in Section 2.5) will be used if necessary. No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VI. ENERGY — Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency				\boxtimes

Discussion of Impacts

a, b) No Impact. It would be necessary to use diesel-powered equipment during project construction. This would not be considered wasteful, inefficient, or unnecessary consumption of energy resources. The bridge replacement project will comply with state and Trinity County plans for energy efficiency.

Mitigation Measures

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VII. 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?			\boxtimes	
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?			\boxtimes	
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) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				\boxtimes

- a, i-ii) Less-than-Significant Impact. No faults pass through the project area and the site is not within an Alquist-Priolo area for fault-rupture hazard (USGS 2021). The project location is in a region that experiences lower levels of and less frequent ground-shaking (California Geological Survey 2016). The nearest mapped quaternary faults are approximately 50 miles southeast of the project area (USGS 2021). According to the Trinity County General Plan, there are many inactive faults, and the occasional earthquake occurs in the county. Earthquake-related ground shaking may occur during design life of the new bridge. However, the risk of seismic activity occurring would not change with the implementation of the proposed project. Earthquake activity would have a negligible effect on the new bridge and road, resulting in less-than-significant impacts on public safety.
- iii) **Less-than-Significant Impact**. Liquefaction issues may be present at the site due to high potential ground accelerations and the presence of saturated granular alluvial material.

Groundwater elevations are likely to match the water elevation in the channel. The new bridge design, including the type and depth of the new bridge footings, will meets current County, American Association of State Highway and Transportation Officials, and Caltrans design criteria. The use of bridge foundations extending below the depth of susceptible soils and groundwater elevation would reduce the risk of adverse impacts resulting from liquefaction to a less than significant impact.

- iv) **Less-than-Significant Impact.** The topography of the project area is generally characterized as mostly level, although banks immediately along the Middle Weaver Creek channel are deeply incised. The potential for landslides to occur within the project area is low, with the possible exception of local bank instability. The project design includes stabilization methods such as RSP to prevent landslides within the project area. The potential for landslides resulting from the project would be less than significant.
- b) Less-than-Significant Impact. Ground-disturbing construction activities would expose soils and make them susceptible to erosion in the event of rain; however, once soils are paved or overlain with RSP, the potential for erosion would be significantly reduced. Erosion and sediment control measures described in Conservation Measure #2 Erosion and Sedimentation Control will be used during construction to minimize the potential for erosion pre- and post-construction. The potential for soil erosion and loss of topsoil as a result of project implementation would be less than significant.
- c) Less-than-Significant Impact. The project area includes a paved roadway. Middle Weaver Creek channel substrate is composed of cobble, gravel, and sand, and the banks consist of rocky soils associated with the existing rock retaining walls. The project is underlain by gravelly loam, gravelly loam sand, and gravelly clay loam. The majority of the project area has a K Erosion Factor rating of 0.02. The K Erosion Factor indicates a very low potential of a soil to sheet and rill erosion by water (Natural Resource Conservation Service 2021). The project area does not have a significant potential for landslides according to the California Department of Conservation (California Geological Survey 2016) or by the Trinity County General Plan (Trinity County 2014). The potential for site instability would be less than significant.
- d) No Impact. Expansive soils are defined as those soils with a plasticity index of 15 percent or greater; soil unit types within the project area do not exceed a plasticity index of 0 percent (Natural Resources Conservation Service 2021). Furthermore, work outside of the existing road corridor would be temporary and the project constructed within the existing road corridor would be consistent with Caltrans Design Specifications. As such, there is no potential for expansive soils that would be substantial risks to life or property.
- e) **No Impact.** The project does not involve septic or wastewater systems.
- f) **No Impact.** There are not unique paleontological or geologic features in the project area.

Mitigation Measures

Conservation Measure #2 – Erosion and Sedimentation Control (described in Section 2.5) will be used if necessary. No project-specific mitigation is required under this subject.

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

a) Less-than-Significant Impact. GHGs are recognized by wide consensus among the scientific community to contribute to global warming/climate change and associated environmental impacts because of their ability to trap heat in the atmosphere and affect climate. The major GHGs that are released from human activity include carbon dioxide, methane, and nitrous oxide (Governor's Office of Planning and Research 2008, 2018). The primary sources of GHGs are vehicles (including planes and trains), energy plants, and industrial and agricultural activities (such as dairies and hog farms).

Emissions of GHGs from the proposed project would be generated offsite from the production of materials used for the bridge, as well as onsite construction-related equipment emissions. The project would not increase the generation of emissions after construction is complete because traffic levels would be similar to current conditions. Emissions of GHGs resulting from off-road heavy-duty diesel engines during construction activities would be short-term and minor. Implementing *Conservation Measure #1— Air Quality/Dust Control* and *Conservation Measure #8 – Greenhouse Gas Emissions* (described in Section 2.5) would reduce GHG emissions.

Plantings of riparian trees and shrubs to replace those removed as a result of the project, would ultimately offset almost twice as much carbon dioxide as would be generated by project construction described in *Conservation Measure #4 – Protection of Riparian Habitat*. In addition, the new project facilities including wider roadway approaches and a wider bridge would be conducive to alternative forms of non-motorized transportation such as bicycles and pedestrians. These measures combined with measures included in *Conservation Measure #8 – Greenhouse Gas Emissions* have been incorporated into the project design and would be used during construction to ensure that project related impacts would remain less than significant.

b) **Less-than-Significant Impact.** 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 construction and operation would adhere to statewide efforts aimed at minimizing GHG emissions and, therefore, would not conflict with any applicable plans, policies, or regulations adopted for reducing the emission of GHGs. The project would have a less-than-significant impact.

Mitigation Measures

Conservation Measure #1 – Air Quality/Fugitive Dust and Emissions Controls, Conservation Measure #2 – Erosion and Sedimentation Control, and Conservation Measure #8 – Greenhouse Gas Emissions (described in Section 2.5) will be used if necessary. No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS — Would	d 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?			\boxtimes	
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?			\boxtimes	
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) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			\boxtimes	
g) 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 Impact. Project construction and operation would not routinely generate any hazardous materials. Project operation would not involve the use or storage of any hazardous materials. Although construction would not generate any hazardous materials, a potential hazard to the public and the environment would be posed by the use of diesel or gasoline powered construction equipment (e.g., trucks, excavators) and lubricants such as oil and hydraulic fluids. The potential for such hazards would be temporary since equipment will be routinely maintained and inspected to avoid leaks, and this is similar to the impacts associated with the vehicles operating daily on nearby roads. BMPs described in Conservation

Measure #3 – Prevention of Accidental Spills (described in Section 2.5) will further reduce the potential impacts associated with the accidental spills of pollutants (e.g., fuel, oil, grease) during construction and operation. The potential for the accidental spill of pollutants would be less than significant.

