EXHIBIT A

Initial Study/ Proposed Mitigated Negative Declaration

for the

Wilderness Lodge Road over Dutch Charlie Creek Bridge Replacement Project

July 2022

Mendocino County
Department of Transportation
Mendocino County
340 Lake Mendocino Drive
Ukiah, CA 95482

PROJECT INFORMATION

1. Project Title:	Wilderness Lodge Road over Dutch Charlie Creek Bridge Replacement Project
2. Lead Agency Name and Address:	Mendocino County Department of Transportation 340 Lake Mendocino Drive Ukiah, CA 95482
3. Contact Person and Phone Number:	Mr. James Linderman, Sr. Environmental Compliance Specialist, 707-234-2819 lindermanj@mendocinocounty.org
4. Project Location:	The Project is in Mendocino County, on the Lincoln Ridge USGS quadrangle, (Figure 1, Figure 2).

5. Description of Project:
The Mendocino County Department of Transportation (MCDOT), in cooperation with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), proposes to replace the Wilderness Lodge Road (also known as Jack of Hearts Road) bridge (Bridge 10C0073) at Dutch Charlie Creek. The proposed Project is the replacement of an existing single-span approximately 40-feet long structure comprised of two railroad flatcars with a timber deck. The bridge, constructed in 1969, is structurally deficient with a sufficiency rating of 49.6. The proposed replacement bridge is 60 feet long with a clear width of 24 feet located on the same alignment. Construction is planned for 2023 or later and will take approximately 5-6 months to complete. A complete project description is provided in Chapter 2 of this document.

6. General plan designation:

Mendocino County Assessor's Parcel Number (APN)	General Plan Land Use Designation	Zoning Designation	Williamson Act Contract Status
County Road Right Of way	NA	NA	NA
013-660-62 (+10 ac)	RMR20 (Remote Residential 20 acres)	TP (Timberland Production)	Not Enrolled
013-660-58 (+15 ac)	RMR20 (Remote Residential 20 acres)	TP (Timberland Production)	Not Enrolled

7. Zoning:
See table above

8. Surrounding Land Uses and Setting:
The Project occurs in a rural, partially forested setting. Low density rural residential housing occurs adjacent to the Project area.

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

The Project may require permits or approvals from the following:

- Caltrans — National Environmental Policy Act (NEPA) Categorical Exclusion
- U.S. Army Corps of Engineers — Section 404 Clean Water Act Nationwide Permit
- North Coast Regional Water Quality Control Board — Section 401 Water Quality Certification for in-stream work subject to the Clean Water Act
- State Water Resources Control Board — Statewide General Permit for Discharges of Storm Water Associated with Construction Activity.
- California Department of Fish and Wildlife — Section 1602 Lake and Streambed Alteration Agreement
- Mendocino County Board of Supervisors — Resolution adopting a Mitigated Negative Declaration pursuant to CEQA for the Project.

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1 INTRODUCTION

The Mendocino County Department of Transportation (MCDOT), in cooperation with Caltrans and the FHWA, propose to replace the Wilderness Lodge Road (also known as Jack of Hearts Road) bridge at Dutch Charlie Creek. Mendocino County is the local lead agency and prepared this Initial Study to evaluate the significance of potential Project impacts pursuant to the California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, Section 21000, et seq.). This Initial Study was prepared in accordance with the State CEQA Guidelines (14 California Administrative Code, Section 14000 et seq.).

Based on the results of this Initial Study, the County has determined that the Project would have less than significant impacts on the environment with the incorporation of mitigation measures. The County may approve the Project with the certification of a Mitigated Negative Declaration (MND). The remainder of this document is organized into the following sections:

- **Section 2, Project Description**—Provides a detailed description of the proposed Project;
- **Section 3, Initial Study Checklist and Supporting Documentation**—Provides CEQA Initial Study Resource impact checklists and supporting documentation. Identifies the thresholds of significance, evaluates potential impacts, and describes mitigation measures necessary to reduce impact significance;
- **Section 4, Initial Study Findings**—Provides a determination of the County's CEQA findings;
- **Section 5, Supporting Information Sources**—Identifies the personnel responsible for the preparation of this document and provides a list of the references cited throughout the document.

2 PROJECT DESCRIPTION

The Project replaces Bridge 10C0073 on Wilderness Lodge Road Bridge over Dutch Charlie Creek. The existing single-span approximately 40-feet long structure is comprised of two railroad flatcars with a timber deck. Wilderness Lodge Road is classified as a 'Local' road as per the Caltrans Functional Classification System and has Average Daily Traffic (ADT) of approximately 150 vehicles per day, which classifies it as a low volume road (ADT<400).

The existing bridge, constructed in 1969, is structurally deficient, has a sufficiency rating of 49.6, and is eligible for replacement under the FHWA Bridge Program (HBP) administered by Caltrans. The roadway approaches to the bridge consist of two 9 to 12-foot lanes with no shoulders. The existing bridge crosses the creek on a perpendicular alignment. The existing bridge does not support two lanes of legal loads and is currently weight restricted to a single through lane. The existing structure provides insufficient freeboard for the 50-year and 100-year flood events. Construction of a longer bridge span will reduce the channel constriction and will reduce the water surface elevations in and around the new bridge. The Project does not increase the capacity of Wilderness Lodge Road. Construction is planned for 2023 or later and will take approximately 5-6 months to complete.

2.1 LOCATION

The Wilderness Lodge Road Bridge at Dutch Charlie Creek is located in unincorporated Mendocino County approximately nine air miles east of the community of Laytonville (Figure 1). The Project is within the Lincoln Ridge USGS topographic quad (T21N, R16W, Section 9) and is in the South Fork Eel Hydrologic Unit (hydrologic unit code 18010106). Elevation in the Project area ranges from approximately 1,465 to 1,475 feet above sea level. Figure 2 is an aerial photo of the Project and surrounding area. The entire Project site drains to Dutch Charlie Creek which drains to the South Fork Eel River immediately east of the Project area.

Figure 1. Location Map

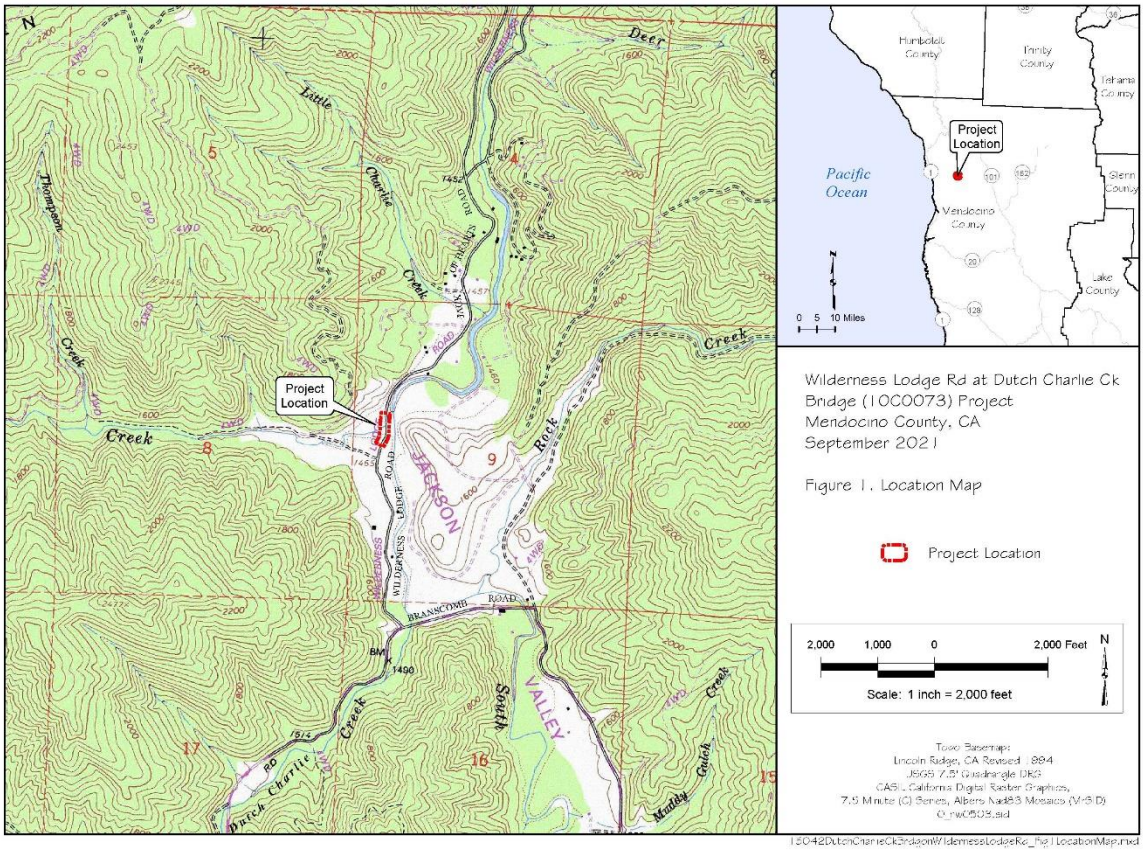
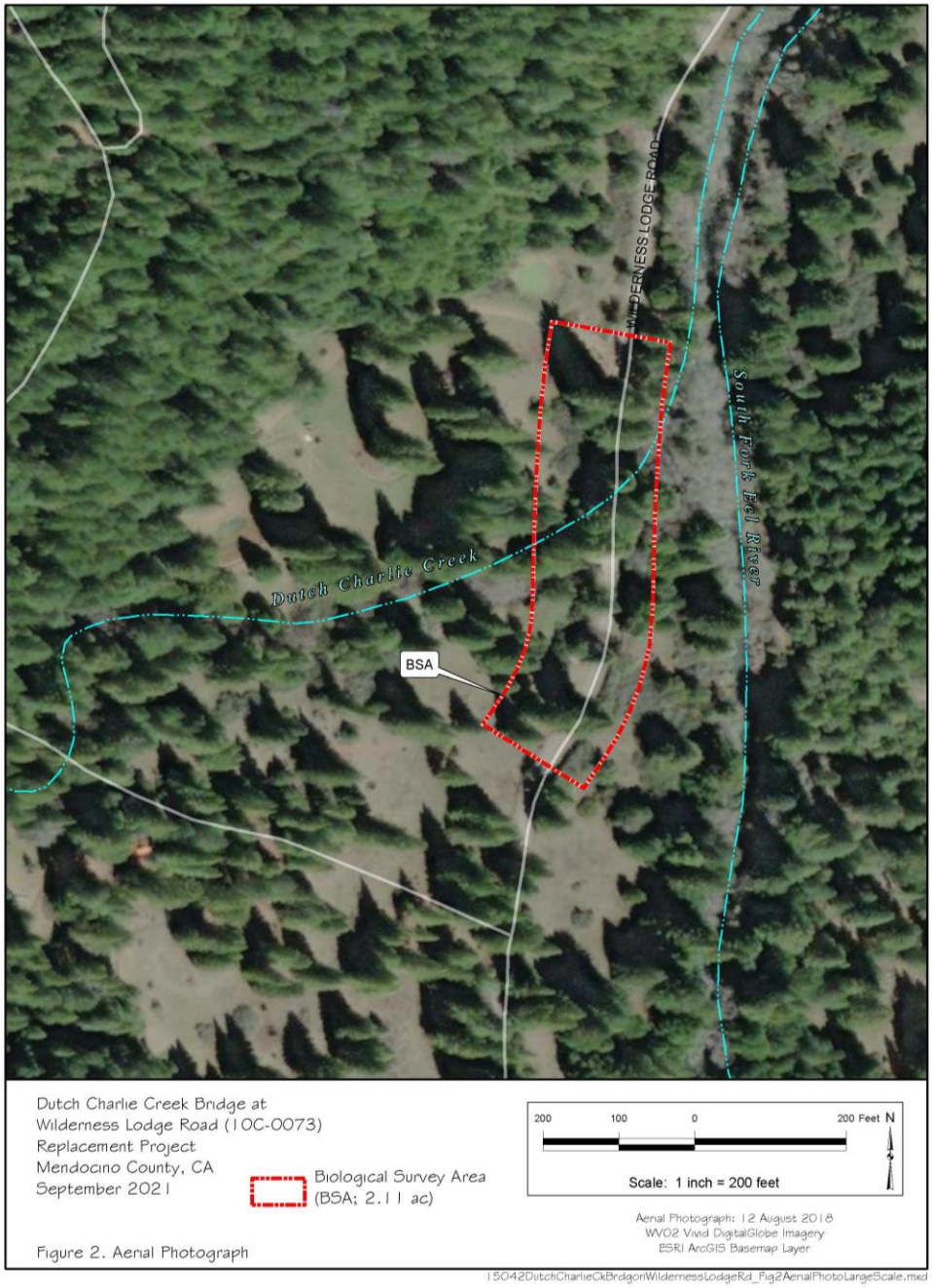


Figure 2. Aerial Photograph



2.2 PROJECT PURPOSE

The purpose of the Project is to provide the traveling public with a bridge that is consistent with County and American Association of State Highway and Transportation Officials (AASHTO) guidelines. The current bridge provides the only road access to private lands north of Dutch Charlie Creek. Installation of the new bridge and approaches will provide the public with a new two-lane bridge that meets current design standards and will pass the 50-year flood event while providing a reasonable amount of additional hydraulic capacity.

2.3 CONSTRUCTION DETAILS

The proposed replacement bridge is 60 feet long with a clear width of 24 feet. The proposed 60-foot long single-span replacement bridge was developed to reduce the channel constriction caused by the existing bridge and limit the steepness of the channel slopes. The 24-foot clear width will allow for two 10-foot lanes and two 2-foot shoulders. The bridge will be supported on spread footings on rocks for abutment supports. To reduce channel constriction, the proposed abutments will be placed outside of the ordinary high-water mark (OHWM) of Dutch Charlie Creek. The roadway profile grade will be raised approximately two-feet to provide additional hydraulic capacity for up to a 50-year flood event. It is estimated that 1,350 CY of fill will be needed for the roadway construction. The proposed replacement bridge will replace the existing bridge on the same alignment.

The existing road varies in width from 18 to 20-feet south of the bridge and 23 to 24-feet north of the bridge. Based on an ADT of 150 vehicles per day, the width and roadway geometrics for Wilderness Lodge Road will follow the criteria presented in the AASHTO "Geometric Design of Very Low-Volume Local Roads" allowing the bridge to be constructed with a minimum clear width of 24 feet.

A standard Midwest Guardrail System (MGS) consisting of transition railing and a terminal system is required at all four corners of the bridge. A Caltrans standard California ST-30 open barrier is proposed for the bridge railing. The open barrier railing will allow drivers to view the creek and to allow water to better pass over the bridge when the bridge is overtopped. The County currently does not have any specific aesthetic requirements for the new replacement structure.

The Draft Bridge Type Selection Report (MGE 2016) evaluated two basic bridge replacement alternatives and two structure types:

- **Alternative 1:** Construct a temporary detour west of the existing bridge and build the new bridge on the existing alignment. The new bridge would be constructed on the existing tangent alignment and on a profile grade approximately two-feet higher than existing. The approach roadways would be realigned slightly and conform with the existing roadways within 200-feet of the proposed bridge to the north and south. The geometry of the existing road conforms to a design speed of 40-45mph.
- **Alternative 2:** Construct the new bridge in two stages on an alignment shifted slightly to the east such that the existing bridge can remain open for traffic during stage one construction of the replacement bridge. The new bridge would be constructed in two stages such that the existing bridge could remain open for traffic during stage one construction. The realigned Wilderness Lodge Road would be shifted approximately 17-feet to the east and conform with the existing roadways within 300-feet of the proposed bridge to the north and south. The geometry of the realigned road would conform to a design speed of 40mph.

Alternative 1 was selected because of: (1) lower costs; (2) greater hydraulic clearance; (3) no requirement for additional permanent right-of-way acquisition; (4) it maintains existing Wilderness Lodge Road alignment; (5) less roadway embankment needed; and (5) less overall permanent environmental impacts compared to Alternative 2

Alternative 1 consists of a cast-in-place (CIP) prestressed (post-tensioned) concrete slab bridge constructed on the existing alignment and on a profile grade approximately 2-feet higher than existing. The approach roadways would be realigned slightly and conform with the existing roadways within 200-feet of the proposed bridge to the north and south. The superstructure depth for the CIP prestressed concrete slab is approximately 1.83 feet.

Stream banks will be excavated for removal of the existing abutments. Abutment removal can be completed with equipment stationed on the approach roadway side. The depths of the existing abutments

are unknown, but are expected to be removed to a depth of approximately 3 feet below finished grade. Removal of the existing abutments may leave voids in the creek bed. Backfill behind the existing abutments will be recontoured to match the natural grade of the creek. River rock will be composed of washed, rounded, spawning-sized gravel between 0.4 to 4 inches in diameter. The Project will remove and demolish the existing bridge; this is discussed in Section 2.6 below.

Falsework for the new bridge will be constructed across the stream from abutment to abutment. The falsework may include columns supported on the streambed with pads to distribute the weight of the concrete bridge deck. Concrete trucks and other equipment will be stationed on the existing road adjacent to construction. Falsework will be removed following construction of the superstructure slab.

The 2017 Draft Foundation Report (Shannon & Wilson, Inc.) recommends spread footings on rocks for abutment supports. The foundations will not be on driven piles due to the presence of listed salmonids in Dutch Charlie Creek and the potential vibration and noise impacts associated with pile driving. The abutment embankments will not need to be protected from scour as the abutment foundations will be founded on non-scourable rock material.

The approach roadways will drain surface water into areas adjacent to the roadways as currently exists. The bridge deck slopes down from the south to the north. Storm water will sheet flow over the bridge and drain into two bioswales north of the bridge, one on each side of the roadway near the ends of the wingwalls. The bridge deck will not utilize scuppers.

Heavy equipment will be used during construction activities and may include any combination of the following: excavator with jack-hammer attachment (aka excavator hydraulic breaker, aka hoe-ram), front-end loader, bulldozer, crane, dump trucks, grader, off road forklift, service trucks and vehicles, asphalt paver, roller, generator set, signal boards, rubber-tired backhoe, etc.