- c) Less-than-Significant Impact. The nearest school is Weaverville Elementary School, which is approximately 0.15 mile east of the project site. The project would not generate any hazardous materials and no handling of hazardous materials or waste would occur on the project site. As stated earlier in section III Air Quality, Weaverville Elementary School could be exposed to temporary air pollutants from construction activities, such as fugitive dust, ROG, NOx, and carbon monoxide. However, the volume of air pollutants generated by construction of the project would be minor and temporary, and project activities will be implemented according to Caltrans' Standard Specifications, applicable North Coast Unified AQMD rules and regulations, and Conservation Measure #1 Air Quality/Dust Control, resulting in a less-than-significant impact.
- d) Less-than-Significant Impact. Review of the California Department of Toxic Substances Control EnviroStor database (California Department of Toxic Substances Control 2020) and the State Regional Water Quality Control Board's GeoTracker database (State Water Resources Control Board 2021) found multiple leaking underground tank sites located in the project vicinity. However, all of these sites have been completed and their cases closed, with the nearest site being closed in 2009. There is no record of any known contaminated sites, regulated landfill sites, or hazardous-waste generators 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. No potential hazardous materials or waste sites are listed in the project vicinity.
- e) **No Impact.** The Lonnie Pool Field/Weaverville Airport is located approximately 1.20 miles northeast of the project area. The project is located within the Trinity County Airport Land Use Compatibility Plan (Airport Land Use Commission Trinity County 2009). The project includes a bridge replacement and would have no impact on Lonnie Pool Field/Weaverville Airport or present a safety hazard for people working or residing in the project area.
- f) Less-than-Significant Impact. Lorenz Road would be closed at the bridge site for the duration of construction. Lorenz Road does serve as a primary route to Lee Fong Park; however, Bremer Street, south of the SR 299/Lorenz Road intersection would remain open, providing access to areas south of the bridge, including Lee Fong Park. 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 would be maintained through the project area during construction. The impact would be less than significant.
- g) Less-than-Significant Impact. The project is located in the urbanized boundaries of the community of Weaverville and immediately adjacent to SR 299. Despite the presence of human-made landscape features throughout the project study area and vicinity, the Middle Weaver Creek and Ten Cent Gulch channels have retained substantial montane riparian vegetation. Most of the southern part of the project study area has been disturbed by recreational development, roadways, and historic homesteading. Natural land cover in the undeveloped areas is primarily annual grassland, dominated by weedy species. Based on current mapping, the fire hazard potential of lands in the project area is mapped as having "low" fire hazard potential by the U.S. Department of Agriculture (2020) and is not mapped as a fire risk according to the California Public Utilities Commission Fire-Threat Map (California Public Utilities Commission 2020). The project activities, including a bridge replacement, would not exacerbate fire risks or result in ongoing impacts to the environment. Therefore, the project would have no impact. The use of construction equipment in and around vegetated areas

increases the potential for wildfire ignition. However, *Conservation Measure #9 – Wildfire Potential* (described in Section 2.5) will further reduce the risk of wildfire associated with project construction. The potential for accidental wildfire ignition during construction would be less than significant. Project operation would be consistent with existing conditions and would not increase the potential for wildfire ignition.

Mitigation Measures

Conservation Measure #1 – Air Quality/Dust Control, Conservation Measure #3 – Prevention of Accidental Spills, and Conservation Measure #9 – Wildfire Potential (described in Section 2.5) will be used if necessary. No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY — Would the p	roject:			
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality??			\boxtimes	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;			\boxtimes	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			\boxtimes	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			\boxtimes	
iv) impede or redirect flood flows?			\boxtimes	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

Discussion of Impacts

a) **Less-than-Significant Impact.** Construction and operation of the 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 RWQCB 2018).

Middle Weaver Creek is not listed as an impaired water body under Section 303(d) of the Clean Water Act. However, Middle Weaver Creek is an indirect tributary to the Trinity River which is listed as an impaired water body a total maximum daily limit for sedimentation/siltation (State Water Resource Control Board 2012). Project construction and operation of the bridge is not expected to significantly alter the sedimentation/siltation in Middle Weaver Creek. Water pollution control measures have been incorporated into the project design and are required according to the 2018 Caltrans Standard Specifications (Sections 13 and 21-2). Additionally, project activities will comply with the requirements set forth in a 401 Water Quality Certification, which is required by the North Coast RWQCB prior to project implementation. These measures, in conjunction with Conservation Measure #2 – Erosion and Sedimentation Control and Conservation Measure #3 – Prevention of Accidental Spills, will reduce this impact to a less than significant level.

- b) **No Impact.** Construction and operation of the 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 i-iv) Less-than-Significant Impact. Construction activities associated with the project are not anticipated to alter the existing drainage pattern of the site or area in a way that would result in downstream erosion or sedimentation. Adjacent channel slopes would need to be protected by placement of an engineered RSP system along each embankment slope. Based on the preliminary design, an estimated total maximum of 0.02 acre of RSP would be placed around the abutments (estimated maximum of 30 lineal feet on each bank, or up to 5 to 10 feet beyond the ends of each abutment). Construction of the new bridge would not significantly impact energy slope or sediment transport during floods up to the most probable 100-year flood (Q100) and, therefore, would not aggravate instability in Middle Weaver Creek.

The project would not substantially alter the existing surface or instream drainage patterns of the project area. The larger, wider new bridge structure and roadway approaches would slightly increase the amount of impervious surface in the project area but would not require any new storm water or drainage facilities, as the runoff would continue to flow into Middle Weaver Creek. The amount of additional storm water runoff created from the project would not generate flooding in Middle Weaver Creek or nearby areas, resulting in a less-than-significant impact on drainage patterns or flooding.

The larger, wider new bridge structure and roadway approaches would increase the amount of impervious surface in the project area resulting in a slight, but less-than-significant increase in storm water runoff and the potential for polluted runoff (e.g., lubricants), but would not exceed existing or proposed drainage facility capacities routed to Middle Weaver Creek. All areas of project construction disturbance will be restored to natural conditions.