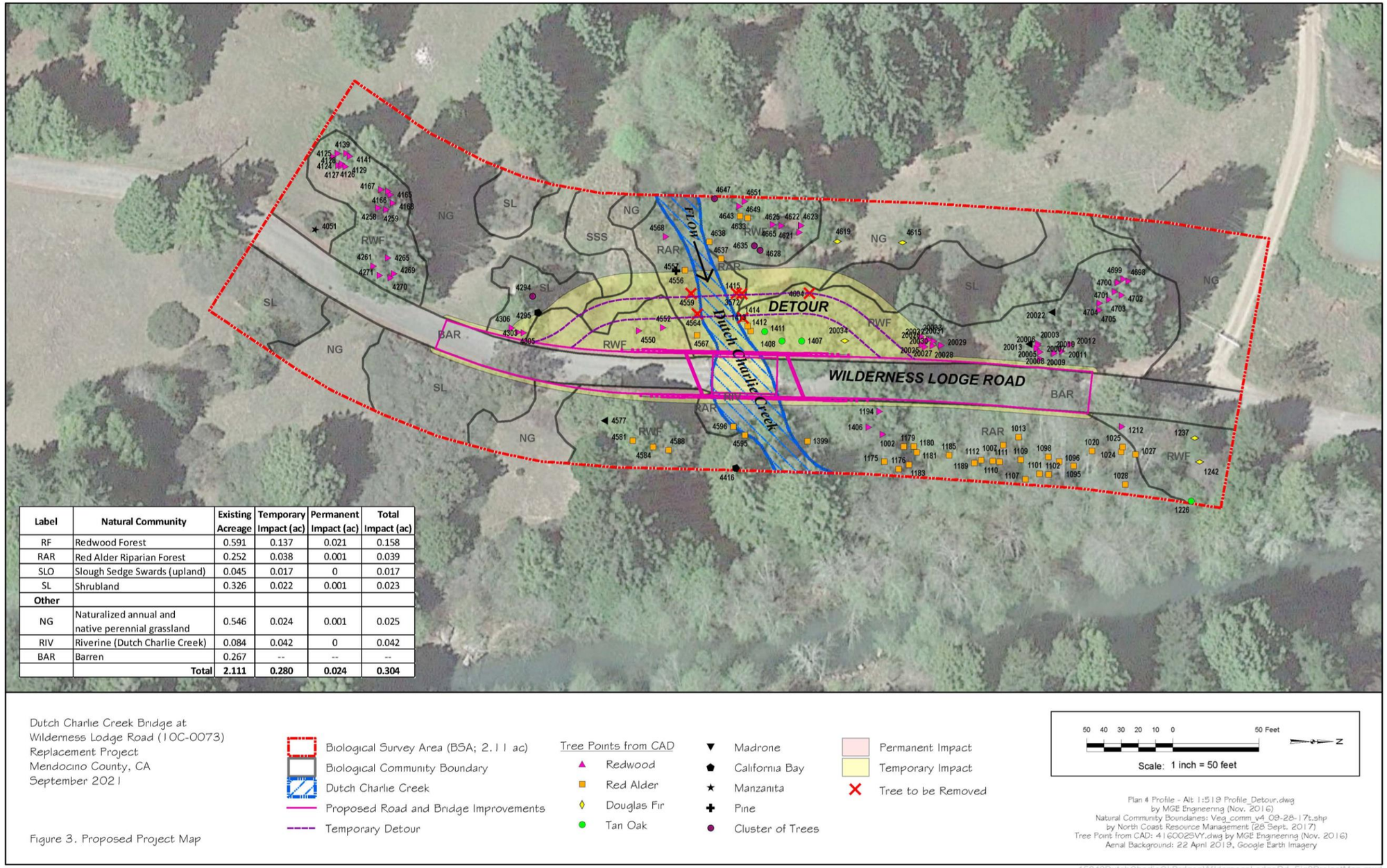
2.4 HYDRAULICS AND DESIGN EXCEPTIONS

Dutch Charlie Creek flows northeasterly through the Project area and is tributary to South Fork Eel River. The existing bridge is located approximately 200 feet from the confluence of Dutch Charlie Creek with the South Fork Eel River and the water surface elevation (WSE) is influenced by the flow condition in the River. Caltrans Highway Design Manual (HDM) requires that bridges be designed to have sufficient freeboard for the 50-year event and pass flows during the 100-year event.

Hydraulic analysis results indicate that the existing bridge cannot pass the 50-year or 100-year flow events. The hydraulic analysis estimated that to meet the HDM requirements, a bridge length of approximately 200 feet would be required and the existing profile grade would need to be raised by approximately 3.5 feet, assuming a multi-span concrete slab bridge was constructed.

Since this is not considered a reasonable replacement scenario, and the fact that there is no anecdotal evidence that the existing bridge has ever been overtopped, a shorter structure that improves the existing hydraulic capacity is being proposed and a design exception will be required (MGE 2016). The proposed bridge will pass the 50-year flow event with a freeboard clearance of approximately 0.50 feet and is predicted to be overtopped by the 100-year flood event based on the HEC-RAS model for Dutch Charlie Creek.

Figure 3. Proposed Project Map



Label	Natural Community	Existing Acreage	Temporary Impact (ac)	Permanent Impact (ac)	Total Impact (ac)
RF	Redwood Forest	0.591	0.137	0.021	0.158
RAR	Red Alder Riparian Forest	0.252	0.038	0.001	0.039
SLO	Slough Sedge Swards (upland)	0.045	0.017	0	0.017
SL	Shrubland	0.326	0.022	0.001	0.023
Other					
NG	Naturalized annual and native perennial grassland	0.546	0.024	0.001	0.025
RIV	Riverine (Dutch Charlie Creek)	0.084	0.042	0	0.042
BAR	Barren	0.267	--	--	--
	Total	**2.111**	**0.280**	**0.024**	**0.304**

Dutch Charlie Creek Bridge at
Wilderness Lodge Road (10C-0073)
Replacement Project
Mendocino County, CA
September 2021

Figure 3. Proposed Project Map

Biological Survey Area (BSA; 2.11 ac)
Biological Community Boundary
Dutch Charlie Creek
Proposed Road and Bridge Improvements
Temporary Detour

Tree Points from CAD
Redwood
Red Alder
Douglas Fir
Tan Oak
Madrone
California Bay
Manzanita
Pine
Cluster of Trees

Permanent Impact
Temporary Impact
Tree to be Removed

50 40 30 20 10 0 50 Feet
Scale: 1 inch = 50 feet

Plan & Profile - Alt 1:519 Profile_Detour.dwg
by MGE Engineering (Nov. 2016)
Natural Community Boundaries: Veg_comm_v4_09-28-17b.shp
by North Coast Resource Management (28 Sept. 2017)
Tree Point from CAD: 41GO25VY.dwg by MGE Engineering (Nov. 2016)
Aerial Background: 22 April 2019, Google Earth Imagery

15042DutchCharlieCkBrdgonWildernessLodgeRd_Fig3ProjectMap.mxd

2.5 TEMPORARY DETOUR AND STAGING

The bridge is the only access to properties north of Dutch Charlie Creek and vehicular access will need to be maintained during construction. Construction staging areas will be located along both sides of Wilderness Lodge Road north and south of the existing bridge, and along the temporary detour.

A temporary detour road and bridge will be installed west (upstream) of the existing bridge. The detour would be a single lane detour with temporary signalization to control traffic. The horizontal geometry of the temporary detour has been designed to minimize tree removal.

The temporary detour will be constructed first by clearing and grubbing the limits of the detour. Geotextile fabric will be laid down covering the area where temporary fill will be placed. The use of geotextile fabric will make is easier for the contractor to remove the temporary detour and restore the areas back to the original grade. The detour will then be paved with asphalt concrete.

The Project Engineer has determined that the temporary detour bridge can span the creek without intermediate supports within the creek banks. A clear span will be written into the bid specifications, and the contractor will be required to construct a clear span bridge. The temporary abutments will be constructed outside the channel, and the temporary bridge superstructure will be placed on the abutments using a small crane outside the creek channel. Following completion of the new bridge and approach roadways, the temporary detour would be removed, and the disturbed areas restored with native plant species as required. The temporary detour would not be expected to add any appreciable time travel on the very low volume rural road.

2.6 BRIDGE REMOVAL

Removal of the existing bridge will be performed in accordance with the Caltrans Standard Specifications modified to meet environmental permit requirements. Existing bridge components (railroad flatcars) may be salvaged by the County. Materials not salvaged by the County will be removed from the Project area and disposed of by the contractor.

Bridge removal will likely involve use of a crane to remove the bridge superstructure, and excavators with demolition tips (hydraulic hammers), on the concrete portions of the substructure. The existing bridge abutments and footings will be removed to at least 3-feet below grade. All bridge and abutment debris will be removed from the site using a combination of heavy and handheld equipment (crane, excavator, jack hammers, shovels etc.). Large equipment used in abutment removal can be stationed on the approach roadway.

2.7 RIGHT OF WAY

Wilderness Lodge Road has a total right-of-way width of 40 feet. The traffic detour would require a temporary construction easement to construct the temporary detour road west of the existing bridge. No permanent right-of-way would be required as the existing alignment would be maintained.

2.8 STREAM DIVERSION/DEWATERING

Best management practices (BMPs) will be implemented during construction to prevent concrete or other materials from entering Dutch Charlie Creek. Diversion/dewatering activities will adhere to any USFWS, NMFS, and CDFW requirements. A qualified biologist will be present during installation and removal of the diversion structure and dewatering activities. Large equipment used in the removal of the existing abutments and construction of the new abutments can be stationed on the approach roadway. Contract specifications will not allow equipment within the creek channel. Clear water diversion will be installed using hand tools within the creek. The construction specifications will require a water pollution control plan.

Abutment removal and replacement, and construction and removal of falsework for the new bridge construction, may require a temporary water diversion of the creek. A temporary cofferdam just upstream and downstream of the bridge could be constructed and flow diverted into one or more pipes to minimize impacts to salmonids and maintain water quality in the creek. A temporary protective cover would be constructed over the piped diversion to prevent debris from falling into the creek. The piped diversion would allow flows to pass through the existing channel under the bridge. This would also limit risk of material falling into the creek, and sediment contributions from construction and elevated turbidity in the creek's lower reaches and in the main South Fork Eel River. Temporary diversion structures will be removed upon completion of construction activities within the creek. The diversion structure would be removed beginning downstream and progressing upstream. If gravel bags are used, they will be removed in their entirety upon completion of the Project, and the riverbed returned to pre-Project conditions.

Diverting the creek may not adequately dewater the stream. If groundwater and/or seepage is encountered during construction, dewatering will be necessary. Dewatering abutment footing excavations can be accomplished by means of diking/diversion of surface water and the use of dewatering trenches, ditches, and/or sump pumps. Clean, non-turbid water would be returned to the creek in accordance with Section 13-8 of the 2018 Caltrans Standard Specifications. Turbid water will be detained in a storage basin until it has settled, at which time it will be returned to a gravel bar or other area where water may go subsurface before returning to the channel. At no time or place shall the temperature of returning water be increased by more than 5°F above natural receiving water temperature.

The Project will develop a dewatering and discharge plan prior to construction. The dewatering plan will detail the location of dewatering activities, equipment, and discharge point(s). Sediment controls and other BMPs will be identified in the plan to ensure that discharges are consistent with the guidelines provided above.

2.9 UTILITIES

The overhead power lines located on the west side of the approach roadways will not require relocation or to be temporarily de-energized as the lines remain outside of the limits of the temporary detour. There are no utilities carried on the existing bridge nor within the Project area.

2.10 DRAINAGE

The approach roadways will drain surface water into areas adjacent to the roadways as currently exists. The new bridge deck will drain storm water off the bridge deck through scuppers in the east and west barrier railing curbs.

2.11 SCHEDULE

Construction is planned for 2023 or later and will take approximately 5-6 months to complete. The in-water work period would be restricted to the dry season, generally defined as the period between 1 July and the first qualifying rain event on or after 15 October (more than one half inch of precipitation in a 24-hour period), unless NMFS and CDFW provides approval of work outside that period

2.12 REQUIRED PERMITS AND APPROVALS

Based on the environmental conditions of the Project area and the analysis of potential impacts provided in Section 3, Project implementation will require the approvals listed in the Table 1 below:

Table 1. Required Permit Approvals

Approving Agency	Required Permit/Approval	Required For
Federal Agencies		
California Department of Transportation per Federal Highway Administration's NEPA delegation	National Environmental Policy Act (NEPA) Categorical Exclusion	Funding
U.S. Army Corps of Engineers	Section 404 Clean Water Act Nationwide Permit. (Clean Water Act, 33 USC 1341)	Discharge of dredge/fill material into "Waters of the United States," including wetlands.
State Agencies		
California Department of Transportation	Project Approval/ NEPA Compliance as delegated by FHWA	Funding through the Federal Highway Bridge Program Funding Approval
State Water Resources Control Board, Regional Water Quality Control Board	General Construction Activity Storm Water Permit. Notice of Intent. (Clean Water Act Section 402; 40 CFR Part 122)	Storm water discharges associated with construction activity for greater than 1 acre of land disturbance
State Water Resources Control Board, Regional Water Quality Control Board	Water Quality Certification (Clean Water Act Section 410), if Project requires Army Corps of Engineers 404 permit.	Discharge into "Waters of the U.S.," including wetlands (see Army Corps of Engineers Section 404 Permit above).
California Department of Fish and Wildlife	Streambed Alteration Agreement. (Fish and Game Code 1602)	Change in natural state of river, stream, lake (includes road or land construction across a natural streambed) which affects fish or wildlife resource.
Local Agencies		
Mendocino County	Project Approval/CEQA Compliance	Project implementation and funding

2.13 FINANCIAL ASSURANCE

This project is funded under Expenditure Authorization BRLO-5910(091) and by the Federal Highway Administration Highway Bridge Program as administered by Caltrans. The project has $1,787,000 in programmed construction funds. The project funding appropriation will include funds needed for all associated fish habitat enhancement structures, BMPs, and avoidance/ minimization measures, as described, during construction, as well as mitigation monitoring and maintenance following project completion, which is estimated to be $400,000. The specific financial commitments needed to secure the various project construction permits will be defined/resolved with each agency during the final design/permit acquisition stage of the project. Caltrans shall provide security, in compliance with the Master Funding Agreement entered into by the California Department of Fish and Wildlife and Caltrans on September 3, 2021, to ensure that it has adequate funding to complete the mitigation measures.

3 INITIAL STUDY CHECKLIST AND SUPPORTING DOCUMENTATION

3.1 INITIAL STUDY CHECKLIST

This section of the Initial Study incorporates the Environmental Checklist contained in Appendix G of the CEQA Guidelines. Each resource topic section provides a determination of potential impact and an explanation for the checklist impact questions. The following 19 environmental categories are addressed in this section:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emission
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

Each of the above listed environmental categories was fully evaluated and one of the following four determinations was made for each checklist question:

- **"No Impact"** means that no impact to the environment would occur as a result of implementing the Project.

- **"Less than Significant Impact"** means that implementation of the Project would not result in a substantial and/or adverse change to the environment and no mitigation is required.

- **"Potentially Significant Unless Mitigation is Incorporated"** means that the incorporation of one or more mitigation measures would reduce the impact from potentially significant to less than significant.

- **"Potentially Significant Impact"** means that there is either substantial evidence that a Project-related effect would be significant or, due to a lack of existing information, could have the potential to be significant.

3.2 SETTING, IMPACTS, AND MITIGATION MEASURES

3.2.1 AESTHETICS

Except as provided in Public Resources Code Section 21099 would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒

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

Environmental Setting

The Project site occurs in a rural portion of Mendocino County at an elevation ranging approximately from 1,465 to 1,475 feet above sea level. Wilderness Lodge Road in the Project area occurs in a relatively flat rural residential portion of Jackson Valley adjacent to the South Fork Eel River. Scattered rural residential structures occur adjacent to the Project. The closest potential residential structures visible on aerial images is located approximately 1,000 ft north of the existing bridge.

The South Fork Eel River located adjacent to and outside the Project area was designated in 1981 as part of the National Wild and Scenic Rivers System (Wild & Scenic Rivers Act 1968, Mendocino County 2008). The reach of the river adjacent to the Project site is designated for its 'recreational' values. This reach of the South Fork Eel River has also been designated by the California state legislature under the 1972 California Wild and Scenic Rivers Act as a State Wild and Scenic River, which protects the river from future development that might inhibit the free flow of the river. The Project does not include activities that would affect the National Wild and Scenic Rivers System of the California Wild and Scenic Rivers Act designations of the South Fork Eel River.

Potential Environmental Effects

a) ***No Impact.*** The Mendocino General Plan Environmental Impact Report (EIR) does not identify any scenic vistas or roadways within or near the vicinity of the Project site (Mendocino County 2008). The replacement bridge will be visually consistent with other transportation infrastructure in the vicinity of the Project.

b) ***No Impact.*** No officially designated scenic highways occur in Mendocino County (CALTRANS 2021, Mendocino County 2008).

c) ***Less Than Significant Impact***. Construction of the Project would result in physical changes to the visual characteristics of the immediate Project area by replacing the existing bridge with a new bridge structure on a slightly higher grade (2 ft). Temporary changes in the visual characteristics of the immediate Project area would results from the installation of the temporary detour. The temporary detour required by the proposed Project involves the removal of six native trees (as well as understory vegetation) including five red alder trees and one Douglas fir tree upstream of the existing bridge. The removal of six native trees and understory vegetation would not substantially degrade the visual character or quality of public views of the site and its surroundings. Numerous native adjacent trees and shrubs will not be removed in the Project area. Mitigation Measure BIO-5 includes implementation of the Project's Revegetation Planting and Erosion Control Specifications and Restoration Plan which includes native tree planting and monitoring as well as revegetation and erosion control measures. This further reduces this already less than significant impact. The

replacement bridge will be visually consistent with other transportation infrastructure in the vicinity of the Project.

d) ***No Impact.*** The replacement bridge would not create a new source of glare; lighting is not proposed for the replacement bridge. Construction activities will occur during daytime hours only.

3.2.2 AGRICULTURAL AND FORESTRY 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 Dept. 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:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental Setting

The Mendocino County Assessor's parcels occurring within the Project limits are listed in Table 2 along with their general plan land use designation, zoning designation, Williamson Act contract status per the Mendocino County Land Use and Zoning interactive map (Mendocino County 2021a).

Table 2. Assessor's Parcels Occurring within the Project Limits

Mendocino County Assessor's Parcel Number (APN)	General Plan Land Use Designation	Zoning Designation	Williamson Act Contract Status
County Road Right Of way	NA	NA	NA
013-660-62 (+10 ac)	RMR20 (Remote Residential 20 acres)	TP (Timberland Production)	Not Enrolled

013-660-58 (+15 ac)	RMR20 (Remote Residential 20 acres)	TP (Timberland Production)	Not Enrolled

APNs 013-660-62 and 013-660-58 are classified as 'Grazing Land' per the California Important Farmland Finder (California Department of Conservation 2021). None of the APN's in the Project area are currently under Williamson Act Contract (Mendocino County 2021a). APNs 013-660-62 and 013-660-58 are both zoned 'Timber Production'.

The Project will require temporary construction easements (TCE's) on the APN's abutting Wilderness Lodge Road in the Project area to facilitate installation of the temporary detour. No permanent easements or right-of-way would be required as the existing alignment would be maintained.

Potential Environmental Effects

a) ***No Impact.*** Areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance do not occur in the Project area and would not be affected.

b) ***No Impact.*** The proposed Project replaces the existing bridge on-site and is consistent with the existing zoning. The Project will not require any rezoning. The two parcels (APNs 013-660-62 and 013-660-58) located in the Project area are not under Williamson Act Contract (Mendocino County 2021a).

c) ***No Impact.*** The two parcels in the Project area are zoned 'Timber Production'. This zoning designation is applied to areas of the County which because of their general soil types, location and timber growing capabilities are suited for and should be devoted to the growing, harvesting, and production of timber and timber related products. The existing road/ bridge alignment will be retained, and no permanent right of way will be acquired for the Project. The Project does not include or require any rezoning and nor will conflict with the existing zoning designation of "Timber Production."

d) ***Less Than Significant Impact.*** No permanent right of way will be acquired for the Project and the Project will not result in the loss of forest land or permanently convert timberland to a different use. The temporary detour required by the proposed Project involves the removal of six native trees including five red alder trees and one Douglas fir tree upstream of the existing bridge on APN 013-660-58. The removal of six native trees and understory vegetation would not result in the loss of forest land or conversion of forest land to non-forest use. Mitigation Measure BIO-5 includes implementation of the Project's Revegetation Planting and Erosion Control Specifications and Restoration Plan which includes native tree planting and monitoring as well as revegetation and erosion control measures and further reduces this less than significant impact.

e) ***No Impact.*** The Project does not include activities that due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

3.2.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Environmental Setting

The Project is located in the North Coast Air Basin which consists of three air districts: (1) the North Coast Unified Air Quality Management District (NCUAQMD); (2) the Mendocino County Air Quality Management District (MCAQMD); and (3) the Northern Sonoma County Air Pollution Control District. The proposed Project occurs in the MCAQMD.

The air quality of a region is determined by the air pollutant emissions (quantities and type of pollutants measured by weight) and by ambient air quality (the concentration of pollutants within a specified volume of air). Air pollutants are characterized as primary and secondary pollutants. Primary pollutants are those emitted directly into the air, for example carbon monoxide (CO), and can be traced to a single pollutant source. Secondary pollutants are those pollutants that form through chemical reactions in the atmosphere, for example reactive organic gasses (ROG) and nitrogen oxides (NOX) combine to form ground level ozone, or smog.

Congress established much of the basic structure of the Clean Air Act in 1970 and made major revisions in 1977 and 1990. The Federal Clean Air Act established national ambient air quality standards (NAAQS). These standards are divided into primary and secondary standards. Primary standards are designed to protect public health and secondary standards are designed to protect other values. Because of the health-based criteria identified in setting the NAAQS, the air pollutants are termed "criteria" pollutants. California has adopted its own, more stringent, ambient air quality standards (CAAQS). The NAAQS and CAAQS attainment status of Mendocino County is presented in Table 3.

Table 3. Attainment Status for Mendocino County

Pollutant	National Designation	State Designation
8-hour Ozone	Unclassified/ Attainment	Attainment
PM10	Unclassified	Nonattainment
PM2.5	Unclassified/ Attainment	Attainment
CO	Unclassified/ Attainment	Attainment
NO_2	Unclassified/ Attainment	Attainment
SO_2	Unclassified	Attainment
SO_4	NA	Attainment
Lead	Unclassified/ Attainment	Attainment
Hydrogen Sulfide	NA	Unclassified
Visibility Reducing Particles	NA	Unclassified

Mendocino County is currently designated as "attainment" or "unclassified" for all the federal and state ambient air quality standards except for the state 24-hour particulate (PM10) standard (ARB 2021). PM10 is defined as course particulate matter measuring 10 microns or less in diameter.

According to the MCAQMD's Particulate Matter Attainment Plan (MCAQMD 2005), the primary man-made sources of PM10 pollution in the North Coast Air Basin are wood combustion (woodstoves, fireplaces, and outdoor burning), fugitive dust, and automobile traffic. Some of the automobile emissions are the result of "pass-though" traffic on US Highway 101 because of its nature as the major transportation corridor.

The MCAQMD administers the state and federal Clean Air Acts in accordance with state and federal guidelines. The MCAQMD regulates air quality through its district rules and permit authority. It also participates in planning review of discretionary Project applications and provides recommendations. The following District rules apply to the Project:

- **Rule 1-400.a and 1-400.b:**
    - 1-400.a (Public Nuisance): A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or that endanger the comfort, repose, health or safety of any such persons or the public or that cause or have a natural tendency to cause injury or damage to business or property.
    - 1-400.b (Circumvention):A person shall not construct, erect, modify, operate or use any equipment that conceals or tends to conceal an air contaminant emission that would be subject to the rules and regulations of the Mendocino County Air Quality Management District or to state law regarding air pollution, or that prevents the determination of compliance with the District's rules and regulations or with applicable state law, unless the operation or use of such equipment results in a verifiable and enforceable significant reduction in the emission of air contaminants that are or would be concealed or determination of whose compliance would be prevented. A person shall not discharge air contaminants into the atmosphere from any source whatsoever except in such fashion as to permit determination of compliance with applicable rules and regulations of the Mendocino County Air Quality Management District and with applicable provisions of state law.
- **Rule 1-410 a (Visible Emissions):** A person shall not discharge into the atmosphere from any source whatsoever any air contaminant for a period or periods aggregating more than three (3) minutes in any one hour that is as dark or darker in shade as that designated as No. 1 on the Ringlemann Chart, as published by the United States Bureau of Mines; or of such opacity as to obscure an observer's view to a degree equal to or greater than Ringlemann 1 or twenty (20) percent opacity.
- **Rule 1-420 a (Particulate Matter):** A person shall not discharge particulate matter into the atmosphere from any combustion source in excess of 0.46 grams per standard cubic meter (0.20 grains per standard cubic foot) of exhaust gas, calculated to 12 percent carbon dioxide; or in excess of the limitations of NSPS, Rule 1-490, as applicable.
- **Rule 1-430 (Fugitive Dust Emissions):** This Rule prohibits the handling, transportation, or open storage of materials, or the conduct of other activities in such a manner that allows or may allow unnecessary amounts of particulate matter to become airborne except under the following circumstances:

- Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to, the following provisions:
    - Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.
    - Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials.
    - The screening of all open-outdoor sandblasting and similar operations.
    - The use of water or chemicals for the control of dust during the demolition of existing buildings or structures.
- The following airborne dust control measures shall be required during all construction operations, the grading of roads, or the clearing of land
    - All visibly dry disturbed soil road surfaces shall be watered to minimize fugitive dust emissions.
    - All unpaved surfaces, unless otherwise treated with suitable chemicals or oils, shall have a posted speed limit of 10 miles per hour.
    - Earth or other material that has been transported by trucking or earth moving equipment, erosion by water, or other means onto paved streets shall be promptly removed.
    - Asphalt, oil, water or suitable chemicals shall be applied on materials stockpiles, and other surfaces that can give rise to airborne dusts.
    - All earthmoving activities shall cease when sustained winds exceed 15 miles per hour.
    - The operator shall take reasonable precautions to prevent the entry of unauthorized vehicles onto the site during non-work hours.
    - The operator shall keep a daily log of activities to control fugitive dust.
- During recreational activities adequate dust control shall be maintained to prevent dust from migrating off the property where the activity is occurring.

- **Rule 1-492: National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

According to the Mendocino County AQMD's 'Google Earth NOA Map' map the Project site is not located in an area known or likely to contain naturally occurring asbestos (Mendocino County AQMD 2021).

CEQA Thresholds: On June 3, 2010, the MCAQMD Air Pollution Control Officer issued new CEQA guidance which requested that Planning agencies and consultants use the Bay Area Air Quality Management District (BAAQMD) CEQA Thresholds adopted on May 28th, 2010, to evaluate air quality impacts, with clarifications provided in 2013(MCAQMD 2010, MCAQMD 2013).

The BAAQMD thresholds have subsequently been updated, with the last major revision completed in May 2017. The BAAQMD CEQA Thresholds were subsequently invalidated by a trial court because the BAAQMD itself did not do a CEQA evaluation of the Thresholds before their adoption. The Court, however, did not rule on or question the adequacy of the BAAQMD Air Quality CEQA Guidelines, including the impact assessment methodologies, or the evidentiary basis supporting the Thresholds, which are included in the Guidelines. Therefore, the following air quality analysis utilizes in part the impact assessment methodologies presented in the BAAQMD Air Quality CEQA Guidelines.

Potential Environmental Effects

a) ***Less Than Significant with Mitigation Incorporated.*** The California Clean Air Act of 1988 requires that any air district that does not meet the PM10 standard make continuing progress to attain the standard at the earliest practicable date. In response to this requirement, the MCAQMD adopted a Particulate Matter Attainment Plan in 2005, which includes a description of local air quality, the sources of local PM emissions, and recommended control measures to reduce future PM levels. Control measures recommended in the Attainment Plan include measures related to woodstoves, campgrounds, unpaved roads, construction and grading activities, new residential development, and open burning emissions.

Construction activities associated with the Project would include site preparation (e.g., demolition, clearing/grubbing), grading, excavation, bridge construction, and asphalt paving. The types of air pollutants generated by these activities are typically nitrogen oxides and particulate matter, such as dust and exhaust. Because construction activities could temporarily increase levels of PM10 in a region designated as nonattainment for PM10, the impact is considered significant. With implementation of Mitigation Measure AQ-1, construction activities would not conflict with or obstruct implementation of the 2005 Particulate Matter Attainment Plan and impacts would be less than significant.

Mitigation Measure AQ-1

In accordance with Rule 1-430(b) of the Mendocino County Air Quality Management District Regulations, the County of Mendocino and its Contractor shall implement the following airborne dust control measures during construction activities:

- *All visibly dry disturbed soil road surfaces shall be watered to minimize fugitive dust emissions.*
- *All unpaved surfaces, unless otherwise treated with suitable chemicals or oils, shall have a posted speed limit of 10 miles per hour.*
- *Earth or other material that has been transported by trucking or earth moving equipment, erosion by water, or other means onto paved streets shall be promptly removed.*
- *Asphalt, oil, water or suitable chemicals shall be applied on materials stockpiles, and other surfaces that can give rise to airborne dusts.*
- *All earthmoving activities shall cease when sustained winds exceed 15 miles per hour.*
- *The operator shall take reasonable precautions to prevent the entry of unauthorized vehicles onto the site during non-work hours.*
- *The operator shall keep a daily log of activities to control fugitive dust.*

b) ***Less Than Significant Impact.*** The Mendocino AQMD is listed as "attainment" or "unclassified" for all the federal and state ambient air quality standards except for the state 24-hour particulate (PM_{10}) standard (ARB 2021). By its nature, air pollution is largely a cumulative impact, in that individual projects are rarely sufficient in size to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions may potentially contribute to cumulative adverse air quality impacts.

The MCAQMD applies the BAAQMD's CEQA guidelines and thresholds that includes screening criteria to provide lead agencies with a conservative indication of whether a project could result in potentially significant air quality impacts. According to the guidelines, if a project's characteristics (i.e., square footage, acreage, number of dwelling units) are less than associated screening criteria,

then the lead agency does not need to perform a detailed air quality assessment of the Project's air pollutant emissions and a less-than-significant impact would occur (BAAQMD 2017).

For construction activities, several different screening criterions are recommended by the BAAQMD relative to air pollutant emissions (i.e., reactive organic gases [ROG], NOX, PM2.5, and PM10). For example, detailed air quality assessments are not required for construction of projects such as single-family residential developments comprised of less than 114 dwelling units, City parks that are less than 67 acres in size, and construction of office and commercial buildings that are less than 277,000 square feet (BAAQMD 2017).

The BAAQMD CEQA thresholds do not include specific screening criteria for bridge replacement and roadway improvement projects. However, when one compares the screening criteria established for the types of projects described above, it is reasonable to assume that the areal extent of construction activities associated with the bridge replacement Project would be substantially less and would also not warrant a detailed air quality assessment. The Project, for example, would be conducted during one construction season (i.e., approximately 5-6 months) and the total construction disturbance area is estimated to be 0.3 acres (i.e., 13,068 square feet) – well below the screening criteria. Therefore, given the temporary nature of the Project's construction phase and the scale of the Project it is not anticipated that construction activities would result in a cumulatively considerable net increase of PM10. The short-term impact would be less than significant.

Additionally, dust control measures required by Mitigation Measure AQ-1 would further reduce this already less than significant impact. Following construction, the Project would not result in a new stationary source of emissions and the roadway capacity would not be increased. The Project would not result in any new mobile pollutant emissions or a cumulatively considerable increase in PM10 emissions. No long-term impact would occur.

d) ***Less Than Significant Impact.*** Sensitive receptors are facilities that generally house people, such as schools, hospitals, residences, etc. The closest residential structures visible on aerial images is located approximately 1,000 ft north of the existing bridge. Project construction would create short-term increases in ROG, NOx, and PM10 emissions from vehicle and equipment operation. Impacts are considered less than significant due to the limited nature of the Project, short-term construction period, and distance to the closest sensitive receptor.

e) ***Less Than Significant Impact.*** Construction activities involve the use of construction equipment and asphalt paving, which have distinctive odors. These would be a potential short-term increase in odors, during construction, in proximity to the Project area. However, no aspects of Project operations would lead to additional emissions that could lead to odors. Odors are considered less than significant because of the limited number of the public affected in the rural area of the Project and the short-term nature of the emissions.

3.2.4 BIOLOGICAL RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California	☐	☒	☐	☐

Department of Fish and 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, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Environmental Setting

The information included in this section summarizes the Biological Assessment (BA) completed by SWCA Inc. (formerly Sycamore Environmental Consultants Inc.) in 2021. The purpose of the Biological Assessment is to provide technical information, in sufficient detail, to determine to what extent the proposed Project may affect threatened, endangered, or proposed species. Additionally, the assessment informs the CEQA analysis impact questions addressed below. The California Department of Transportation (Caltrans), assigned by the Federal Highway Administration (FHWA), prepared the biological assessment under its assumption of responsibility at 23 United States Code (USC) 326(a)(2)(A). The biological assessment is prepared in accordance with 50 CFR 402, legal requirements found in Section 7 (a)(2) of the Endangered Species Act (16 U.S.C. 1536(c)) and with FHWA and Caltrans regulation, policy and guidance.

An evaluation of biological resources was conducted to determine whether any federal-listed or federal-proposed plant or wildlife species, or their habitat, occur in the Project Area. Data on federal-listed and federal-proposed species and habitats known in the area were obtained from state and federal agencies. Maps and aerial photographs of the Project Area and surrounding areas were reviewed. A field survey was conducted to determine the habitats present. The field survey, map review, and a review of the biology of evaluated species and habitats were used to determine the federal-listed or federal-proposed species that could occur in the Project Area. Further detail on the research approach are provided in the Biological Assessment.

A jurisdictional delineation of wetlands and waters was conducted according to U.S. Army Corps of Engineers standards (Corps 1987; Corps 2008). Fieldwork for the jurisdictional delineation and general biological surveys were conducted by North Coast Resource Management (NCRM) on 29 April, 11 May, 30 May, 6 June, 23 June, and 13 July 2016. Dutch Charlie Creek is the only potential waters of the U.S. mapped in the Project Area.

A separate Natural Environment Study (NES) was prepared to evaluate the potential for special- status plant or wildlife species, or their habitat, or sensitive habitats, to occur in the Project Area. The Project NES included an evaluation of the potential for the federal listed Southern Oregon/Northern California Coast Coho salmon Evolutionary Significant Unit (ESU; (*Oncorhynchus kisutch*), Northern California steelhead Distinct Population Segment (DPS; (*Oncorhynchus mykiss*), California Coastal Chinook salmon ESU (*Oncorhynchus tshawytscha*), Tidewater Goby (*Eucyclogobius newberryi*), Pacific marten, Coastal Distinct Population Segment (*Martes caurina*), monarch butterfly (*Danaus plexippus*), marbled murrelet (*Brachyramphus marmoratus*), yellow-billed cuckoo (*Coccyzus americanus*), and Northern spotted owl (*Strix occidentalis caurina*) to occur in the Project Area.

Dutch Charlie Creek provides potential habitat for Coho, steelhead and Chinook; and these species are known to occur in Dutch Charlie Creek.

The Project is outside the range of the federal listed tidewater goby, Central California Coast Coho salmon ESU, California red-legged frog, western snowy plover, Pacific marten and does not provide suitable habitat for these species. The area does not provide suitable habitat for the five federal listed plant species including Howell's spineflower (*Chorizanthe howellii),* Menzies' wallflower *(Erysimum menziesii),* Burke's goldfields *(Lasthenia burkei),* Contra Costa goldfields *(Lasthenia conjugens),* and Showy Indian clover *(Trifolium amoenum).* Additionally, the Project Area does not contain any *Asclepias* spp. to support monarch butterfly.

The Project Area does not provide nesting habitat for yellow-billed cuckoo as the site does not support dense willows or mature cottonwoods. Potential habitat could occur in the riparian area along the South Fork Eel River, located 100 feet east and outside the Project Area.