The preferred bridge is located within an area having flood risk (i.e., regulatory floodway AE¹) mapped by the Federal Emergency Management Agency using detailed study methods. As such, projects may encroach into the floodplain to the extent they result in a 1.0-foot increase in the water surface elevation during the Q100 provided the increase does not result in an increased risk of damage to structures or other negative impacts. The Hydraulic Design Criteria established in the Caltrans Local Procedures Manual prescribe that the facility be capable of conveying the Q100 and passing the 50-year flood (Q50) without causing objectionable backwater, excessive flow velocities, or encroaching on through traffic lanes. As a single-span bridge replacement, the proposed project would not involve the addition of permanent supports (i.e., obstructions) within the stream channel. The existing channel cross-section at the bridge

¹ AE refers to areas subject to inundation by the 1 percent annual chance flood event where base flood elevations are shown.

would be opened up with the partial removal of the existing abutments and wing walls, and construction of the new bridge abutments. This would remove the current impingement, improve hydraulic conveyance, and reduce velocity and erosion through the new bridge opening.

Temporary materials and structures would be in place during the instream construction window of June 1 through October 31 and would be removed following construction and prior to October 31. The area disturbed by the temporary dewatering system would be restored to preconstruction conditions. The project design and the fact that most project construction activities would occur during the drier summer months would ensure there would be no temporary and permanent project structures used that could impede flows within the Q100 floodplain. Any impacts associated with project construction and operation within the floodplain are less than significant.

- d) **No Impact.** The project site is not at risk of seiche, tsunami, or mudflow.
- e) **No Impact.** Construction and operation of the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This includes the Water Quality Control Plan for the North Coast Region (North Coast RWQCB 2018).

Mitigation Measures

Conservation Measure #2 – Erosion and Sedimentation Control and Conservation Measure #3 – Prevention of Accidental Spills (described in Section 2.5) will be used if necessary. No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XI. LAND USE AND PLANNING — Would the project:				
a) Physically divide an established community?				\boxtimes
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				\boxtimes

Discussion of Impacts

- a) No Impact. The project would not divide an established community. Construction of the new Middle Weaver Creek bridge would be temporary and Bremer Street, south of the SR 299/Lorenz Road intersection, would remain open, providing access to areas south of the bridge.
- b) **No Impact**. The project would not require any changes to land uses or zoning and would not conflict with the Trinity County General Plan or Zoning Ordinances. The project would not conflict with any applicable conservation plans.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XII. 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, b) No Impact. The project area has not been mapped by the California Department of Conservation as containing marketable aggregate (California Department of Conservation 2018). The project area is not designated as a mineral resource area, as depicted by the Trinity County General Plan (Trinity County 1973). Gravel mining activities do not occur at this location. Project implementation would not result in the loss of availability of a valuable mineral resource.

Mitigation Measures

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

a) Less-than-Significant Impact. During project construction, there would be a minor increase in ambient noise levels. Based on the Trinity County General Plan Noise Element, the maximum allowable noise exposure from stationary sources is up to 75 decibels A-weighted (dBA) during daylight hours (Trinity County 2003). The types of construction equipment and vehicles to be used during construction activities would be determined by the construction contractor and would likely include air compressors, backhoes, bobcats, boom trucks, bulldozer/loaders, compaction equipment, concrete trucks and pumps, cranes, drill rigs, dump trucks, excavators, flatbed trucks, forklifts, front-end loaders, graders, jackhammers, haul trucks, hoe rams, large drilling trucks, vibratory pile driver, roller/compacter, trucks with seed sprayers, and water trucks.

Heavy construction equipment, including but not limited to an excavator, ground drilling equipment, rock hammers, and dump trucks used for this project can generate noise levels as high as 88 dBA at a distance of 50 feet (Federal Transit Administration 2006; Federal Highway Administration 2006). Construction-related noise would be temporary and would occur only during daylight hours (typically 7:00 a.m. to 7:00 p.m., Monday through Friday). The nearest residence is located approximately 165 feet southeast of the bridge, and approximately 12 feet from the edge of Lorenz Road. Other residences are located approximately 100 feet west of the project area and approximately 270 feet southwest of Middle Weaver Creek bridge. While it is anticipated that project construction noise would be temporarily elevated when compared with ambient noise levels in the project area, noise generated by project construction activities would not exceed the Caltrans specification maximum noise level of 86 dBA (Caltrans Specification, Section 14-8.02, Noise Control). However, to account for any localized and temporary increases in noise levels during construction activities (i.e., greater than 65 dBA), implementation of Conservation Measure #10 - Construction Noise (described in Section 2.5) would further reduce noise; project noise during construction would be less-than-significant. Operation of the new bridge would not generate noise above existing levels.

- b) Less-than-Significant Impact. Pile foundations will not be driven into the ground due decomposed bedrock and potential noise and vibrations impacts to nearby residences, downtown businesses, and to protect aquatic species. During excavation and construction activities for the proposed project, groundborne vibration would be produced by the heavy-duty construction equipment such as jackhammers, backhoes, and loaded trucks. Therefore, short-term, construction-related groundborne vibration impacts would be less than significant. Implementation of Conservation Measure #10 Construction Noise (described in Section 2.5) will further reduce the potential for groundborne vibration. Project impacts related to groundborne vibration would be less than significant.
- c) **No Impact.** The Lonnie Pool Field/Weaverville Airport is located approximately 1.20 miles northeast of the project area. The project is located within the Trinity County Airport Land Use Compatibility Plan (Airport Land Use Commission Trinity County 2009). The project consists of a bridge replacement and would include only temporary noise during construction, with no permanent noise sources. Therefore, the project would have no impact on Lonnie Pool Field/Weaverville Airport or expose people residing or working in the project area to excessive noise levels.

Mitigation Measures

Conservation Measure #10 – Construction Noise (described in Section 2.5) will be used if necessary. No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f XIV. 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 people or housing, necessitating the construction of replacement housing elsewhere?				\boxtimes

- a) **No Impact.** Replacement of the existing Middle Weaver Creek bridge structure would have no effect on population or housing in the vicinity of Lorenz Road or SR 299. It would not increase traffic capacity or extend road access beyond what is available without the project. It would improve traffic safety on Lorenz Road where it crosses Middle Weaver Creek.
- b) **No Impact.** Existing housing in the vicinity of Lorenz Road would not be displaced by the project and no replacement housing would be required.

Mitigation Measures

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XV. 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:				
Fire protection?				
Police protection?				
Schools?				\boxtimes
Parks?				
Other public facilities?				

a) Less-than-Significant Impact. The project would not cause substantial adverse physical impacts on government facilities or negatively affect fire/police protection, schools, parks, or public facilities. Lorenz Road would be closed at the bridge site for the duration of construction. Lorenz Road does serve as a primary route to Lee Fong Park, however, Bremer Street, south of the SR 299/Lorenz Road intersection would remain open, providing access to areas south of the bridge, including Lee Fong Park. The proposed bridge would also provide an improved, safer road and bridge across Middle Weaver Creek. Therefore, the project would have a less-than-significant impact on public resources. No significant adverse impacts 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.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. 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?			\boxtimes	
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?				