The Project Area does not support mature trees with nest platforms for marbled murrelet. The redwood forest in the Project area lacks proper structural elements for nesting and consists of redwood forest interspersed with grassland habitat; therefore, the nesting potential for northern spotted owls is marginal. Suitable nesting habitat for murrelet and owls is present within 0.25 miles of the Project Area.

Dutch Charlie Creek in the Project Area is designated as critical habitat for Southern Oregon/Northern California Coast Coho salmon ESU, Northern California steelhead DPS, and California Coastal Chinook salmon ESU. The Project Area is also located within essential fish habitat (EFH) for Pacific salmon (NMFS 2014b) and is outside of designated critical habitat for marbled murrelet, yellow-billed cuckoo and northern spotted owl.

The Biological Assessment determined that the Project:

> (1) could adversely impact Southern Oregon/Northern California Coast Coho salmon ESU, Northern California steelhead DPS, and California Coastal Chinook salmon ESU;
>
> (2) has the potential to impact designated critical habitat for Southern Oregon/Northern California Coast Coho salmon ESU, Northern California steelhead DPS, and California Coastal Chinook salmon ESU:
>
> (3) is not likely to adversely impact northern spotted owl, yellow-billed cuckoo, and marbled murrelet;
>
> (4) will not impact tidewater goby, Central California Coast Coho salmon ESU, California red-legged frog, western snowy plover, Pacific marten, monarch butterfly, Howell's spineflower (*Chorizanthe howellii),* Menzies' wallflower *(Erysimum menziesii),* Burke's goldfields *(Lasthenia burkei),* Contra Costa goldfields *(Lasthenia conjugens),* and Showy Indian clover *(Trifolium amoenum);* and

(5) may impact EFH for Pacific salmon.

Vegetation in the area consists of redwood forest (0.591 acres), red alder riparian forest (0.252 acres), slough sedge swards (0.045 acres), shrubland (0.326 acres), and naturalized annual and native perennial grassland (0.546 acres). Redwood forest occurs throughout the uplands of the Project Area. Red alder riparian forest borders both sides of Dutch Charlie Creek and along the east side of Wilderness Lodge Road, south of the creek. Slough sedge swards occur just south of Dutch Charlie Creek, on the west side of Wilderness Lodge Road. Shrubland and naturalized annual and native perennial grassland are scattered on both sides of Wilderness Lodge Road.

Biological communities in the Project area and potential impacts are shown in Table 7 and Figure 4 (SWCA 2021). Shrubland and naturalized annual and native perennial grassland are not natural communities of special concern.

Table 4. Potential Impacts to Biological Communities in the Project Area

Biological Community	Existing Acreage	Temporary Impacts (ac)	Permanent Impacts (ac)
Redwood Forest	0.591	0.137	0.021
Red Alder Riparian Forest	0.252	0.038	0.001
Slough Sedge Swards (upland)	0.045	0.017	0
Shrubland	0.326	0.022	0.001
Naturalized annual and native perennial grassland	0.546	0.024	0.001
Riverine (Dutch Charlie Creek)	0.084	0.042	0.001
Other			
Barren	0.267	-	-
Total:	**2.111**	**0.280**	**0.024**

Potential Environmental Effects

a) ***Less Than Significant with Mitigation Incorporated***

Special Status Plant Species

The Project area provides potential habitat for five special status plant species. Botanical surveys were conducted monthly from April -August 2016 and did not detect any special status plant species within the Project area. It was determined that there is no suitable habitat for these species inside the Project Area. The Project will not impact special status plant species.

Figure 4. Biological Study Area and Project Impact Area

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Southern Oregon/Northern California Coast coho salmon, Northern California steelhead, and California Coastal Chinook salmon (salmonids)

Dutch Charlie Creek serves as the primary habitat component for coho, steelhead and Chinook in the Project Area. Dutch Charlie in the Project area does not provide suitable spawning habitat for salmonids. Dutch Charlie Creek is a perennial stream, though summer flows are only a few cubic feet per second (cfs) during the late summer months when bridge construction would occur.

The following stressors could affect federal listed salmonids and their critical habitat: (1) Riparian vegetation removal and/or conversion; (2) Exposure to Construction Personnel, Equipment and Falsework; (3) Water Diversion and Dewatering; (4) Fish Relocation; and (5) Exposure to the degradation product of tires. These potential impacts can be reduced to less than significant with the inclusion of Mitigation Measure BIO-1 to avoid or minimize adverse effects to salmonids:

Mitigation Measure BIO-1

- In-water construction activities will be restricted to the period between 1 July and the first qualifying rain event on or after 15 October (more than one half inch of precipitation in a 24-hour period), subject to approval by NMFS and CDFW Streambed Alteration Agreement, unless NMFS and CDFW provides approval of work outside that period.

- The Diversion, Dewatering and Fish Salvage Plan will be implemented during diversion, dewatering, and fish salvage activities.

- A qualified biologist will train Project staff that are on-site regarding habitat sensitivity, identification of SONCC coho, NC steelhead, and CC Chinook, and required practices before the start of construction. The training shall include the general measures that are being implemented to conserve SONCC coho, NC steelhead, and CC Chinook as they relate to the Project, penalties for noncompliance, and boundaries of the construction area. A fact sheet or other supporting materials containing this information will be prepared and distributed. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures.

- Equipment will be refueled and serviced at designated construction staging areas. All construction material will be stored and contained in a designated area that is located a minimum of 50 feet away from wetted portion of the channel to prevent transport of materials into Dutch Charlie Creek. Appropriate BMPs will be installed to collect any discharge, and adequate materials for spill cleanup will be kept on site. Construction vehicles and equipment will be maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease.

- Diversion and dewatering activities will be done in accordance with NMFS Guidelines for Salmonid Passage at Stream Crossings (NMFS 2001) and CDFW Fish Screen Criteria (Flosi et al. 2010), as applicable.

- Temporary diversion structures will be designed so that fish passage is maintained up and down stream of the Project Area. The diversion will not create an impassible barrier. The diversion would allow passage of salmonids attempting to migrate downstream. The diversion would allow flows to pass through the existing channel under the bridge while maintaining water quality in Dutch Charlie Creek. The contractor will prepare a water diversion and dewatering plan that complies with any applicable permit conditions. A temporary dam just upstream of the bridge could be constructed and flow diverted into one or more pipes. Any salmonids migrating downstream would pass through the bypass pipe and be returned to the stream just above the existing pool. A temporary protective cover will be constructed to prevent debris from falling into the creek.

- During abutment demolition activities using a hydraulic breaker, an impassible barrier will be installed in order to prevent noise stress to surrounding fish. A qualified biologist will clear a 50-foot section of fish on either side of the diversion structure. The 50-foot section will be cleared during methods described in the Diversion, Dewatering and Fish Salvage Plan. Once fish have been successfully cleared, and exclusion 'block' net would be placed across the width of the channel at the 50-foot mark to prevent fish from re-entering the area. The block net would be removed once hydraulic breaker activities cease. The biologist will monitor the fish exclusion sections for any remaining fish and document, if any, fish behavior that would indicate noise stress. The biologist will also monitor the upstream block net to make sure no fish become impinged.

- The qualified biologist will be present during installation and removal of the diversion structure and dewatering activities. Biological surveys and monitoring for fish and diversion/dewatering activities will adhere to the following methods:

    - Netting, electrofishing, seining and/or other fish capture and relocation methods shall be conducted in accordance with NMFS Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act (NMFS 2000b).

    - A survey for salmonids will be conducted prior to installation of the diversion structure. If salmonids are found, fish will be moved from the construction area through seining using two block nets to avoid direct mortality and minimize injury to salmonids. After seining is complete, a qualified biologist will conduct electrofishing to remove any remaining salmonids or other fish species. Installation of the diversion structure and dewatering activities will not commence until all visible salmonids have been removed from the area.

    - The biologist will continue to monitor during dewatering activities to look for fish that may have hidden in the stream and/or remain in low spots. Remaining fish will be captured and relocated, as necessary, in appropriate habitat downstream of the diversion structure. The biologist will remain until the area is completely dewatered, or the water level is low enough to verify no fish remain.

    - If pumps are used to dewater the creek between the cofferdams to facilitate construction, an acceptable fish screen must be used to prevent entrainment or impingement of small fish in accordance with NMFS Guidelines for Salmonid Passage at Stream Crossings (NMFS 2001) and CDFW Fish Screen Criteria (Flosi et al. 2010).

    - Prior to removal of the diversion structure, the qualified biologist will conduct another survey to ensure no fish are nearby that could be injured during diversion removal. Methods will follow the previous bullets, and diversion removal will not commence until all visible salmonids have been removed from the area.

    - Upon completion of activities, the diversion structure would be removed beginning downstream and progressing upstream. If gravel bags are used, they will be removed in their entirety upon completion of the Project to return the riverbed to pre- Project conditions.

- Clean, non-turbid water would be returned to the creek in accordance with Section 13-8 of the 2018 Caltrans Standard Specifications. Turbid water will be detained in a storage basin until it has settled, at which time it will be returned to a gravel bar or other area where water may go subsurface before returning to the channel. At no time or place shall the temperature of returning water be increased by more than 5°F above natural receiving water temperature.

- Removal of the existing abutments may leave voids in the creek bed. Voids created from the removal of the existing abutments will be backfilled with river rock and match the natural grade of the creek. Backfill behind the existing abutment will be removed and the bank recontoured to match the natural grade of the creek banks. River rock will be composed of washed, rounded, spawning-sized gravel between 0.4 to 4 inches in diameter.

- Stormwater runoff will be directed through bioswales.

Marbled Murrelet, Yellow-Billed Cuckoo and Northern Spotted Owl

The Project Area does not provide nesting habitat for marbled murrelet and yellow-billed cuckoo; and provides marginal nesting habitat for northern spotted owl. However, Areas within 0.25 mi of the Project Area could provide potential nesting habitat for marbled murrelet and northern spotted owl. If any marbled murrelet or northern spotted owl were to occur within 0.25 mi of the Project Area, direct interactions could include exposure to construction related noise.

Riparian habitat around the South Fork Eel River approximately 100 feet from the Project Area could provide potential nesting habitat for yellow-billed cuckoo. Additional nesting habitat could occur north and south of the Project Area along the South Fork Eel River. Cuckoos nesting along the South Fork Eel River riparian habitat adjacent to the Project Area could be exposed to construction related noise. Disturbance buffers for cuckoo are not as well defined. If marbled murrelet, yellow-billed cuckoo or northern spotted owls are nesting within 0.25 mi of the Project, they may be directly affected by construction related noise. Work in the Project Area, especially involving loud equipment, could cause stress to pairs nesting or foraging outside the Project Area. These potential impacts can be reduced to less than significant with the inclusion of Mitigation Measure BIO-2 to avoid or minimize adverse effects to marbled murrelet, yellow-billed cuckoo and northern spotted owl:

Mitigation Measure BIO-2

- Environmental awareness training will be conducted by a qualified biologist prior to the onset of Project work for construction personnel to brief them on how to recognize marbled murrelet and northern spotted owl, the importance of avoiding impacts to these species, the mitigation measures specific to these species, and what to do if these species are found. Education programs will be conducted for appropriate new personnel as they are brought on the job during the construction period. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures.
- The Project will not remove potential nesting trees for marbled murrelet and northern spotted owl. The trees proposed for removal are not potential nesting trees for marbled murrelet and northern spotted owl.
- If construction or vegetation removal occurs outside the breeding season for marbled murrelet (24 March to 15 September) and northern spotted owl (1 February to 15 September), there will be no need to conduct a preconstruction survey for active nests.
- Vegetation may be removed using hand tools, including chain saws and mowers, and may be trimmed several inches above the ground with the roots left intact to prevent erosion.
- Vegetation scheduled for removal should be removed during the non-breeding season of marbled murrelet and northern spotted owl, from 16 September to 31 January. If construction or vegetation removal occurs between 1 February and 15 September, a biologist shall conduct a survey for active marbled murrelet and northern spotted owl nests within 165 feet (50 m) of the Project Area from accessible areas within two weeks prior to construction. The 165 feet buffer is the estimated harassment distance from the Project Area where a majority of construction

activities will generate noise in the "high" range. The measures listed below shall be implemented based on the survey results.

- If no active northern spotted owl or marbled murrelet nest is found, then no further avoidance and minimization measures are necessary.
- If an active northern spotted owl nest is discovered in or within 165 feet of the Project Area, work will be deferred until after 31 July, after which the Service considers the above-ambient sound levels as having "no effect" on nesting spotted owls and dependent young.
- If an active marbled murrelet nest is discovered in or within 165 feet of the Project Area, work will be deferred until 6 August, the date when most marbled murrelets have fledged in the coastal northern California. Between 6 August and 15 September, Project activities will observe a daily work window beginning two hours post-sunrise and ending two hours pre-sunset. Prep work that does not generate sound levels above ambient sound levels, including street sweeping and manual removal of pavement markers, can occur during all hours.
- If an active yellow-billed cuckoo nest is discovered in or within 165 feet of the Project Area, an Environmental Sensitive Area (ESA) will be established between the active nest and the Project Area. The size of the ESA buffer will be determined in consultation with USFWS. Project-related activities within the ESA will be deferred until the Project biologist determines that the nest is no longer active.

- No human activities shall occur within visual line-of-sight of 328 feet (100 m) or less from a known marbled murrelet or northern spotted owl nest location. The 328 feet visual line-of- sight buffer shall be maintained until the end of the nesting season (September 15) or until a qualified biologist confirms that the young have fledged or are otherwise no longer present.
- Jackhammers, generators and compressors, dump trucks or service vehicles or similar equipment that produce high intensity sounds will only be used for short duration each work day (less than two hours total in any work day). High intensity levels refer to activity generating sound levels 20 or more decibels above ambient sound levels or with maximum sound levels (ambient sound levels plus activity-generated sound levels) above 90 decibels (excluding vehicle back-up alarms). No blasting shall be permitted. If necessary, equipment producing high intensity sound should be shielded through the use of portable noise barriers.
- All work shall be performed during daylight hours. No nighttime operations or use of staging lights shall be allowed.
- All internal combustion engines used for construction shall be fitted with mufflers.
- The County will adhere to applicable Caltrans and County construction-related noise standards.

Invasive Species

Invasive plants are a subset of nonnative plants that spread into undisturbed ecosystems and generally negatively impact native plants and alter ecosystem processes (Cal-IPC 2006). The California Invasive Plant Council (Cal-IPC) maintains an inventory of invasive nonnative plants that threaten wildland areas of California. Species receive an overall rating of High, Moderate, or Limited. There are 29 invasive plant species that occur in the Project Area and there is one species rated "High" by the Cal-IPC (2006): Himalayan blackberry (*Rubus armeniacus*). Himalayan blackberry is found along Dutch Charlie Creek in the Project Area. Himalayan blackberry is common in Mendocino County. The Project could potentially lead to the introduction and/or spread of invasive species due to construction equipment and other vehicles entering the Project area. The impact is reduced to less than significant with the incorporation of Mitigation Measure BIO-3.

Mitigation Measure BIO-3

To reduce the spread of invasive plant species, all mud and debris will be washed off construction equipment prior to entering the site. Areas disturbed during construction will be revegetated with native species or sterile non-native species to reduce the spread of invasive plants.

b) ***Less Than Significant with Mitigation Incorporated***

Sensitive habitats include those that are of special concern to resource agencies and those that are protected under CEQA, the California Fish and Game Code, or the Clean Water Act. Sensitive habitats in the Project area include water (Dutch Charlie Creek), Redwood Forest, Red Alder Riparian Forest, and Slough Sedge Swards. The Project is partially within these three habitats. Approximately five (5) red alder trees and one (1) Douglas fir tree will be removed. The final tree removal determination will be made by Mendocino County Department of Transportation (MCDOT).

Redwood Forest

The redwood forest community occurs within the upland portion of the Project Area on either side of Dutch Charlie Creek. A large patch of redwood forest is located on the western side of Wilderness Lodge Road on the north side of Dutch Charlie Creek. The redwood forest community is characterized by a codominant canopy with coast redwood (*Sequoia sempervirens*), Douglas-fir (*Pseudotsuga menziesii*), tanoak (*Notholithocarpus densiflorus*), red alder (*Alnus rubra*) and California bay (*Umbellularia californica*).

Red Alder Riparian Forest

The riparian forest borders both sides of Dutch Charlie Creek and the flood plain near the confluence with the South Fork Eel River, located along the east side of Wilderness Lodge Road and south of the creek. The red alder riparian forest is characterized by a codominant canopy with red alder (*Alnus* rubra), arroyo willow (*Salix lasiolepis*), big leaf maple (*Acer macrophyllum*), and Oregon Ash (*Fraxinus latifolia*) along with a shrub layer of thimbleberry *(Rubus parviflorus)* and the invasive Himalayan blackberry (*Rubus armeniacus*).

Slough Sedge Swards

The slough sedge (Carex obnupta) sward community is located on a low terrace near the proposed detour bridge over Dutch Charlie Creek, directly southwest of the existing bridge. This community is dominated by hydrophytic vegetation but lacked the necessary soil and hydrology indicators to qualify as a wetland. The soil color and the lack of concentrations or depletions observed led to the soil not being considered wetland soil. Multiple un-official soil pits were dug in order to verify the lack of hydric soil indicators and these additional soil pits also resulted in non-hydric soils. The area drains into the alder forest near bridges southwestern abutment.

Implementation of Mitigation Measure BIO-4 will be implemented to reduce Project effects to trees and sensitive habitats to less than significant.

Mitigation Measure BIO-4

- The limits of construction will be fenced by the County or Contractor to exclude activities from avoided habitat. Trucks and other vehicles will not be allowed to park beyond, nor shall equipment be stored beyond, the fencing. No vegetation removal or ground disturbing activities will be permitted beyond the fencing.
- Geotextile or similar fabric will be temporarily placed along the area of the temporary detour. The purpose of the fabric is to monument the original ground level and minimize compaction. After the Project is complete, the contractor will remove the temporary detour and restore the areas back to the original grade.
- Implementation of the Restoration Plan

c) ***Less Than Significant with Mitigation Incorporated***

Dutch Charlie Creek

Dutch Charlie Creek is the only potential waters of the U.S. mapped in the Project Area. The riverine community comprises of Dutch Charlie Creek below the ordinary high-water mark (OHWM). Small pockets of torrent sedge (*Carex nudata*) occur below the OHWM within Dutch Charlie Creek. Either side of the creek and the flood plain near the confluence with the South Fork Eel River are lined with red alder riparian forest. Dutch Charlie Creek is a perennial stream that flows east through the Action Area, discharging into the South Fork Eel River approximately 200 feet from the existing bridge and outside of the Project Area. The width of Dutch Charlie Creek varies between approximately 11 feet wide at the narrowest on the west side of the Project Area, to approximately 36 feet wide on the east side of Wilderness Lodge Road adjacent to the existing bridge. The average width of Dutch Charlie Creek is approximately 20.8 feet. The headwaters of Dutch Creek are spread throughout the 4.3 sq. mile basin to the west of the Project Area. The furthermost reach originates approximately 2.5 air miles west of the Project. The Project is located within the approximately 153.88 ac Elder Creek- South Fork Eel River Dutch watershed (HUC 180101060103). Run-off within the area flows into Dutch Charlie Creek.

The Project would require work to occur within the creek during low water. Based on preliminary design, the Project will temporarily impact approximately 0.0042-ac. and will permanently impact approximately 0.001-ac. of waters.

Implementation of Mitigation Measures BIO-1, and BIO-5 will reduce potential impacts to less than significant.

Mitigation Measure BIO-5

- During construction, water quality will be protected by implementation of BMPs consistent with the current edition of the Caltrans Stormwater Quality Handbooks (http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm) to minimize the potential for siltation and downstream sedimentation of Dutch Charlie Creek.
- The Project will develop a dewatering and discharge plan describing the methods, materials, quantities, and locations of dewatering and discharge activities. All discharges from dewatering will adhere to the requirements of the General Waste Discharge Requirements/NPDES Permit for Dewatering and Other Low Threat Discharges to Surface Waters (Order No. R5-2008-0081/NPDES Permit No. CAG995001). A NOI shall be submitted to the RWQCB for approval before dewatering may commence. A completed Notice of Termination Form shall be submitted to the RWQCB after the permitted discharge is complete. The dewatering and discharge plan shall be submitted by the Contractor to the RWQCB Water Quality Certification unit within 15-30 days prior to construction.
- The Project will prepare a water pollution control plan that will implement the appropriate BMPs in accordance with the Mendocino County Water Pollution Control Plan (WPCP) guidelines, as well as current versions of the Caltrans Stormwater Pollution Prevention Plan and the California Stormwater Quality Association (CASQA) BMP Handbook, as applicable. If disturbed area is greater than one (1) acre, the Project will obtain coverage under Adopted Order 2009-0009-DWQ (As amended by 2010-0014-DWQ and 2012-006-DWQ Construction General Permit [CGP]), including preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) that identifies Project-specific erosion, sediment, and stormwater BMPs to protect water quality during Project construction.
- During demolition of the existing bridge, a cover or other temporary protection structure that spans the creek will be placed over Dutch Charlie Creek bed to prevent falling debris from entering the creek.
- Areas temporarily disturbed on the banks of Dutch Charlie Creek will be revegetated in accordance with the Revegetation Planting and Erosion Control Specifications in Appendix I and Restoration Plan in Appendix J. Reseeded areas will be covered with a biodegradable erosion control fabric to prevent erosion and downstream sedimentation. The Project engineer will determine the specifications needed for erosion control fabric (e.g., sheer strength) based on anticipated maximum

flow velocities and soil types. The seed type will consist of commercially available native grass and herbaceous species. No seed of nonnative species will be used unless certified to be sterile.

d) ***Less Than Significant Impact:*** Construction of the Project could temporarily disrupt movement of native wildlife species that occur in or adjacent to the Project Area. Although construction disturbance may temporarily hinder wildlife movements, the impact is less than significant due to its short-term nature and the relative scale of the Project.

e) ***Less Than Significant Impact:*** The Project is consistent with the goals and objectives described in the county's general plan (Mendocino County 2009) including measures for water quality and biological resource protection.

f) ***No Impact:*** There are no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans that cover the Project area.

3.2.5 CULTURAL RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Environmental Setting

Alta Archaeological Consulting (ALTA) prepared an Archaeological Survey Report (ASR) and a Historic Property Survey Report (HPSR) for the Project (ALTA 2019a and ALTA 2019b). Caltrans approved the ASR on and the HPSR on 30 April 2019. The ASR included a records search, literature review, an intensive pedestrian survey, and consultation with the Native American community and local preservation societies. The HPSR is a document that summarizes the results of the ASR.

The Area of Potential Effects (APE) encapsulates the maximum area needed for the construction of this Project. The proposed Project has the potential to affect historic and prehistoric cultural resources because ground-disturbing work will occur. An intensive pedestrian survey was conducted of the APE on 1 June 2016. No historic or prehistoric materials were identified. Extended Phase I (XPI) subsurface testing was conducted on 12 June 2018 within the proposed temporary detour road. Cahto Indian Tribe representative Fred Simmons was present to monitor excavation. No prehistoric-era or historic-era cultural resources were identified.

Potential Environmental Effects

a) ***No Impact.*** The ASR documents that there are no historic resources identified in the Project area. The Caltrans Historic Bridge Inventory lists Wilderness Lodge Road over Dutch Charlie Creek Bridge as Category 5, not eligible for listing on historic registers.

b) ***Less Than Significant Impact with Mitigation Incorporated.*** No prehistoric cultural resources were identified in the Project area. However, being situated adjacent to a perennial watercourse (Dutch Charlie Creek) near its confluence with the South Fork Eel River on well-drained landforms

that are generally level, the areas adjacent to the creek could have been suitable for early Native American activities and habitation. The presence of documented prehistoric-era resources in the general vicinity of the Project area suggests there is a potential for presently unrecorded resources to be encountered during ground-disturbing activities associated with Project construction. Implementation of mitigation measure CULT-1 will reduce potential impacts to less than significant.

Mitigation Measure CULT-1

- Mendocino County shall retain a qualified archaeologist to be present during initial ground disturbing activities to ensure that there are no prehistoric archaeological resources present within the vertical APE. These activities would include excavation of the existing concrete abutments, headwalls, and associated footings from the creek.
- If archaeological materials are encountered during construction activities, construction crews shall stop all work within 100 feet of the discovery until a qualified archaeologist can assess the discovery and provide recommendations. Such treatment and resolution could include modifying the Project to allow the materials to be left in place, or undertaking data recovery of the materials in accordance with standard archaeological methods. The preferred treatment of the resource is protection and preservation.
- Resources could include buried historic features, such as artifact-filled privies, wells, and refuse pits, and artifact deposits, along with concentrations of adobe, stone, or concrete walls or foundations, and concentrations of ceramic, glass, or metal materials. Native American archaeological materials could include obsidian and chert flaked stone tools (such as projectile points and knives), midden (darken soil created culturally from use and containing heat-affected rock, artifacts, animal bones, or shellfish remains), and/or groundstone implements (such as mortars and pestles). Project personnel shall not collect cultural materials.

c) ***Less Than Significant Impact with Mitigation Incorporated.*** The Project ASR documents that no cemeteries or burials were observed or known within the Project study area (Alta 2019a). There is the possibility of unanticipated discoveries of human remains during construction-related ground-disturbing activities. The procedures identified in State Health and Safety Code Section 7050.5 will reduce potential impacts. State Health and Safety Code Section 7050.5 requires that if human remains are found no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. Implementation of Public Resources Code Section 5097.5 et seq. will further reduce potential impacts. Implementation of mitigation measure CULT-2 will reduce potential impacts to less than significant.

Mitigation Measure CULT-2

- If human remains are encountered as a result of construction activities, any work in the vicinity shall stop and the Mendocino County Coroner shall be contacted immediately. In addition, a qualified archaeologist shall be contacted immediately to evaluate the discovery, if a monitor is not already present. If the human remains are Native American in origin, then the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification, pursuant to Public Resources Code 5097.98. California Health and Safety Code Section 7050.5 states that it is a misdemeanor to knowingly disturb a human grave.

3.2.6 ENERGY

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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?	☐	☐	☐	☒

Potential Environmental Effects

a) ***Less Than Significant Impact.*** Project construction would result in short-term increased energy requirements through the use of gasoline and diesel fuels for operation of heavy-duty construction equipment and vehicles. Materials manufacturing would also consume energy, although information on the intensity and quantity of fuel used during manufacturing is currently unknown and beyond the scope of Project-level environmental analyses. An analysis of energy associated with materials manufacturing is considered speculative and is not presented in this document.

Operation of the new bridge would not result in a long-term continuous use of electricity because bridge lighting is not part of the design. Operation of the new bridge would have a minimal effect on local or regional energy supplies. There would be no effect on peak- or base-period demands for electricity or other forms of energy.

b) ***No Impact:*** The Mendocino County General Plan includes policies to promote energy conservation in the County (Policy RM-52, RM-54, and RM-57) and to increase use of renewable energy resources (Policies RM-53, RM—55, RM-56, and RM-58). Project construction would not require a large amount of fuel or energy due to the limited scope and size. Project operation would not require additional energy use beyond existing conditions. The energy use associated with construction and operation of the proposed Project would not conflict with applicable state or local energy legislation, policies or standards and would not be considered wasteful, inefficient, or unnecessary.

3.2.7 GEOLOGY AND SOILS

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐

iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Environmental Setting

A Draft Preliminary Foundation Report was prepared for the Project (Shannon & Wilson, Inc. 2017). The Draft Foundation Report provides geologic, seismic, and foundation information for use in preliminary bridge design and was used in preparation of this section.

Site Geology: Published geologic mapping shows Quaternary Alluvium/River Terrace Deposits underlying the bridge location (Shannon & Wilson, Inc. 2017). The mapping describes the deposits as a mixture of unconsolidated poorly sorted gravel, conglomerate, sand and mud. The mapped deposits extend upstream from the bridge on Dutch Charlie Creek to the base of the hillside west of the bridge. These deposits are extensively mapped along the South Fork Eel River channel. Published geologic mapping also show Eocene to Upper Cretaceous Coastal Franciscan Belt in areas surrounding and likely underlying the Quaternary Alluvium/River Terrace deposits at the site. The Coastal Franciscan deposits extend from the coastal area to the Maacama Fault Zone three miles west of Laytonville. The Coastal Franciscan Belt comprises the hillsides above Dutch Charlie Creek and the S. Fork Eel River valley.

Seismicity: Seismicity is defined as the geographic and historical distribution of earthquake activity. Seismic activity may result in geologic and seismic hazards including seismically induced fault displacement and rupture, ground shaking, liquefaction, lateral spreading, landslides and avalanches, and structural hazards. Based on historical seismic activity and fault and seismic hazards mapping, Mendocino County is considered to have a relatively high potential for seismic activity.

Fault Systems: The closest active earthquake fault to the Project site is the Maacama Fault Zone, mapped as running through the eastern portion of Mendocino County, and roughly follows the route of U.S. 101 approximately 9.2 miles southwest of the Project site (Shannon & Wilson, Inc. 2017).

Paleontology: Paleontological resources are the fossilized remains of organisms that are preserved in the geologic record. Fossils are protected by federal, state, and local environmental laws and regulations. The Society of Vertebrate Paleontology standards and guidelines indicate that sedimentary rock units with a high potential for containing significant nonrenewable paleontological resources are those within which vertebrate or significant invertebrate fossils have been previously determined to be present, or likely to be present. The potential paleontological importance of the Project area can be assessed by identifying the rock units that are over 10,000 years old within the underlying landform.

Potential Environmental Effects

a-i) ***No Impact.*** The Project is located within the Lincoln Ridge 7.5-Minute USGS Quadrangle; this quad does not include seismic areas delineated on a Alquist-Priolo as a "Special Study Zone." The Maacama Fault (the fault nearest to the Project) is located approximately 9.2 miles to the southwest.

a-ii) ***Less than Significant Impact.*** As with most of California, the Project site can be expected to be experience seismic ground shaking at some future time. The closest active fault (the Maacama Fault) is 9.2 miles southwest of the Project site (Shannon & Wilson, Inc. 2017). The proposed bridge will be designed in accordance with the Mendocino County DOT standards, Caltrans Seismic Design Criteria parameters, and AASHTO guidelines. The Project incorporates the current seismic design parameters and ensures that impacts resulting from potential strong seismic ground shaking would be less than significant.

a-iii) ***Less than Significant Impact.*** Liquefaction is a secondary effect associated with seismic loading. It can occur when saturated, loose to semi-compact, granular soils or specifically defined cohesive soils, are subjected to ground shaking. Based on the soils observed at the site and the results from seismic shear wave tests, the potential for liquefaction is considered low (Shannon & Wilson, Inc. 2017). The Project also incorporates current seismic design parameters which further reduces this already less than significant impact.

a-iv) ***Less than Significant Impact***. The potential for seismic slope instability (landslide) of the existing creek banks is low due to the relatively flat site (Shannon & Wilson, Inc. 2017). The Project incorporates the current seismic design parameters which further reduces the potential impacts associated with landslides.

b) ***Less than Significant Impact.*** Construction activities will include implementation of stormwater runoff best management practices (BMPs). Application of these requirements and measures would prevent substantial erosion or topsoil loss. Mitigation Measure BIO-5 will require implementation of best management practices (BMPs) to protect water quality and minimize the potential for siltation and downstream sedimentation. Areas temporarily disturbed will be revegetated and reseeded with native grasses and other native herbaceous annual and perennial species.

c) ***Less than Significant Impact.*** No overriding geologic hazards (e.g. faulting, landslides, severe erosion, subsidence, etc.) were identified in the Draft Foundation Report (Shannon & Wilson, Inc. 2017). Per the Draft Foundation Report '*The site appears stable and support is available for the proposed bridge foundations.*' and '*In our opinion, the subsurface conditions appear suitable for constructing the proposed spread footing foundations. The footings will achieve support within the rock mass.* (Shannon & Wilson, Inc. 2017).

d) ***Less Than Significant Impact.*** Expansive soils that may swell enough to cause problems with paved surfaces are generally clays falling into the AASHTO A-6 or A-7 groups, or classified as CH, MH, or OH by the Unified Soil Classification System (USCS), and with a Plasticity Index greater than about 25 as determined by ASTM D4318. Chapter 610 of the Caltrans Highway Design Manual (2012) defines an expansive subgrade to include soils with a Plasticity Index greater than 12 (Caltrans 2012).

AASHTO group classification is a system that classifies soils specifically for geotechnical engineering purposes that are related to highway and airfield construction. It is based on particle-size distribution and Atterberg limits, such as liquid limit and plasticity index.

AASHTO and USCS classification for the soils in the Project area are listed in Table 5 (Shannon & Wilson, Inc. 2017, NRCS 2021). The NRCS Web Soil Survey indicates the maximum plasticity

index of soils in the Project area is 5.4 (NRCS 2021). Soils in the Project area are not considered expensive.

Table 5. AASHTO and USCS soil classes for Project area

Soil Units In Project Area	Classification	
	AASHTO	USCS
Gschwend-Frenchman complex, 0 to 9 percent slopes	A-8	SC: Clayey Sand; Clayey Sand with Gravel SM: Silty Sand; Silty Sand with Gravel

The Project is being designed in accordance with the special engineering or construction considerations outlined in Chapter 610 "Engineering Considerations" of the Highway Design Manual, California Transportation Department. Because the Project is being designed in accordance with the Caltrans Highway Design Manual and will consider and address expansive soils, impacts are considered less than significant.

e) ***No Impact*.** The proposed Project is the replacement of an existing bridge. The proposed Project does not include the construction of septic tanks or wastewater disposal systems.

f) ***Less Than Significant with Mitigation Incorporated*.** The Project is not anticipated to cause a substantial adverse change in the significance, directly or indirectly destroy a unique paleontological resource or site, geological feature, or unique geological feature. Due to the developed character of the site, the potential to encounter surface-level paleontological resources is considered low. However, there is the potential for accidental discovery of paleontological resources. If resources are inadvertently discovered, implementation of measure GEO-1 would reduce potential impacts to a less than-significant.

Mitigation Measure GEO-1

- If paleontological resources (e.g., vertebrate bones, teeth, or abundant and well-preserved invertebrates or plants) are encountered during construction, Mendocino County shall ensure work in the immediate vicinity shall be diverted away from the find until a professional paleontologist assesses and salvage the find, if necessary.

3.2.8 GREENHOUSE GAS EMISSIONS

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

Environmental Setting

Greenhouse gases (GHGs) are recognized by wide consensus among the scientific community to contribute to global warming/climate change and associated environmental impacts. The major GHGs

that are released from human activity include carbon dioxide, methane, and nitrous oxide (OPR 2008). The primary sources of GHGs are vehicles (including planes and trains), energy plants, and industrial and agricultural activities (such as dairies and hog farms).

Greenhouse gas emissions for transportation projects can be divided into those produced during operations and those produced during construction. The proposed Project does not increase the capacity of Wilderness Lodge Road and would not increase operational GHG levels. The discussion below therefore focuses on construction related GHG emissions of the Project. To date, Mendocino County has not prepared a GHG significance thresholds, reduction plan, climate action plan, or GHG policies and standards.

Potential Environmental Effects

a) ***Less than Significant Impact.*** The proposed Project does not increase the capacity of Wilderness Lodge Road and would subsequently not increase operational GHG levels. Construction of the proposed Project would generate short-term emissions of greenhouse gases. The Sacramento Metropolitan Air Quality Management District (SMAQMD's) Road Construction Emissions Model, Version 7.1.5.1 was utilized to estimate CO2e from construction of the proposed Project.

The Road Construction Emissions Model results indicate Project construction is estimated to produce a maximum of approximately 3,155 kg per day of CO2e or a total for the Project of approximately 213 metric tons (MT) of CO2e over the assumed 4-month construction period.