Discussion of Impacts

- a) Less-than-Significant Impact. Lorenz Road serves as a primary route to Lee Fong Park. With the proposed bridge replacement and slightly wider bridge design, the ADT is anticipated to increase from the current 125 vehicles per day to 134 vehicles per day (projected to 2035). With this increase in vehicles, Lee Fong Park could potentially have an increase in use. However, with this minor increase in vehicles per day over a long duration of time and the improved, safer road and bridge across Middle Weaver Creek, the project would have a less-than-significant impact on recreational facilities.
- b) **No Impact.** The project would not construct or expand recreational facilities; therefore, no impact would occur.

Mitigation Measures

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
$\textbf{XVII. TRANSPORTATION/TRAFFIC} \ -\ \textbf{Would the project}$:			
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d) Result in inadequate emergency access?				

- a) Less-than-Significant Impact. The project is not anticipated to substantially increase either the number of vehicle trips, volume-to-capacity ratio, or congestion at intersections along SR 299 or Lorenz Road. The project is consistent with the goals and policies of the County's General Plan.
- b) Less-than-Significant Impact. The project consists of a bridge replacement, with the new bridge being slightly wider and longer than the existing bridge. Lorenz Road would be closed at the bridge site for the duration of construction. However, Bremer Street, south of the SR 299/Lorenz Road intersection would remain open, providing access to areas south of the bridge. This will be a temporary detour during construction and have a less than significant impact on vehicle miles traveled since there is access to Bremer Street along SR 299, just south of the project area. Therefore, the project would not conflict with Section 15064.3, subdivision (b).
- c) No Impact. The project would not result in the creation of sharp curves, dangerous intersections, or incompatible uses. The project is designed to provide a slightly wider, safer bridge crossing across Middle Weaver Creek.
- d) Less-than-Significant Impact. The new bridge would be constructed in the footprint of the existing bridge. Lorenz Road would be closed at the bridge site for the duration of construction. Lorenz Road does serve as a primary route to Lee Fong Park; however, Bremer Street, south of the SR 299/Lorenz Road intersection would remain open, providing access to areas south of the bridge, including Lee Fong Park. Therefore, the impact on emergency vehicle access would be less than significant.

Mitigation Measures

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

- a) **No Impact.** There are no tribal cultural resources listed or eligible for listing on the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).
- b) No Impact. In accordance with Public Resources Code sections 5024.1, 5097.94, 21074, and 21080.3, commonly known as Assembly Bill 52, Pacific Legacy, Inc. sent notification letters and a map via mail and email to the Native American tribes who may have knowledge of cultural resources in the area of potential effect on August 21, 2018. The following tribe was contacted based on a list of tribes provided by the Native American Heritage Commission (NAHC): Nor-Rel-Muk Nation. Follow-up phone calls were made to two tribal representatives on April 30, May 1, August 22, and August 27, 2019. The Nor Rel Muk Nation responded expressed concern for prehistoric and historic-era cultural resources in the APE and project area. Both representatives requested that local Native American monitors participate in the construction phase of the project and requested to be kept informed of the project through continued consultation.

Additionally, NAHC conducted a review of its Sacred Lands database for culturally significant properties and responded by email on July 5, 2018, indicating that the Sacred Lands File contained no records of Native American cultural resources in the immediate area, and no tribal cultural resources were identified in the project area. Project construction and operation would have no impact on tribal cultural resources.

Mitigation Measures

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

- a) Less-than-Significant-Impact. There are existing utility poles carrying overhead electric and communication lines located along Lorenz Road and across Middle Weaver Creek. The electric line is attached to a tree that will be removed during construction. The communication line may be in conflict with construction equipment. It is anticipated that both lines would need to be relocated or temporarily deactivated due to low vertical clearance to avoid conflicts with construction equipment. The relocation or deactivation of these lines would not result in the relocation, construction, or expansion of an electric power or telecommunications facilities. Therefore, the project would have a less-than-significant impact.
- b) No Impact. No new or expanded water entitlements would be required for the project.
- c) **No Impact.** The project does not in involve any actions that would generate wastewater.
- d) Less-than-Significant Impact. Construction activities associated with the project could generate solid waste in the form of demolished materials, metal pilings, and other trash. Non-hazardous solid waste generated at the project site would be disposed of at a suitable facility such as the Weaverville Transfer Station located in town, approximately 1.12 miles northeast of the project area. The project is not likely to generate solid waste in amounts that would adversely affect the existing capacity of the local landfill. The contractor would be responsible for removing the existing bridge from the site.
- e) **Less-than-Significant Impact.** Any solid waste generated by the project would be disposed of at an approved landfill in compliance with local, state, and federal regulations pertaining to solid waste disposal.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XX. WILDFIRE — Would the project result in:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			\boxtimes	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

Discussion of Impacts

- a) No Impact. During project activities, Lorenz Road would be closed at the bridge site for the duration of construction. However, Bremer Street, south of the SR 299/Lorenz Road intersection, would remain open and may be used as an alternative route. The project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Alternative routes are available and there are no designated emergency evacuation routes in the community (Trinity County 2016). Project operation would be consistent with existing conditions.
- b, c) Less-than-Significant Impact. Based on current mapping, the fire hazard potential of lands in the project area is mapped as having "low" fire hazard potential by the U.S. Department of Agriculture (2020) and not mapped as a fire risk according to the California Public Utilities Commission Fire-Threat Map (California Public Utilities Commission 2020). The project activities, including a bridge replacement, would not exacerbate fire risks or result in ongoing impacts to the environment. Implementation of Conservation Measure #9 Wildfire Potential (described in Section 2.5) will further reduce the potential for wildfire. The projects wildfire risk potential would be less than significant.
- d) **No Impact.** The project profile would provide sufficient gradient for drainage of roadway surfaces, and as such, the project would not expose people or structures to significant risks as a result in drainage changes, runoff, or slope instability.

Mitigation Measures

Conservation Measure #9 – Wildfire Potential (described in Section 2.5) will be used if necessary. No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XXI. 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?			\boxtimes	

Discussion

- Less than Significant with Mitigation Incorporated. As discussed in the preceding sections, a) the proposed project has a potential to impact biological and cultural resources. Special-status wildlife species that could be affected by the project are: SONCC ESU Coho salmon, Pacific lamprey, Klamath River lamprey, foothill yellow-legged frog, western pond turtle, pallid bat, western red bat, and migratory birds and raptors. The project would also have minor impacts on sensitive riparian (including wetlands) and riverine habitat. Potential impacts on resources and the specified species are discussed in detail in the corresponding sections above. Conservation and mitigation measures required to reduce the significance of project impacts are summarized in Chapter 5. With implementation of the required mitigation measures, potential impacts would be reduced to a less-than-significant level. Although cultural resources are not likely to be affected, there is the potential for previously undetected cultural resources or human remains to be affected by project activities. Therefore, conservation measures (see Chapter 5) have been incorporated into the proposed project to ensure protection of any such resources in the event of inadvertent discovery. The project is consistent with the existing land uses, and the relevant plans and policies that govern such projects.
- 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. The project would not introduce new development into a previously undeveloped area. The project would mainly be constructed in the existing County ROW, with minor permanent takes of additional ROW to accommodate the bridge and approach roadway from both adjacent properties. For

the most part, impacts associated with the project would be limited 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 Impact. The proposed bridge replacement project could result in a variety of impacts on human beings, particularly during the construction phase. Potential adverse effects on construction workers and commercial and residential properties in the project vicinity along Lorenz Road and SR 299 are related to temporary impacts on air quality, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, and temporary increases in noise levels during construction. Chapter 5 contains mitigation measures that will be implemented to avoid or minimize potentially adverse effects to humans resulting from the construction and operation of the project. The project would not involve any actions that would have a substantial direct or indirect impact on the human environment that cannot be mitigated to a less-than-significant level.

4. DETERMINATION

Trinity County Department of Transportation

Based	on this initial evaluation:	
	I find that the proposed project COULD NOT have a a NEGATIVE DECLARATION will be prepared.	significant effect on the environment and
	I find that although the proposed project could have a there will not be a significant effect in this case becau made by or agreed to by the project proponent. A MI will be prepared.	use revisions in the project have been
	I find that the proposed project MAY have a significant ENVIRONMENTAL IMPACT REPORT is required.	nt effect on the environment, and an
	I find that the proposed project MAY have a "Potential significant unless mitigated" impact on the environment adequately analyzed in an earlier document pursuant has been addressed by mitigation measures based of attached sheets. An ENVIRONMENTAL IMPACT Report only the effects that remain to be addressed.	ent, but at least one effect 1) has been t to applicable legal standards, and 2) on the earlier analysis as described on
	I find that although the proposed project could have a because all potentially significant effects (a) have been or NEGATIVE DECLARATION pursuant to applicable or mitigated pursuant to that earlier ENVIRONMENTADECLARATION, including revisions or mitigation mean proposed project, nothing further is required.	en analyzed adequately in an earlier EIR e standards, and (b) have been avoided AL IMPACT REPORT or NEGATIVE
(DColU	11410/22
David	Colbeck, Environmental Compliance Specialist	Date

5. MITIGATION MONITORING AND REPORTING PROGRAM

This chapter presents the Mitigation Monitoring and Reporting Program (MMRP) for the Lorenz Road Over Middle Weaver Creek Bridge Replacement Project (project). The purpose of this MMRP is to memorialize the mitigation responsibilities of the Trinity County Department of Transportation (County) in implementing the proposed project. The mitigation measures listed herein are required by law or regulation and will be adopted by the County as part of the overall project approval. Mitigation is defined by CEQA Section 15370 as a measure that

- Avoids the impact altogether by not taking a certain action or parts of an action,
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation,
- Rectifies the impact by repairing, rehabilitating, or restoring the impacted environment,
- Reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project, or
- Compensates for the impacts by replacing or providing substitute resources or environments.

Mitigation measures provided in this MMRP have been identified in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures of the IS/MND and are considered feasible and effective in mitigating Project-related environmental impacts.

This MMRP includes discussions of the following: legal requirements, intent of the MMRP; development and approval process for the MMRP; the authorities and responsibilities associated with implementation of the MMRP; a method of resolution of noncompliance complaints; and a summary of monitoring requirements.

Legal Requirements: The legal basis for the development and implementation of the MMRP lies within CEQA (including the California Public Resources Code). Sections 21002 and 21002.1 of the California Public Resources Code state:

- Public agencies are not to approve projects as proposed if there are feasible alternatives or feasible mitigation measures available that would substantially lessen the significant environmental effects of such projects.
- Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.

Section 21081.6 of the California Public Resources Code further requires that:

- The public agency shall adopt a reporting or monitoring program for the changes made to the
 project or conditions of project approval, adopted in order to mitigate or avoid significant
 effects on the environment. The reporting or monitoring program shall be designed to ensure
 compliance during project implementation.
- The monitoring program must be adopted when a public agency makes its findings under CEQA so that the program can be made a condition of project approval in order to mitigate significant effects on the environment. The program must be designed to ensure compliance

with mitigation measures during project implementation to mitigate or avoid significant environmental effects.

Intent of the Mitigation Monitoring and Reporting Program: The MMRP is intended to satisfy the requirements of CEQA as they relate to the project. It will be used by County staff, participating agencies, project contractors, and mitigation monitoring personnel during implementation of the project. The primary objective of the MMRP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMRP will provide for monitoring of construction activities as needed, onsite identification and resolution of environmental problems, and proper reporting to lead agency staff.

Development and Approval Process: The timing elements for implementing mitigation measures and the definition of the approval process are provided in detail throughout this MMRP to assist the County by providing the most usable monitoring document possible.

Authorities and Responsibilities: The County, functioning as the CEQA Lead Agency, will have the primary responsibility for overseeing the implementation of the MMRP and will be responsible for the following activities:

- coordination of monitoring activities
- reviewing and approving status reports
- maintenance of records concerning the status of all approved mitigation measures

The County, also the implementing agency, will be responsible for implementing the mitigation measures by incorporating them into the project specifications (i.e., the contract documents) and enforcing the conditions of the contract in the field during construction. Some pre- and post-construction activities may be implemented directly by the County.

Resolution of Noncompliance Complaints: Any person or agency may file a complaint that alleges noncompliance with the mitigation measure(s) adopted as part of the approval process for the proposed project. The complaint will be directed to the County's Environmental Compliance Manager in written form describing the purported violation in detail. The County will investigate and determine the validity of the complaint. If noncompliance with a mitigation measure is verified, the County will take the necessary action(s) to remedy the violation. Complaints will be responded to in writing including descriptions of the County's investigation findings and the corrective action(s) taken, if applicable.

Summary of Monitoring Requirements: Following this discussion are the conservation measures, mitigation measures and associated monitoring requirements for the proposed project. Conservation measures include standard BMPs that will be used during construction. Mitigation measures are organized by environmental issue area (e.g., Biological Resources).