CO2e emissions associated with construction are temporary; the project will require the import of 1,350 CY of fill for the roadway approach construction. The Mendocino County AQMD has not yet quantified thresholds for construction activities. However, the construction emissions would be well below the Mendocino County AQMD operational threshold of 1,100 metric tons CO2e per year for non-stationary projects.

b) ***Less than Significant Impact.*** The Mendocino County AQMD has not adopted a plan, policy, or regulation for reducing GHG emissions. Therefore, the most applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions is Assembly Bill (AB) 32, which codified the State's future GHG emissions reduction targets.

The California Global Warming Solutions Act establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. The California Air Resources Board (CARB) Scoping Plan includes measures to achieve the GHG reductions in California required by the California Global Warming Solutions Act. Measures included in the Scoping Plan would indirectly address GHG emission levels associated with construction activities, including the phasing-in of cleaner technology for diesel engine fleets (including construction equipment) and the development of a low-carbon fuel standard. Policies formulated under the mandate of the California Global Warming Solutions Act that are applicable to construction-related activity, either directly or indirectly, are assumed to be implemented statewide and would affect the proposed Project if those policies are implemented before construction begins. The proposed Project's construction emissions would comply with any mandate or standards set forth by the Scoping Plan. Therefore, it is assumed there would be not conflict with the Scoping Plan.

As discussed in the Air Quality section, it is anticipated that the proposed Project would not change current operational emissions. The Project's construction related GHG emissions are well below the Mendocino County AQMD's operational threshold of 1,100 metric tons of CO2e per year. As

such, implementation of the proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

3.2.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Environmental Setting

Most hazardous materials regulation and enforcement in Mendocino County is overseen by the Mendocino County Health and Human Services Agency, Environmental Health Division (MCEHD), which refers large cases of hazardous materials contamination or violations to the RWQCB and the State Department of Toxic Substance Control (DTSC). Other agencies, such as the AQMD and the Federal and State Occupational Safety and Health Administrations (OSHA), may also be involved when issues related to hazardous materials arise.

An Initial Site Assessment (ISA) was completed for the bridge site (Pinnacle Environmental Inc. 2016). Site visits were conducted by Pinnacle in February 2016. The ISA provides information regarding whether the proposed Project could be significantly affected by potential recorded or readily visible ASTM Recognized Environmental Conditions (RECs) that may be present in the Project area. Recommendations for further action are provided as applicable.

The ISA included the following findings (Pinnacle Environmental Inc. 2016):

- A records review of regulatory databases indicates there are no hazardous materials locations that may have potential to impact the site.

- The ISA did not identify any evidence of REC at the Project site.
- Based on the Project location and the lack of hazardous materials sites in the Project vicinity the potential to encounter RECs is considered low.
- The ISA identified routine non-REC issues summarized below:
    - Lead Based Paint (LBP): Based upon the age of the subject bridge structure (railcar bodies of unknown age in place since at least 1969), it is possible that LBP was used on the railcar bodies. The subject bridge frame is of steel construction and was painted with red-brown paint on the frame and guardrail support post portions, and does not appear to have been re-painted subsequently. The paint was severely deteriorated, and most areas had been damaged by rust. The guardrails were wooden and only the portions facing the roadway were painted. Due to the age of the structure, all painted surfaces should be considered covered with suspect lead-based paint.
    - Aerially Deposited Lead (ADL): The subject property roadway has been used for vehicular traffic since at least 1948. The exhaust of cars burning leaded gasoline prior to its phase-out in the 1970s in California have the potential to be deposited on the exposed soils and drainage pathways alongside roadways, which can reach concentrations more than the hazardous waste threshold (generally 1,000 mg/Kg in California) in certain circumstances. These circumstances generally involve large quantity, long-term volumes of traffic (e.g. main highways) during the time period that leaded gasoline was used. Due to the very rural nature of the subject roadway, and the corresponding very low volumes of traffic currently, and likely even lower volumes during the period leaded gasoline was used, it is unlikely that significant concentrations of aerially deposited lead from gasoline would occur along the subject roadway.
    - Asbestos Containing Construction Materials (ACCM): The bridge was constructed in approximately 1969, with concrete abutments. No information was provided as to whether asbestos was added to the concrete abutments, nor would such information likely be available. The existing abutments and footings could include Asbestos-Containing Building Materials.
    - Chemically Treated Wood: The subject bridge appears to include treated lumber for all or portions of the deck and guardrails.

The Project does not occur in an 'Areas More Likely to Contain Naturally Occurring Asbestos' (CDOC 2000). No serpentine soils, serpentine inclusions, or ultramafic rock types that could include naturally occurring asbestos (NOA) are mapped in or adjacent to the Project per the Mendocino County Land Constraints interactive map (Mendocino County 2021b). ***Potential Environmental Effects***

a) ***Less Than Significant Impact.*** Small amounts of hazardous materials would be used during construction activities (i.e., equipment maintenance, fuel, solvents, roadway resurfacing and re-striping materials). Hazardous materials would only be used during construction of the Project, and any hazardous material uses would be required to comply with all applicable local, state, and federal standards associated with the handling and storage of hazardous materials. Use of hazardous materials in accordance with applicable standards ensures that any exposure of the public to hazard materials would have a less-than-significant impact.

b) ***Less Than Significant with Mitigation Incorporated*****.**

Lead Based Paint: Based on the age of the subject bridge structure (railcar bodies of unknown age in place since at least 1969), it is possible that LBP was used on the railcar bodies. Implementation of HAZ-1 will reduce potential impacts to less than significant.

Mitigation Measure HAZ-1 (Lead Based Paint, LBP)

- All painted surfaces of the bridge (including railings) will be tested for LBP prior to demolition/removal to determine if they exceed thresholds established by the California Code of Regulations. Material found to exceed the threshold will be disposed of at a Class I disposal facility. If lead is detected, then appropriate procedures will be included in the Construction contract to avoid contact with these materials or generation of dust or vapors.

Asbestos Containing Construction Materials: The existing abutments and footings could include ACCM. Implementation of HAZ-2 will reduce potential impacts to less than significant.

Mitigation Measure HAZ-2 *(*Asbestos Containing Construction Materials (ACCM)

- Prior to the start of construction, the existing bridge's building material will be tested for asbestos. If present, the following will be implemented:
    - Asbestos-containing building material will be removed using one of several methods approved by the Federal EPA and California Occupational and Safety Hazard Administration (CalOSHA), at the contractor's discretion. The waste container will be properly documented and disposed of at a Class I landfill, such as the Clean Harbors Buttonwillow LLC facility in Buttonwillow, CA (CAD980675276) or the Chemical Waste Management Inc. Kettleman facility in Kettleman, CA (CAT000646117).

Chemically Treated Wood Waste: Chemically treated wood must be handled as treated wood waste (TWW) and disposed of as hazardous waste. The subject bridge appears to include treated lumber for all or portions of the deck and guardrails. Implementation of HAZ-1 will reduce potential impacts to less than significant.

Mitigation Measure HAZ-3 (Treated Wood Waste (TWW)

- Handling and disposal of chemically treated wood removed from the project site will adhere to Caltrans 2015 Standard Specification (SS) 14011.14 and Special Standard Provision (SSP) 14011.14 or equivalent current Caltrans Standard Specification and Special Standard Provisions for chemically treated wood removal and California Department of Toxic Substance Control (DTSC) Treated Wood Waste Alternative Management Standard (22 CCR Chapter 34).

Due to the very rural nature of the subject roadway, and the corresponding low volumes of existing traffic and likely even lower volumes during the period leaded gasoline was used, it is unlikely that significant concentrations of ADL from gasoline would occur along the subject roadway. The potential for ADL is considered less than significant.

c) ***No Impact.*** As noted above, the Project would involve the short-term handling of hazardous materials during construction. The nearest schools are in Laytonville approximately nine miles east of the Project site. Handling and storage of hazardous materials during construction would comply with all applicable local, state, and federal standards and would not impact any existing or proposed school.

d) ***No Impact.*** No listed hazardous material sites occur in Project area.

e) ***No Impact*.** The nearest airport to the Project area is the Willits Municipal Airport (Ells Field), approximately 22 miles to the southeast. The Project is not located in an Airport Land Use Plan area or within two miles of a public airport or public use airport.

f) ***Less Than Significant Impact.*** The 2016 Mendocino County/Operational Area Emergency Operations Plan (EOP) addresses response to and short-term recovery from disasters and emergency situations affecting the Mendocino County Operational Area. Mendocino County has also developed the 2020 Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) to assess risks posed by natural and human-caused hazards and to develop a mitigation strategy for reducing the County's risks.

The existing bridge is the only access to properties north of Dutch Charlie Creek and vehicular access will need to be maintained during construction. A temporary detour road and bridge will be installed west (upstream) of the existing bridge. The temporary detour would be a single lane detour with temporary signalization to control traffic. Project construction activities would be coordinated with local law enforcement and emergency services providers as applicable. The proposed Project will not hinder the implementation, or physically interfere with, emergency response or evacuation plans.

g) ***Less Than Significant Impact.*** The completed Project will not result in a new or increased exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires. Construction includes activities that can result in fire. Mendocino County would retain a construction contractor to construct the proposed improvements. The contractor would be responsible for compliance with all applicable rules, regulations, and ordinances associated with proposed Project activities. The contractor would construct the proposed Project in accordance with the Public Contract Code of the State of California, Project Plans, and any Special Provisions issued by Mendocino County. This includes compliance with requirements of Public Resources Code 4442 that a note on all construction plans that internal combustion engines shall be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire.

3.2.10 HYDROLOGY AND WATER QUALITY

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
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	☐	☐	☒	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐

iv. Impede or redirect flood flows?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Environmental Setting

Dutch Charlie Creek flows northeast through the Project area and drains into the South Fork Eel River approximately 200 ft east of the existing bridge. The proposed roadway approach work will maintain the existing alignment, there will be no change to the handling of the roadway drainage. The approach roadways will drain surface water into areas adjacent to the roadways as currently exists. The new bridge deck will drain storm water off the bridge deck through scuppers in the east and west barrier railing curbs. The existing bridge and a portion of the approaches are mapped in Zone A (the 100-floodplain) (FEMA 2021).

The Eel River Hydrologic Unit, where the Project is located, is listed as a CWA Section 303(d) impaired water by the U.S. Environmental Protection Agency and subsequently requires a Total Maximum Daily Load (TMDL) for aluminum, sedimentation/ siltation, and water temperature. Per the Final 2014 and 2016 Integrated Report (CWA Section 303(d) List / 305(b) Report, California State Waterboard 2021) the listing for aluminum "only applies to the mainstem South Fork Eel River in the South Fork Eel River HA. The listing does not include Elder Creek or any other tributary in the South Fork Eel River HA." The Final 2014 and 2016 Integrated Report also indicates that the temperature listing 'does not apply to Dutch Charlie Creek' (California State Waterboard 2021). The listing for sedimentation/ siltation applies to Dutch Charlie Creek. The sedimentation/ siltation listing is currently being addressed by the Eel River South Fork Sediment and Temperature TMDL approved by the U.S EPA on 16 December 1999.

Potential Environmental Effects

a) ***Less Than Significant with Mitigation Incorporated.*** Construction of the proposed Project could introduce sediments and other contaminants into stormwater runoff. Erosion potential and water quality impacts are always present during construction and occur when protective vegetative cover is removed, and soils are disturbed. Stormwater could carry various pollutants downstream such as sediment, nutrients, bacteria and viruses, oil and grease, heavy metals, organics, pesticides, and miscellaneous waste. These pollutants could originate from soil disturbances, construction equipment, building materials, or workers. In the case of the proposed Project, potential impacts will result primarily from grading and excavation associated with removal of the old bridge and installation of the new bridge and road approaches. Implementation of measure BIO-5 requires implementation of BMP's in accordance with the Mendocino County Water Pollution Control Plan (WPCP) guidelines, as well as current versions of the Caltrans Stormwater Pollution Prevention Plan and the California Stormwater Quality Association (CASQA) BMP Handbook, as applicable. Implementation of BIO-5 that will reduce potential impacts to less than significant.

b) ***No Impact.*** The Project would not involve any withdrawals from an aquifer or groundwater table.

c) ***i-iv Less Than Significant Impact.*** Project grading and excavation will not result in substantial changes in site drainage volume or configuration and thus not result in substantial erosion or increased siltation after Project construction. As discussed above, there is a possibility of erosion to occur during construction. However, the probability of significant erosion is reduced due to the timing of the Project (during the dry season) and the implementation of BMPs.

The Project would not alter the course of Dutch Charlie Creek or substantially alter drainage patterns on the Project site. Dutch Charlie Creek would retain its existing function and capacity at the completion of the Project. The approach roadways will drain surface water into areas adjacent to the roadways as currently exists. The new bridge deck will drain storm water off the bridge deck through scuppers in the east and west barrier railing curbs. The Project would result in a minimal increase (1,053 square feet) in impervious surfaces from the new bridge and roadway approaches and would not 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.

Caltrans Highway Design Manual (HDM) requires that bridges be designed to have sufficient freeboard for the 50-year event and pass flows during the 100-year event. Hydraulic analysis results indicate that the existing bridge cannot pass the 50-year or 100-year flow events. The proposed bridge will pass the 50-year flow event with a freeboard clearance of approximately 0.50 feet and is predicted to be overtopped by the 100-year flood event based on the HEC-RAS model for Dutch Charlie Creek. The proposed Project provides a new bridge with improved hydraulic capacity and performance and would not impede flood flows.

d) ***Less Than Significant Impact.*** Given the distance from coastal areas and any large bodies of water the Project is not located in a tsunami or seiche hazard zone. As discussed above the new bridge will pass the 50-year flow event with a freeboard clearance of approximately 0.50 feet and is predicted to be overtopped by the 100-year flood event based on the HEC-RAS model for Dutch Charlie Creek. The completed Project would not include components that risk release of pollutants due to inundation, and impacts would be considered less than significant.

e) ***Less Than Significant Impact.*** The Water Quality Control Plan for the North Coast Region (Basin Plan) contains the regulations adopted by the North Coast Regional Water Quality Control Board and establishes thresholds for key water resource protection objectives for both surface waters and groundwater. While the Project would replace the existing Wilderness Lodge Road bridge over Dutch Charlie Creek it is not anticipated that the Project would alter water quality parameters established in the Basin Plan. Erosion control BMPs (including revegetation planting) would be required to be implemented during construction to prevent erosion and to protect overall water quality. The Project does not include activities that would affect groundwater recharge or sustainability.

3.2.11 LAND USE AND PLANNING

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Physically divide an established community?	☐	☐	☐	☒
b) 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?	☐	☐	☐	☒

Environmental Setting

The applicable land use plan in the Project area is the 2009 County of Mendocino General Plan. Temporary construction easements may be required to construct the temporary detour. No permeant ROW acquisition is required for the Project.

Potential Environmental Effects

a) ***No Impact.*** The Project involves modifications to an existing roadway and bridge and will not divide an established community.

b) ***No Impact.*** The Project would result in no changes in land use and would not conflict with any 2009 General Plan goals, policies or objectives intended to mitigate potential environmental impacts.

3.2.12 MINERAL RESOURCES

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

Environmental Setting

The Mendocino County General Plan identifies sand and gravel from mined quarries, instream gravel, and terrace gravel deposits, is the predominant minerals resource found in the County. The State of California Geological Survey has not studied mineral resource zones in Mendocino County and no locally important mineral resource recovery area is identified in the Mendocino County General Plan. Existing mining operations do not occur in the Project vicinity. According to the California Department of Conservation, Division of Mine Reclamation 'Mines Online' interactive mapper no mines occur in or immediately adjacent to the Project area (California Department of Conservation 2021)

Potential Environmental Effects

a) ***No Impact.*** The Project is not within or adjacent to any important mineral resource areas as identified by the State of California; therefore, the Project would not impact the availability of mineral resources that would be of value to the state.

b) ***No Impact.*** The Project is not within or adjacent to any important mineral resource areas as identified by County of Mendocino General Plan EIR (Mendocino County 2008) and would not impact the availability of mineral resources that would be of value to the region.

3.2.13 NOISE

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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 ground-borne vibration or ground-borne 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?	☐	☐	☐	☒

Environmental Setting

The Project area is in a remote rural portion of the County and is not in proximity to any major roadways. Due to the rural remote nature of the site, few sensitive receptors occur in the vicinity. The closest potential sensitive receptor is a residential structure visible on aerial images located approximately 1,000 ft north of the existing bridge.

The 2009 County of Mendocino General Plan Development Element establishes policies and standards for noise exposures at noise sensitive land uses. General Plan policies are generally considered to apply to long-term operational land uses and not to construction activities. Additionally, the County has not established quantified construction noise limits or allowable construction hours.

Potential Environmental Effects

a) ***(Construction Related Noise) Less Than Significant Impact with Mitigation Incorporated.*** Construction activities would increase noise levels temporarily in the vicinity of the Project. The primary source of noise is heavy machinery which is constantly moving in unpredictable patterns. Actual noise levels would depend on the type of construction equipment involved, distance to the source of the noise, time of day, and similar factors. These increases would be temporary.

Project Construction will generate noise from excavators, backhoes or similar equipment during removal of the existing bridge, installation of the replacement bridge, installation of the temporary detour, road approach work, and retaining wall installation. Table 6 below lists the types of equipment that may be used during Project construction and their approximate maximum noise level at 50 ft from the job site (FHWA 2006). Based on Table 1, the maximum noise generated by construction may be between 80 and 86 dBA at 50 ft from the bridge construction site.

Table 6. Potential Equipment Used During Construction and Maximum Noise Level

Equipment	Maximum Noise Level (dBA at 50 feet)[1]
Backhoe	80
Bulldozer	85
Compactor (ground)	80
Concrete Mixer Truck	85
Concrete Mixer Truck	85
Concrete Pump	82
Drill Rig Truck	84
Dump Truck	84
Excavator	85
Flat Bed Truck	84

Equipment	Maximum Noise Level (dBA at 50 feet)[1]
Front End Loader	80
Generator (more than 25 KVA)	82
Jackhammer	85
Mounted Impact Hammer (hoe ram)	86
Paver	85
Pneumatic Tools	85
Scrapers	85

[1] Source: FHWA Highway Construction Noise Handbook, Final Report, August 2006.