- Conservation Measures: describes the schedules of activities, prohibitions of practices, maintenance procedures, and structural or managerial practices, that will be used either singly or in combination to prevent or reduce the release of pollutants, or otherwise minimize the potential for adverse effects on environmental resources. The same conservation numbering system used in the IS/MND is carried forward in this MMRP.
- Mitigation Measure(s): lists the mitigation measure(s) identified for each potentially significant impact discussed in the IS/MND. The same mitigation numbering system used in the IS/MND is carried forward in this MMRP.
- Timing/Implementation: Indicates at what point in time or project phase the mitigation measure will need to be implemented.

- Enforcement: Indicates which agency or entity is responsible for enforcement of the mitigation measure(s).
- Monitoring: Indicates which agency or entity is responsible for implementing and monitoring each mitigation measure.
- Verification: Provides a space to be signed and dated by the individual responsible for verifying compliance with each mitigation measure.

5.1 CONSERVATION MEASURES

The following conservation measures and BMPs will be followed during project construction to avoid or minimize potential environmental impacts:

Conservation Measure #1: Air Quality/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:

- 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.
- Equipment or manual watering shall be conducted on all stockpiles, dirt/ gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.

Conservation Measure #2: Erosion and Sedimentation Control

Erosion control measures shall be implemented during construction of the project. These measures shall conform to the provisions in Section 21 of the Caltrans Standard Specifications (Caltrans 2018) and the special provisions included in the contract for the project. Such provisions include the preparation of a Storm Water Pollution Prevention Plan or Water Pollution Control Program depending on size of disturbance determined, these plans would describe and illustrate the use of BMPs to be implemented at the project site.

Erosion control measures to be included in the Storm Water Pollution Prevention Plan, Water Pollution Control Program, or to be implemented by the County include the following:

- Activities that may increase the erosion potential in the BSA shall be restricted to the relatively dry summer and early fall period to minimize the potential for rain events to transport sediment to nearby surface waters (i.e., Middle Weaver Creek and Ten Cent Gulch). Therefore, any in-channel construction would be conducted between June 1 and October 31; upland construction may occur throughout the year if work activities comply with the conservation and avoidance and minimization measures identified herein for the protection of sensitive or special-status plant or animal species. For construction activities that must take place during the late fall, winter, or spring, 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 installed.
- Areas where vegetation needs to be removed shall be identified in advance of ground disturbance and limited to only those areas that have been approved by the County. Exclusionary fencing would be installed around areas that are not to be disturbed.

- Within 10 days of completion of construction in areas where subsequent ground disturbance would not occur for 10 calendar days or more, 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 or secured plastic sheeting, as outlined in the Storm Water Pollution Prevention Plan, shall be applied to all exposed areas upon completion of the day's activities. Soils shall not be left exposed during the rainy season.
- Suitable BMPs, such as silt 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. Further, sediment built up at the base of BMPs would be removed before BMP
 removal to avoid any accumulated sediments from mobilizing post-construction.
- 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. Any spoil sites shall be
 graded and vegetated with native species to reduce the potential for erosion.
- Sediment control measures shall be in place prior to the onset of the rainy season and would be monitored and maintained in good working condition until disturbed areas have been revegetated with native species.

Conservation Measure #3: Prevention of Accidental Spills

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

- A site-specific spill prevention plan would be completed and implemented for all potentially hazardous materials. This would include containment methods for any use of concrete or other hazardous materials according to Caltrans Standard Specifications (2018) Section 14-11.03. The plan would include the proper handling and storage of all potentially hazardous materials including concrete, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms would be constructed to prevent spilled materials from reaching surface water features.
- Equipment and hazardous materials would be stored at least 50 feet away from all waterways.
- Vehicles and equipment used during construction would receive proper and timely
 maintenance to reduce the potential for mechanical breakdowns leading to a spill of
 materials. Maintenance and fueling would be conducted in an area at least 50 feet away from
 waterways or within an adequate fueling containment area.
- For removal of the existing bridge, it would be required to submit a debris containment and
 collection plan per Caltrans Standard Specifications (2018) section 14-11.13B (2). The plan
 must include shop drawings of containment systems complying with section 59-2.01C (2) and
 include the name and location of the disposal facility that would accept any hazardous waste
 if determined to be present.

Conservation Measure #4. Protection 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 within 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 to riparian vegetation outside of the construction area are minimized.
- Riparian habitat areas temporarily disturbed by construction shall be replanted using native riparian species that have been recorded in Trinity County in the vicinity of the project area, using a replacement planting ratio and a monitoring and contingency program to ensure successful restoration of functional riparian vegetation in the project area, including interplanting of areas to be covered by rock slope protection (RSP). Details of planting methods, monitoring, and contingency actions will be specified in a Riparian Wetland Mitigation and Monitoring Plan (RWMMP) to be submitted to National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW) for review and approval prior to beginning construction.
- Non-native tree species removed during project construction will be replaced with native riparian species to the extent practicable.
- Revegetation monitoring will be implemented in compliance with regulatory permit conditions
 and be initiated immediately following completion of the planting and will be described in a
 RWMMP to be reviewed and approved by NMFS and CDFW. It is anticipated that this plan
 would provide for a five-year monitoring and contingency program to ensure successful
 restoration of riparian vegetation.

Conservation Measure #5: Prevention of Spread of Invasive Species

The following measures shall be implemented to prevent the spread of invasive species:

- All equipment would be weed-free prior to entering the BSA.
- Any vegetation removed for construction would be properly disposed of to prevent the spread
 of existing invasive species.
- If project implementation calls for mulches or fill, they would be weed free.
- Any seed mixes or other vegetative material used for re-vegetation of disturbed sites would consist of locally adapted native plant materials to the extent practicable.
- Any gravels or materials used/placed instream would be new, from a local source, or properly disinfected or cleaned prior to installation.
- Any equipment (including boots/waders) and construction equipment shall be properly
 disinfected or cleaned according to guidance provided by the State of California Aquatic
 Invasive Species Management Plan (California Department of Fish and Game 2008) prior to
 in-water work to prevent the spread of aquatic invasive species.

Conservation Measure #6: Tree Removal

The following measures shall be implemented to reduce potential impacts on trees in the project area:

 Through careful preconstruction planning tree removal would be limited to the minimum amount necessary to facilitate demolition of the old bridge and construction of the new bridge.

Conservation Measure #7: Cultural Resources and Human Remains

Surface surveys are not infallible and buried resources may be overlooked. Implementation of the following conservation measures will avoid or minimize the potential for significant effects to newly discovered resources:

- Per Caltrans Exhibit 5.1 in Volume 2 of the Standard Environmental Reference, it is Caltrans' policy to avoid cultural resources whenever possible. If buried cultural materials are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the undertaking changes to include areas not previously surveyed. Per Attachment 4 of the Section 106 Programmatic Agreement, isolated prehistoric or historic finds of fewer than three items per 100 square meters are properties exempt from evaluation.
- If human remains are discovered during project activities, all activities near the find will be suspended and the Trinity County Sheriff–Coroner will be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission (NAHC). Treatment of the remains will be conducted in accordance with the direction of the County Coroner and/or NAHC as appropriate.

Conservation Measure #8: Greenhouse Gas Emissions

Construction contract documents include provisions to minimize project-related greenhouse gas emissions (GHGs). The following measures will be implemented to reduce construction-related GHG emissions:

- Reuse and recycle construction and demolition waste including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard.
- Ensure that the project enhances, and does not disrupt or create barriers to, non-motorized transportation (e.g., bicycles, pedestrians) through proper pre-construction planning.
- Protect existing trees to the extent possible and encourage the planting of new trees.

Conservation Measure #9: Wildfire Potential

Construction contract documents include measures to minimize project-related potential for wildfire ignition:

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

Conservation Measure #10: Construction Noise

Construction contract documents include provisions to minimize project-related noises. The following measures will be implemented to reduce construction-related noises generated:

- Construction activities (excluding activities that would result in a safety concern to the public
 or construction workers) will be limited to between the daylight hours of 7:00 A.M. and 7:00
 P.M., Monday through Friday, and 8:00 A.M. and 5:00 P.M. on Saturdays. Construction
 activities will be prohibited on Sundays and federal/state recognized holidays.
- Construction equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers in accordance with manufacturers' recommendations.
- When not in use, motorized construction equipment will not be left idling for more than 5 minutes.
- Stationary equipment (generators, compressors, etc.) will be located at the furthest practical
 distance from nearby noise-sensitive land uses. If necessary, noise attenuation measures
 sufficient to achieve compliance with the Trinity County General Plan Noise Element (Trinity
 County 2003) will be implemented.

5.2 MITIGATION MEASURES FOR BIOLOGICAL RESOURCES

This MMRP includes the following mitigation measures to be implemented during construction of the Lorenz Road Over Middle Weaver Creek Bridge Replacement Project:

Mitigation Measure #1 - LIMITED OPERATING PERIOD

Due to the seasonal occurrence of salmonids in the project area and vicinity, restricting construction activities that are proposed to occur within the channel to periods of the year when the potential for fish occurrence is lowest is an appropriate measure to avoid or minimize the potential for direct injury or mortality. Therefore, all work to be performed in the channel of the Middle Weaver Creek will occur in the dry season from late-spring to early-fall (June 1 through October 31).

Timing/Implementation: Prior to and during construction

Enforcement: National Marine Fisheries Service, California Department of

Fish and Wildlife, California Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #2 – PRE-CONSTRUCTION FISH SURVEY AND RELOCATION:

Due to the low flows anticipated in the dry summer months, when the limited in-channel work window would occur, water will be diverted into a culvert using an upstream diversion dam constructed of a combination of sand or gravel bags and plastic sheeting. If crushed rock is allowed by permit, in this instance, plastic sheeting or other containment methods will be used to separate the fill rock from the channel bottom to facilitate complete removal of fill rock. Final design of the diversion will be included in the stream diversion plan and will be vetted by National Marine Fisheries Service and CDFW.

The potential for juvenile Southern Oregon/Northern California Coast (SONCC) evolutionarily significant unit (ESU) Coho salmon to occur in the project area during the spring through summer months varies from year to year and is dependent on the previous winter's hydrologic conditions providing adequate flow and water temperature for rearing salmon extending into the summer. While it is expected that restricting the proposed in-channel construction window to the dry summer months will reduce likelihood of SONCC ESU Coho salmon occurring in the creek, juveniles may be present in the project area through June, especially in years when suitable stream conditions persist into early summer. Because of this annual variation in potential for presence of juvenile salmon at the beginning of the proposed in-channel work period, their presence will be assumed, and fish will be carefully

herded out of the area using a beach seine, with a minimum of three passes to clear as many as possible from the project area. Block nets and/or coffer dams/diversion berms will be used to exclude any fish from re-entering work areas.

• Any fish that cannot be herded away from the work areas and remain within or behind the block net or coffer dam/bermed areas will be captured using seines, dip nets, and electrofishers prior to complete dewatering and relocated to nearby suitable habitat. To minimize adverse effects of handling on aquatic organisms, all removal/translocation of fishes will be conducted by qualified and experienced biologists and all methods of removal and conditions of handling will be vetted and included in a fish rescue and relocation plan that will be completed and approved by CDFW and NMFS.

NMFS issued the following terms and conditions for fish relocation activities in its Biological Opinion:

- Qualified biologists with expertise in the areas of anadromous salmonid biology shall conduct
 fish relocation activities associated with construction. Caltrans will ensure that all biologists
 working on the project are qualified to conduct fish relocation in a manner which minimizes all
 potential risks to salmonids. A stream diversion and fish relocation plan that includes the
 qualifications of biologists conducting the fish relocation shall be submitted to the NMFS
 Arcata office not later than 30 days prior to stream diversion activities.
- Salmonids shall be handled with extreme care and kept in water to the maximum extent possible during rescue activities. All captured fish must be kept in cool, shaded, and aerated water protected from excessive noise, jostling, or overcrowding or potential predators any time they are not in the stream, and fish will not be removed from this water except when released. Captured salmonids will be relocated as soon as possible to an instream location in which suitable habitat conditions are present to allow for adequate survival for transported fish and fish already present. Fish will be distributed between multiple areas if biologists judge that overcrowding may occur in a single area.
- If any salmonids are found dead or injured, the biologist will contact NMFS biologist Mike Kelly by phone immediately at (707) 825-1622. The purpose of the contact is to review the activities resulting in the take and to determine if additional protective measures are required. All salmonid mortalities will be retained, placed in an appropriately-sized sealable plastic bag, labeled with the date and location, fork length, and be frozen as soon as possible. Frozen samples will be retained by the biologist until specific instructions are provided by NMFS. The biologist may not transfer biological samples to anyone other than the NMFS Northern California Office in Arcata, California without obtaining prior written approval from the South Coast Branch Chief. Any such transfer will be subject to such conditions as NMFS deems appropriate.