Sound intensity decreases in proportion with the square of the distance from the source. Generally, sound levels for a point source will decrease by 6 dBA for each doubling of distance (FHWA 2017). The closest potential sensitive receptor is a residential structure visible on aerial images located approximately 1,000 ft north of the existing bridge. A potential sensitive receptor 1,000 ft from where active construction would occur and may receive a maximum noise level less than about 56 to 62 dBA (80 – 86 dBA minus 6 dBA per doubling of distance). During construction nearby residents may intermittently hear construction noise at various locations adjacent to the Project site. Temporary increases in ambient noise levels could result in increased annoyance and potential sleep disruption. Implementation of measure NOISE-1 will reduce potential impacts to less than significant

Mitigation Measure NOISE-1

The Project plans and specifications will include provisions requiring the contractor to make every reasonable effort to minimize construction noise through implementation of measures including:

- *Project construction activities would occur during the daytime hours (typically 7 AM to 7 PM Monday through Saturday).*
- *Local residents will be given advanced notice of project construction schedules, and will be notified that there will be temporary increases in local noise levels during project construction at the nearest residences to the construction activities.*
- *To the extent feasible, separation between construction staging areas and the nearest residences should be maximized.*
- *All internal combustion engines used for construction shall be fitted with mufflers.*
- *Generators and compressors required during project construction should be located as far as possible from existing residents and, if necessary, shielded from view of those residences by portable noise barriers.*

(Operational Related Noise) Less Than Significant Impact. The Project does not increase the capacity of Wilderness Lodge Road and noise levels in the Project vicinity will be substantially unchanged from the pre-Project condition. Impacts are less than significant.

b) ***Less Than Significant Impact.*** Project construction includes activities such as pneumatic hammering may result in the periodic, temporary generation of groundborne vibration. The Project does not include pile driving activities. Because the Project would not expand the roadway or change the way in which it is used, an increase in groundborne vibration associated with use of the road would not change from the current condition. Given that any potential construction related groundborne vibration and noise levels would be expected to rapidly dissipate prior to reaching the

nearest residence, and that it would be temporary and periodic, potential impacts are less than significant.

c) ***No Impact.*** The Project is not located within the vicinity of a private airstrip or an airport land use plan area or within two miles of a public or public use airport.

3.2.14 POPULATION AND HOUSING

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

Environmental Setting

The area surrounding the Project consists of rural parcels with timber production zoning with remote residential land use designations and a minimum 20-acre parcel size. The closest potential residential structures visible on aerial images is located approximately 1,000 ft north of the existing bridge.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** The Project would replace the existing deficient bridge with a bridge that is consistent with County standards and the AASHTO guidelines. The Project does not increase the capacity of Wilderness Lodge Road. The Project does not include activities that would result in substantial unplanned population growth either directly or indirectly. There may be a minimal number of temporary jobs created be the short duration of construction. However, it is anticipated that the jobs would be filled by individuals living locally and would not result in substantial new housing.

b) ***No Impact.*** The Project does not include any activities that would result in the displacement of housing or people.

3.2.15 PUBLIC SERVICES

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				

i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

Environmental Setting

The Mendocino County Sheriff provides public safety and law enforcement services. The Long Valley Fire Protection District provides fire protection services and emergency services. The County maintains public facilities including the Project area roadways. Mendocino County Parks provides park services for unincorporated portions of the County.

Potential Environmental Effects

a i-v) ***No Impact.*** Replacement of the existing Wilderness Lodge Road Bridge over Dutch Charlie Creek Bridge would not increase human presence in the area. There would be no increased demand for public services and no new governmental facilities would be needed or built.

3.2.16 RECREATION

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

Environmental Setting

Mendocino County Parks provides parks and recreation services for unincorporated portions of the County. There are no recreation facilities within or immediately adjacent to the proposed Project area.

Potential Environmental Effects

a) ***No Impact*.** The Project would not increase population in the region and subsequently result in increased use of existing parks.

b) ***No Impact*.** The Project does not include the construction of any recreational facilities and would not require the expansion of existing recreational facilities.

3.2.17 TRANSPORTATION

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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	☐	☐	☒	☐
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒
e) Result in inadequate parking capacity?	☐	☐	☐	☒

Environmental Setting

The Dutch Charlie Creek Bridge carries local traffic over Dutch Charlie Creek on Wilderness Lodge Road. The bridge is located approximately 0.7 mile north of the intersection of Branscomb Road and provides the only access to private lands north of Dutch Charlie Creek. The existing bridge, constructed in 1969, is a single-span structure approximately 40-feet in length, and comprised of two railroad flatcars side-by-side with a timber deck. Wilderness Lodge Road has an Average Daily Traffic (ADT) of approximately 150 vehicles per day, which classifies it as a low volume road (ADT<400). Travel on the existing structure is restricted to a single lane as the bridge cannot support two lanes of legal loads. The bridge is eligible for replacement under the Federal Highway Bridge Program (HBP) administered by Caltrans for FHWA due to its functionally obsolete status.

Potential Environmental Effects

a) ***No Impact.*** Replacement of the existing Wilderness Lodge Road Bridge over Dutch Charlie Creek would not change the amount of traffic on Wilderness Lodge Road because it is not a new development or growth inducing project. The number of through lanes on Wilderness Lodge Road will remain the same. The Project provides the public with a new two-lane bridge that meets current design standards and will not conflict with an applicable plan, ordinance or policy regarding the effectiveness of the performance of the circulation system.

b) ***Less than Significant Impact***. The purpose of the Project is to replace the existing bridge with a bridge that is consistent with County design standards and the AASHTO guidelines. The Project does not increase the capacity of Wilderness Lodge Road and is not anticipated to increase operational related vehicle miles travels (VMT). A temporary minor increase in VMT could occur during Project construction as the result of worker trips to the site, materials delivery, and material hauling. Any increase in VMT would be temporary. The completed Project would not increase VMT.

c) ***No Impact.*** Consistent with the stated purpose, the Project will provide a bridge that meets current design standards and will pass the 50-year flood event while providing a reasonable amount of additional hydraulic capacity. The Project will not substantially increase hazards due to a design feature.

d) ***No Impact.*** The bridge is the only access to properties north of Dutch Charlie Creek and vehicular access will need to be maintained during construction. A temporary detour road and bridge will be installed west (upstream) of the existing bridge. The temporary detour would be a single lane detour with temporary signalization to control traffic. The completed Project would provide a new two-lane bridge with greater hydraulic capacity that the existing bridge.

e) ***No Impact.*** Designated parking does not occur in the Project area. The Project would not result in an increase in demand for parking in the vicinity of the Project.

3.2.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) 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:				
i. 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	☐	☐	☒	☐
ii. 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Potential Environmental Effects

a) ***Less Than Significant Impact.*** No California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project have requested to be notified by Mendocino County DOT pursuant to Assembly Bill (AB) 52.

Per the approved ASR (ALTA 2019a) the following Native American consultation activities were conducted in accordance with Section 106 of the National Historic Preservation Act (NHPA) as part of the Projects National Environmental Policy Act (NEPA) compliance. The Native American Heritage Commission (NAHC) was contacted via email on February 18, 2016 to request a review of the Sacred Lands file for information on Native American cultural resources in the study area and to request a list of Native American contacts in this area. In the NAHC response dated March 24, 2016, NAHC Staff indicated that no known cultural resources are present in the area. The NAHC response letter identified the five following Native American individuals/organizations that may have knowledge of cultural resources within the Project area.

- Laytonville Rancheria / Cahto Indian Tribe
- Noyo River Indian Community

- Round Valley Reservation / Covelo Indian Community
- Sherwood Valley Rancheria of Pomo

On May 31, 2016, Tim Keefe, Caltrans District 1 Associate Environmental Planner, sent consultation letters by mail to all five Native American individuals listed by the NAHC. To date, no response has been received from any of the Native American contacted as part of public outreach for this Project.

On June 8, 2018, the Tribal Historic Preservation Officer (THPO) with the Cahto Indian Tribe, was contacted by phone and email to request that a tribal monitor be present to observe excavations conducted for the XPI study. The THPO agreed to send a representative of the tribe. On June 12, 2018, Cahto Indian Tribe representative Fred Simmons was present to monitor XPI excavations. No prehistoric-era or historic-era cultural resources were identified as a result of the XPI investigation. No documentation regarding tribal cultural resources was identified or received that would facilitate an eligibility determination pursuant to PRC Section 21074, 5020.1(k) or 5024.1. Implementation of CULT-1 and CULT-2 will further reduce this already less than significant impact.

3.2.19 UTILITIES AND SERVICE SYSTEMS

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Require or result in the relocation or construction of new water or expanded waste water treatment or stormwater 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 waste water 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?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Environmental Setting

Mendocino County maintains the storm drainage facilities within the Project area. The overhead power lines located on the west side of the approach roadways will not require relocation or be temporarily de-energized as the location of the lines remain outside of the limits of the temporary detour. There are no utilities carried on the existing bridge and no underground utilities within the project limits.

Potential Environmental Effects

a) ***No Impact.*** The Project is the replacement of the sub-standard bridge and does not require utility relocations, new utilities, or expanded demand for utilities. No impact will occur.

b) ***No Impact.*** The Project would require minimal water for dust suppression during the construction phase of the Project. Operation and maintenance of the replacement bridge following construction would not be expected to use additional water supplies. Future routine maintenance may include pressure washing and other minor water uses. The Project would not increase the demand on existing water or wastewater treatment facilities.

c) ***No Impact.*** The Project would not generate any wastewater requiring treatment during construction or operation of the Project.

d) ***Less than Significant Impact.*** Solid waste generated by the Project would be limited to construction debris. Solid waste disposal would occur in accordance with federal, state, and local regulations including the disposal of material related to the removal of the existing bridge and construction of the new bridge. The Project would not generate the need for the construction of new solid waste facilities.

e) ***No Impact.*** The Project would conform to all applicable state and federal solid waste regulations.

3.2.20 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☒	☐	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or 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?	☐	☐	☐	☒

Environmental Setting

The Project is in a 'high fire hazard severity zone' in the 'state responsibility area' per the 2007 CAL FIRE, Fire Hazard Severity Zones State Responsibility Area (SRA) maps (CAL FIRE 2021).

Potential Environmental Effects

a) ***No Impact.*** The County of Mendocino's 2016 Emergency Operations Plan includes and identifies emergency planning, organization, policies, procedures, and response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies (Mendocino County 2016). Wilderness Lodge Road is not considered an evacuation route in the County's Emergency Operation Plan. The bridge is the only access to properties north of Dutch Charlie Creek and vehicular access will need to be maintained during construction. A

temporary detour road and bridge will be installed west (upstream) of the existing bridge. Following construction, the new bridge and roadway approaches would improve the ease of emergency access across the bridge when compared to existing conditions. The Project would not impair implementation of an adopted emergency response plan or emergency evacuation plan.

b) ***Less Than Significant with Mitigation Incorporated.*** Wildfire risk is dependent upon existing environmental conditions, including but not limited to the amount of vegetation present, topography, and climate. The Project site is located on relatively flat ground in a rural area surrounded by redwood forest and riparian vegetation. Climate in the area is generally warm and temperate, with the winters being rainier than the summers. The proposed Project involves the replacement of a functionally obsolete bridge with a new bridge structure. The completed Project would not house any 'occupants'. CAL FIRE has designated the Project area as a High Fire Hazard Severity Zone in a SRA. Human activities are the primary reason wildfires start. Project construction would involve the use of heavy equipment, welding, and other activities that have potential to ignite fires. A wildland fire caused by Project construction activities could result in a significant impact. Implementation of Mitigation Measure WILD-1 would reduce this potential impact to less-than-significant.

Mitigation Measure WILD-1

The County will require its contractors to prepare a Fire Protection Plan before construction begins in areas with moderate to high fire hazards. The Fire Protection Plan will include the following measures.

- Internal combustion engines, stationary and mobile, will be equipped with spark arresters. Spark arresters shall be in good working order.
- Contractor will keep all construction sites and staging areas free of grass, brush, and other flammable materials.
- Personnel will be trained in the practices of the fire safety plan relevant to their duties. Construction and maintenance personnel shall be trained and equipped to extinguish small fires.
- Work crews shall have fire-extinguishing equipment on hand, as well as emergency numbers and cell phone or other means of contacting the Fire Department.
- Smoking will be prohibited while operating equipment and shall be limited to paved or graveled areas or areas cleared of all vegetation. Smoking will be prohibited within 30 feet of any combustible material storage area (including fuels, gases, and solvents). Smoking will be prohibited in any location during a Red Flag Warning issued by the National Weather Service for the Project area (Red-Flag Warning" is a term used by fire-weather forecasters to call attention to limited weather conditions of particular importance that may result in extreme burning conditions.

c) ***No Impact.*** The proposed Project would replace the existing Wilderness Lodge Road Bridge over Dutch Charlie Creek, no new infrastructure would be installed. The completed Project would not exacerbate fire risk or result in temporary or ongoing impacts to the environment above the existing conditions. Therefore, no impact would occur.

d) ***No Impact*****.** Site drainage will remain largely unchanged from the current condition. The approach roadways will drain surface water into areas adjacent to the roadways as currently exists. The new bridge deck will drain storm water off the bridge deck through scuppers in the east and west barrier railing curbs. The proposed bridge will pass the 50-year flow event with a freeboard clearance of approximately 0.50 feet. The Project site is located on relatively flat ground. The Project would result in a negligible increase (1,053 square feet) in impervious surfaces from the new bridge and

roadway approaches. The Project would not result in localized increases in the rate or amount of surface runoff that would result in flooding downslope or downstream.

3.2.21 MANDATORY FINDINGS OF SIGNIFICANCE

(To be filled out by Lead Agency if required)	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
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?	☐	☒	☐	☐

a) ***Less Than Significant with Mitigation Incorporated.*** With implementation of the mitigation measures presented above, the Project does not have the potential to degrade the quality of the environment, including fish or wildlife species or their habitat, plant or animal communities, important examples of the major periods of California history or prehistory, or adverse effects on human beings.

b) ***Less than Significant Impact.*** The Project is consistent with the General Plan and would not result in individually limited but collectively significant impacts. The Project results in an environmentally similar condition compared to pre-Project and the project would not cause any additional environmental effects or significantly contribute to a cumulative impact.

c) ***Less Than Significant with Mitigation Incorporated.*** See response to item a above.

4 DETERMINATION

4.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

___	Aesthetics	___	Mineral Resources
___	Agricultural Resources	✓	Noise
✓	Air Quality	___	Population and Housing
✓	Biological Resources	___	Public Services
✓	Cultural Resources	___	Recreation
___	Energy	___	Transportation
✓	Geology and Soils	___	Tribal Cultural Resources
___	Greenhouse Gas Emissions	___	Utilities and Service Systems
✓	Hazards and Hazardous Materials	✓	Wildfire
✓	Hydrology and Water Quality	✓	Mandatory Findings of Significance
___	Land Use and Planning		None Identified

On the basis of this initial evaluation:

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

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the project-specific mitigation measures described in Section III have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

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

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

James Linderman 7/20/2022

Signature Date

James Linderman, Sr. Environmental Compliance Specialist

5 REPORT PREPARATION AND REFERENCES

5.1 REPORT PREPARATION

Mendocino County Department of Transportation – CEQA Lead Agency

Jason Wise	Deputy Director of Transportation – Land Improvement
James Linderman	Sr. Environmental Compliance Specialist

MGE Engineering, Inc. – Preliminary Design

Robert Sennett, P.E.	Project Manager

SWCA Environmental Consultants

Jeffery Little	Director, Sacramento

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APPENDIX A

Mitigation Monitoring and Reporting Plan

Mitigation Monitoring and Reporting Plan
for the
Wilderness Lodge Road over Dutch Charlie Creek Bridge Replacement Project

CEQA Lead Agency:
Mendocino County

Prepared: March 2022

Adopted by Board of Supervisors on: _____

Introduction

Mendocino County, in conjunction with the California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA), is proposing to replace the Wilderness Lodge Road (also known as Jack of Hearts Road) bridge (Bridge 10C0073) at Dutch Charlie Creek. The proposed replacement bridge is 60 feet long with a clear width of 24 feet located on the same alignment. The existing bridge, constructed in 1969, is structurally deficient with a sufficiency rating of 49.6.

As described in the IS/MND, the Project itself incorporates a number of measures to minimize adverse effects on the environment. The IS/MND also identified several mitigation measures that are required to reduce potentially significant impacts to levels that are less than significant. This Mitigation Monitoring and Reporting Plan (MMRP) describes a program for ensuring that these mitigation measures are implemented in conjunction with the Project. Mendocino County Department of Transportation (DOT), as the lead agency under the California Environmental Quality Act (CEQA), is responsible for overseeing the implementation and administration of this MMRP. The Mendocino County DOT will designate a staff member to manage the MMRP. Duties of the staff member responsible for program coordination will include conducting routine inspections and reporting activities, coordinating with the Project construction contractor, coordinating with regulatory agencies, and ensuring enforcement measures are taken.

Regulatory Framework

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

Format of This Plan

Mitigation measures are followed by an implementation description, the criteria used to determine the effectiveness of the mitigation, the timeframe for implementation, and the party responsible for monitoring the implementation of the measure. Implementation of mitigation measures is ultimately the responsibility of the County; during construction, the delegated responsibility is shared by the County's contractors.

Environmental Factor	Mitigation Measure #	Environmental Protection Measures	Method of Verification	Timing of Verification	Responsible Party for Verification	Verification of Completion	
						Date	Initial
Air Quality	AQ-1	In accordance with Rule 1-430(b) of the Mendocino County Air Quality Management District Regulations, the County of Mendocino and its Contractor shall implement the following airborne dust control measures during construction activities: • *All visibly dry disturbed soil road surfaces shall be watered to minimize fugitive dust emissions.* • *All unpaved surfaces, unless otherwise treated with suitable chemicals or oils, shall have a posted speed limit of 10 miles per hour.* • *Earth or other material that has been transported by trucking or earth moving equipment, erosion by water, or other means onto paved streets shall be promptly removed.* • *Asphalt, oil, water or suitable chemicals shall be applied on materials stockpiles, and other surfaces that can give rise to airborne dusts.* • *All earthmoving activities shall cease when sustained winds exceed 15 miles per hour.* • *The operator shall take reasonable precautions to prevent the entry of unauthorized vehicles onto the site during non-work hours.* • *The operator shall keep a daily log of activities to control fugitive dust.*	Mendocino County Department of Transportation to verify construction plans	During Construction	Mendocino County		
Biological Resources	BIO-1	• In-water construction activities will be restricted to the period between 1 July and the first qualifying rain event on or after 15 October (more than one half inch of precipitation in a 24- hour period), subject to approval by NMFS and CDFW Streambed Alteration Agreement, unless NMFS and CDFW provides approval of work outside that period. • The Diversion, Dewatering and Fish Salvage Plan will be implemented during diversion, dewatering, and fish salvage activities. • A qualified biologist will train Project staff that are on-site regarding habitat sensitivity, identification of SONCC coho, NC steelhead, and CC Chinook, and required practices before the start of construction. The training shall include the general measures that are being implemented to conserve SONCC coho, NC steelhead, and CC Chinook as they relate to the Project, penalties for noncompliance, and boundaries of the construction area. A fact sheet or other	Mendocino County Department of Transportation to verify construction plans include conditions in the General Notes and/or Grading Plan. Qualified biologist to conduct survey and training.	Prior to and during construction	Mendocino County		

Environmental Factor	Mitigation Measure #	Environmental Protection Measures	Method of Verification	Timing of Verification	Responsible Party for Verification	Verification of Completion	
						Date	Initial
		supporting materials containing this information will be prepared and distributed. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures. • Equipment will be refueled and serviced at designated construction staging areas. All construction material will be stored and contained in a designated area that is located a minimum of 50 feet away from wetted portion of the channel to prevent transport of materials into Dutch Charlie Creek. Appropriate BMPs will be installed to collect any discharge, and adequate materials for spill cleanup will be kept on site. Construction vehicles and equipment will be maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease. • Diversion and dewatering activities will be done in accordance with NMFS Guidelines for Salmonid Passage at Stream Crossings (NMFS 2001) and CDFW Fish Screen Criteria (Flosi et al. 2010), as applicable. • Temporary diversion structures will be designed so that fish passage is maintained up and down stream of the Project Area. The diversion will not create an impassible barrier. The diversion would allow passage of salmonids attempting to migrate downstream. The diversion would allow flows to pass through the existing channel under the bridge while maintaining water quality in Dutch Charlie Creek. The contractor will prepare a water diversion and dewatering plan that complies with any applicable permit conditions. A temporary dam just upstream of the bridge could be constructed and flow diverted into one or more pipes. Any salmonids migrating downstream would pass through the bypass pipe and be returned to the stream just above the existing pool. A temporary protective cover will be constructed to prevent debris from falling into the creek. o During abutment demolition activities using a hydraulic breaker, an impassible barrier will be installed in order to prevent noise stress to surrounding fish. A qualified biologist will clear a 50-foot section of fish on either side of the diversion structure. The 50-foot section will be cleared during methods described in the Diversion, Dewatering and Fish Salvage Plan. Once fish have been successfully cleared, and exclusion 'block' net would be placed across the width of the channel at the 50-foot mark to prevent fish from re-entering the area. The block net would be removed once hydraulic breaker activities cease. The biologist will monitor the fish exclusion sections for any remaining fish and document, if any, fish behavior that would indicate noise stress. The biologist will also monitor the upstream block net to make sure no fish become impinged.					

Environmental Factor	Mitigation Measure #	Environmental Protection Measures	Method of Verification	Timing of Verification	Responsible Party for Verification	Verification of Completion	
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		• The qualified biologist will be present during installation and removal of the diversion structure and dewatering activities. Biological surveys and monitoring for fish and diversion/dewatering activities will adhere to the following methods: o Netting, electrofishing, seining and/or other fish capture and relocation methods shall be conducted in accordance with NMFS Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act (NMFS 2000b). o A survey for salmonids will be conducted prior to installation of the diversion structure. If salmonids are found, fish will be moved from the construction area through seining using two block nets to avoid direct mortality and minimize injury to salmonids. After seining is complete, a qualified biologist will conduct electrofishing to remove any remaining salmonids or other fish species. Installation of the diversion structure and dewatering activities will not commence until all visible salmonids have been removed from the area. o The biologist will continue to monitor during dewatering activities to look for fish that may have hidden in the stream and/or remain in low spots. Remaining fish will be captured and relocated, as necessary, in appropriate habitat downstream of the diversion structure. The biologist will remain until the area is completely dewatered, or the water level is low enough to verify no fish remain. o If pumps are used to dewater the creek between the cofferdams to facilitate construction, an acceptable fish screen must be used to prevent entrainment or impingement of small fish in accordance with NMFS Guidelines for Salmonid Passage at Stream Crossings (NMFS 2001) and CDFW Fish Screen Criteria (Flosi et al. 2010). o Prior to removal of the diversion structure, the qualified biologist will conduct another survey to ensure no fish are nearby that could be injured during diversion removal. Methods will follow the previous bullets, and diversion removal will not commence until all visible salmonids have been removed from the area. o Upon completion of activities, the diversion structure would be removed beginning downstream and progressing upstream. If gravel bags are used, they will be removed in their entirety upon completion of the Project to return the riverbed to pre- Project conditions.					

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		• Clean, non-turbid water would be returned to the creek in accordance with Section 13-8 of the 2018 Caltrans Standard Specifications. Turbid water will be detained in a storage basin until it has settled, at which time it will be returned to a gravel bar or other area where water may go subsurface before returning to the channel. At no time or place shall the temperature of returning water be increased by more than 5°F above natural receiving water temperature. • Removal of the existing abutments may leave voids in the creek bed. Voids created from the removal of the existing abutments will be backfilled with river rock and match the natural grade of the creek. Backfill behind the existing abutment will be removed and the bank recontoured to match the natural grade of the creek banks. River rock will be composed of washed, rounded, spawning-sized gravel between 0.4 to 4 inches in diameter.					
Biological Resources	BIO-2	• Environmental awareness training will be conducted by a qualified biologist prior to the onset of Project work for construction personnel to brief them on how to recognize marbled murrelet and northern spotted owl, the importance of avoiding impacts to these species, the mitigation measures specific to these species, and what to do if these species are found. Education programs will be conducted for appropriate new personnel as they are brought on the job during the construction period. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures. • The Project will not remove potential nesting trees for marbled murrelet and northern spotted owl. The trees proposed for removal are not potential nesting trees for marbled murrelet and northern spotted owl. • If construction or vegetation removal occurs outside the breeding season for marbled murrelet (24 March to 15 September) and northern spotted owl (1 February to 15 September), there will be no need to conduct a preconstruction survey for active nests. • Vegetation may be removed using hand tools, including chain saws and mowers, and may be trimmed several inches above the ground with the roots left intact to prevent erosion. • Vegetation scheduled for removal should be removed during the non-breeding season of marbled murrelet and northern spotted owl, from 16 September to 31 January. If construction or vegetation removal occurs between 1 February and 15 September, a biologist shall conduct a survey for active marbled murrelet and northern spotted owl nests within 165 feet (50 m) of the Project Area from accessible areas within two weeks prior to construction. The 165 feet buffer is the estimated harassment distance from the Project Area where a majority of construction activities will generate	Qualified biologist to conduct survey.	Prior to and during construction	Mendocino County		

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		noise in the "high" range. The measures listed below shall be implemented based on the survey results. • If no active northern spotted owl or marbled murrelet nest is found, then no further avoidance and minimization measures are necessary. • If an active northern spotted owl nest is discovered in or within 165 feet of the Project Area, work will be deferred until after 31 July, after which the Service considers the above-ambient sound levels as having "no effect" on nesting spotted owls and dependent young. • If an active marbled murrelet nest is discovered in or within 165 feet of the Project Area, work will be deferred until 6 August, the date when most marbled murrelets have fledged in the coastal northern California. Between 6 August and 15 September, Project activities will observe a daily work window beginning two hours post-sunrise and ending two hours pre-sunset. Prep work that does not generate sound levels above ambient sound levels, including street sweeping and manual removal of pavement markers, can occur during all hours. • If an active yellow-billed cuckoo nest is discovered in or within 165 feet of the Project Area, an Environmental Sensitive Area (ESA) will be established between the active nest and the Project Area. The size of the ESA buffer will be determined in consultation with USFWS. Project-related activities within the ESA will be deferred until the Project biologist determines that the nest is no longer active. • No human activities shall occur within visual line-of-sight of 131 feet (40 m) or less from a known marbled murrelet or northern spotted owl nest location. The 131 feet visual line-of- sight buffer shall be maintained until the end of the nesting season (September 15) or until a qualified biologist confirms that the young have fledged or are otherwise no longer present. • Jackhammers, generators and compressors, dump trucks or service vehicles or similar equipment that produce high intensity sounds (typically 90 dB or greater) will only be used for short duration each work day (less than two hours total in any work day). No blasting shall be permitted. If necessary, equipment producing high intensity sound should be shielded through the use of portable noise barriers. • All work shall be performed during daylight hours. No nighttime operations or use of staging lights shall be allowed. • All internal combustion engines used for construction shall be fitted with mufflers.					

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		• The County will adhere to applicable Caltrans and County construction-related noise standards.					
Biological Resources	BIO-3	To reduce the spread of invasive plant species, all mud and debris will be washed off construction equipment prior to entering the site. Areas disturbed during construction will be revegetated with native species or sterile non-native species to reduce the spread of invasive plants in the Project Area.	Qualified biologist to conduct survey.	During construction	Mendocino County		
Biological Resources	BIO-4	• The limits of construction will be fenced by the County or Contractor to exclude activities from avoided habitat. Trucks and other vehicles will not be allowed to park beyond, nor shall equipment be stored beyond, the fencing. No vegetation removal or ground disturbing activities will be permitted beyond the fencing. • Geotextile or similar fabric will be temporarily placed along the area of the temporary detour. The purpose of the fabric is to monument the original ground level and minimize compaction. After the Project is complete, the contractor will remove the temporary detour and restore the areas back to the original grade. • Implementation of the Restoration Plan	Mendocino County Department of Transportation to verify construction plans include conditions in the General Notes and/or Grading Plan.	Prior to and during construction	Mendocino County		
Biological Resources	BIO-5	• During construction, water quality will be protected by implementation of BMPs consistent with the current edition of the Caltrans Stormwater Quality Handbooks (http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm) to minimize the potential for siltation and downstream sedimentation of Dutch Charlie Creek. • The Project will develop a dewatering and discharge plan describing the methods, materials, quantities, and locations of dewatering and discharge activities. All discharges from dewatering will adhere to the requirements of the General Waste Discharge Requirements/NPDES Permit for Dewatering and Other Low Threat Discharges to Surface Waters (Order No. R5-2008-0081/NPDES Permit No. CAG995001). A NOI shall be submitted to the RWQCB for approval before dewatering may commence. A completed Notice of Termination Form shall be submitted to the RWQCB after the permitted discharge is complete. The dewatering and discharge plan shall be submitted by the Contractor to the RWQCB Water Quality Certification unit within 15-30 days prior to construction. • The Project will prepare a water pollution control plan that will implement the appropriate BMPs in accordance with the Mendocino County Water Pollution Control Plan (WPCP) guidelines, as well as current versions of the Caltrans Stormwater Pollution Prevention Plan and the California Stormwater Quality Association (CASQA) BMP Handbook, as applicable. If disturbed area is greater than one (1) acre, the Project will obtain coverage	Mendocino County Department of Transportation to verify construction plans include conditions in the General Notes and/or Grading Plan.	Prior to and during construction	Mendocino County		

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		under Adopted Order 2009-0009-DWQ (As amended by 2010-0014-DWQ and 2012-006-DWQ Construction General Permit [CGP]), including preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) that identifies Project-specific erosion, sediment, and stormwater BMPs to protect water quality during Project construction. • During demolition of the existing bridge, a cover or other temporary protection structure that spans the creek will be placed over Dutch Charlie Creek bed to prevent falling debris from entering the creek. • Areas temporarily disturbed on the banks of Dutch Charlie Creek will be revegetated in accordance with the Revegetation Planting and Erosion Control Specifications in Appendix I and Restoration Plan in Appendix J. Reseeded areas will be covered with a biodegradable erosion control fabric to prevent erosion and downstream sedimentation. The Project engineer will determine the specifications needed for erosion control fabric (e.g., sheer strength) based on anticipated maximum flow velocities and soil types. The seed type will consist of commercially available native grass and herbaceous species. No seed of nonnative species will be used unless certified to be sterile.					
Cultural Resources	CULT-1	• Mendocino County shall retain a qualified archaeologist to be present during initial ground disturbing activities to ensure that there are no prehistoric archaeological resources present within the vertical APE. These activities would include excavation of the existing concrete abutments, headwalls, and associated footings from the creek. • If archaeological materials are encountered during construction activities, construction crews shall stop all work within 100 feet of the discovery until a qualified archaeologist can assess the discovery and provide recommendations. Such treatment and resolution could include modifying the Project to allow the materials to be left in place, or undertaking data recovery of the materials in accordance with standard archaeological methods. The preferred treatment of the resource is protection and preservation. • Resources could include buried historic features, such as artifact-filled privies, wells, and refuse pits, and artifact deposits, along with concentrations of adobe, stone, or concrete walls or foundations, and concentrations of ceramic, glass, or metal materials. Native American archaeological materials could include obsidian and chert flaked stone tools (such as projectile points and knives), midden (darken soil created culturally from use and containing heat-affected rock, artifacts, animal bones, or	Mendocino County Department of Transportation to verify construction plans include conditions in the General Notes and/or Grading Plan. Site inspection (if historic or archaeological resources are discovered)	During construction	Mendocino County		

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		shellfish remains), and/or groundstone implements (such as mortars and pestles). Project personnel shall not collect cultural materials.					
Cultural Resources	CULT-2	If human remains are encountered as a result of construction activities, any work in the vicinity shall stop and the Mendocino County Coroner shall be contacted immediately. In addition, a qualified archaeologist shall be contacted immediately to evaluate the discovery, if a monitor is not already present. If the human remains are Native American in origin, then the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification, pursuant to Public Resources Code 5097.98. California Health and Safety Code Section 7050.5 states that it is a misdemeanor to knowingly disturb a human grave.	Mendocino County Department of Transportation to verify construction plans include conditions in the General Notes and/or Grading Plan. Site inspection (if archaeological resources are discovered)	During construction	Mendocino County		
Geology	GEO-1	If paleontological resources (e.g., vertebrate bones, teeth, or abundant and well-preserved invertebrates or plants) are encountered during construction, Mendocino County shall ensure work in the immediate vicinity shall be diverted away from the find until a professional paleontologist assesses and salvage the find, if necessary.	Mendocino County Department of Transportation to verify construction plans include conditions in the General Notes and/or Grading Plan. Site inspection (if paleontological resources are discovered)	During construction	Mendocino County		
Hazards	HAZ-1	All painted surfaces of the bridge (including railings) will be tested for LBP prior to demolition/removal to determine if they exceed thresholds established by the California Code of Regulations. Material found to exceed the threshold will be disposed of at a Class I disposal facility. If lead is detected, then appropriate procedures will be included in the Construction contract to avoid contact with these materials or generation of dust or vapors.	Mendocino County Department of Transportation will test for LBP	Prior to construction	Mendocino County		
	HAZ-2	Prior to the start of construction, the existing bridge's building material will be tested for asbestos. If present, the following will be implemented: • Asbestos-containing building material will be removed using one of several methods approved by the Federal EPA and California Occupational and Safety Hazard Administration (CalOSHA), at the contractor's discretion. The waste container will be properly	Mendocino County Department of Transportation will test for Asbestos	Prior to construction	Mendocino County		

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		documented and disposed of at a Class I landfill, such as the Clean Harbors Buttonwillow LLC facility in Buttonwillow, CA (CAD980675276) or the Chemical Waste Management Inc. Kettleman facility in Kettleman, CA (CAT000646117).					
	HAZ-3	Handling and disposal of chemically treated wood removed from the project site will adhere to Caltrans 2015 Standard Specification (SS) 14011.14 and Special Standard Provision (SSP) 14011.14 or equivalent current Caltrans Standard Specification and Special Standard Provisions for chemically treated wood removal and California Department of Toxic Substance Control (DTSC) Treated Wood Waste Alternative Management Standard (22 CCR Chapter 34).	Mendocino County Department of Transportation will comply will appropriate regulations	During construction	Mendocino County		
Noise	NOISE-1	The Project plans and specifications will include provisions requiring the contractor to make every reasonable effort to minimize construction noise through implementation of measures including: • *Project construction activities would occur during the daytime hours (typically 7 AM to 7 PM Monday through Saturday).* • *Local residents will be given advanced notice of project construction schedules, and will be notified that there will be temporary increases in local noise levels during project construction at the nearest residences to the construction activities.* • *To the extent feasible, separation between construction staging areas and the nearest residences should be maximized.* • *All internal combustion engines used for construction shall be fitted with mufflers.* • *Generators and compressors required during project construction should be located as far as possible from existing residents and, if necessary, shielded from view of those residences by portable noise barriers.*	Mendocino County Department of Transportation will provide specifications to contractor(s)	During construction	Mendocino County		
Wildfire	WILD-1	The County will require its contractors to prepare a Fire Protection Plan before construction begins in areas with moderate to high fire hazards. The Fire Protection Plan will include the following measures. • Internal combustion engines, stationary and mobile, will be equipped with spark arresters. Spark arresters shall be in good working order. • Contractor will keep all construction sites and staging areas free of grass, brush, and other flammable materials. • Personnel will be trained in the practices of the fire safety plan relevant to their duties. Construction and maintenance personnel shall be trained and equipped to extinguish small fires.	Contractor will provide Plan to County	Prior to construction	Mendocino County		

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		• Work crews shall have fire-extinguishing equipment on hand, as well as emergency numbers and cell phone or other means of contacting the Fire Department. • Smoking will be prohibited while operating equipment and shall be limited to paved or graveled areas or areas cleared of all vegetation. Smoking will be prohibited within 30 feet of any combustible material storage area (including fuels, gases, and solvents). Smoking will be prohibited in any location during a Red Flag Warning issued by the National Weather Service for the Project area (Red-Flag Warning" is a term used by fire-weather forecasters to call attention to limited weather conditions of particular importance that may result in extreme burning conditions.					