Timing/Implementation: Prior to and during construction

Enforcement: National Marine Fisheries Service, California Department of Fish and Wildlife, California Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #3 - STREAM DIVERSION BYPASS/PUMPING/DEWATERING MEASURES

Dewatering of construction areas will occur by diversion of the stream through a temporary culvert bypass. Any gravel fill used to create water diversions and work pads will be smooth rounded "fish rock." Contractors will leave approximately one cubic yard of gravel spread out evenly in the channel as an aquatic habitat enhancement following construction. A stream diversion plan will be developed during the final design and will be consistent with Section 13-

4.03G of Caltrans Standard Specifications and all environmental commitments and will be vetted with NMFS and CDFW prior to implementation. Any temporary diversion constructed for the project will be sized to handle flows for the specified in-water work period and will conform with Section 14-6.03C of Caltrans Standard Specifications (Caltrans 2018) and the NMFS and CDFW guidelines, which require accommodating passage for all life stages of fish. In the event that the creek is completely dry during construction and no diversion bypass is necessary, the Contractor will still be required to spread one cubic yard of fish rock as an aquatic habitat enhancement measure.

• Direct pumping of water from Middle Weaver Creek will not occur. If dewatering of cofferdam work areas by pumping is needed for the removal of nuisance water (likely to be ground water seeping into work areas), only where fish have been previously removed as described above, the water will be pumped to a temporary sediment retention basin outside of the channel through a mechanized water filtration system or into Baker tanks or similar storage system and taken offsite to an authorized disposal site. If a temporary basin is constructed it shall be located outside of the active channel and include filter socks or similar sediment controls on the discharge.

Timing/Implementation: Prior to and during construction

Enforcement: National Marine Fisheries Service, California Department of

Fish and Wildlife, California Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #4 – Foothill Yellow-legged Frog

The following measures will be implemented to avoid or minimize the potential for significant impacts on foothill yellow-legged frog:

- Environmental awareness training for construction personnel will be conducted by a qualified biologist prior to onset of work to brief them on how to recognize foothill yellow-legged frog and other special-status animals that may occur in the project area.
- If foothill yellow-legged frogs are encountered in the project site during construction and could be harmed by construction activities, work will stop in the area and the County will notify CDFW. Upon authorization from CDFW, a qualified biologist may relocate the individual(s) the shortest distance possible to a location containing habitat outside of the work area.

Timing/Implementation: Prior to and during construction

Enforcement: California Department of Fish and Wildlife, California

Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #5 – Western Pond Turtle

The following measures will be implemented to avoid or minimize the potential for adverse impacts on western pond turtle:

- Environmental Awareness Training: Construction personnel training would be conducted by a
 qualified biologist prior to onset of work to brief them on how to recognize foothill yellowlegged frog and other special-status animals (e.g., Western pond turtle) that may occur in the
 BSA.
- Foothill Yellow-Legged Frog Relocation: If foothill yellow-legged frogs are encountered in the BSA during construction and could be harmed by construction activities, work would stop in

the area and the County would notify CDFW. Upon authorization from CDFW, a qualified biologist may relocate the individual(s) the shortest distance possible to a location containing habitat outside of the work area.

Timing/Implementation: Prior to and during construction

Enforcement: California Department of Fish and Wildlife, California

Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #6 – Migratory Birds and Raptors

The following measures will be implemented to avoid or minimize the potential for adverse impacts on nesting migratory birds and raptors:

Vegetation Removal Prior to Nesting Season: If all necessary approvals have been
obtained, potential nesting substrate (e.g., shrubs and trees) that would be removed by the
project should be removed before the onset of the nesting season, which is March 1 through
September 31, if practicable. This would help preclude nesting and substantially decrease the
likelihood of direct impacts.

Vegetation Removal During the Nesting Season: If vegetation removal and construction activities occur within nesting bird habitat between March 1 and September 31, a qualified biologist would conduct a preconstruction survey no more than two weeks before construction activities begin in that area. If an active nest is found, the biologist would determine a construction-free buffer zone to be established around the nest until the young have fledged. If a raptor nest is found that buffer would be 250 feet, unless a smaller buffer is approved by CDFW. The biologist would monitor the nest to ensure construction activity would not disturb the reproductive process, and to determine when the young have fledged.

Timing/Implementation: Prior to and during construction

Enforcement: California Department of Fish and Wildlife, California

Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #7 – Bats

The following measures will be implemented to avoid or minimize the potential for adverse impacts on bats:

- Construction During Volant Season: To the extent practicable, removal of large trees and removal of the existing bridge shall occur before maternity colonies form, prior to March 1, or after young are volant (i.e., capable of flying), after August 15.
- Construction During Non-Volant Season: If construction (including the removal of large trees and the existing bridge) occurs during the non-volant season, which is March 1 through August 15, a qualified biologist shall conduct a pre-construction survey of the project area to locate maternity colonies and identify measures to protect the colonies from disturbance. The pre-construction survey would be performed no more than 14 days prior to the implementation of construction activities. If a lapse in construction activities for 14 days or longer occurs between those dates, another pre-construction survey would be performed.

Timing/Implementation: Prior to and during construction

Enforcement: California Department of Fish and Wildlife, California

Department of Transportation

Monitoring: County and/or its contractor

Mitigation Measure #8 – Waters of the United States

The following measures shall be implemented to reduce construction-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.
- 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 U.S. Army
 Corps of Engineers (USACE). For any features determined not to be subject to USACE
 jurisdiction during the verification process, authorization to discharge shall be obtained from
 the North Coast Regional Water Quality Control Board (RWQCB). For fill requiring a USACE
 permit, water quality certification shall be obtained from the North Coast 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
 CDFW and, if required, a streambed alteration agreement shall be obtained from CDFW.
- Any monitoring, maintenance, and reporting required by the regulatory agencies (i.e., USACE, North Coast RWQCB, and CDFW) 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: U.S. Army Corps of Engineers, North Coast Regional Water

Quality Control Board, California Department of Fish and

Wildlife

Monitoring: County and/or its contractor

6. REPORT PREPARATION

6.1 TRINITY COUNTY DEPARTMENT OF TRANSPORTATION CEQA LEAD AGENCY

Randy Cessna, PE Project Manager

David Colbeck Environmental Compliance Specialist

6.2 QUINCY ENGINEERING

Jim Foster Principal Engineer

Carolyn Davis, PE Project Manager/Project Engineer

6.3 PACIFIC LEGACY, INC. SUBCONSULTANT

Amy Kovak, M.A. Prehistoric Archaeologist

6.4 STANTEC CONSULTING SERVICES ENVIRONMENTAL COMPLIANCE SUBCONSULTANTS

Wirt Lanning Program Manager/Project Manager

Connie MacGregor Environmental Analyst/Environmental Scientist

Scott Elder Environmental Analyst
David Pluth Fisheries Biologist

Gabe Youngblood Biologist
Anna Burns Botanist
Teri Mooney GIS Analyst

Sylvia Langford Editing and Formatting

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