

ITEM NO. 6

MEETING DATE: 01/11/18

APPLICATION NO. PW-17-11

**TRINITY COUNTY PLANNING COMMISSION  
STAFF REPORT**

**OWNER:** Trinity County    **REPORT BY:** David Colbeck, Environmental Compliance Specialist

**AGENT:** David Colbeck, Environmental Compliance Specialist

**APN:** Not applicable

**PROPOSAL:** Initial Study/Mitigated Negative Declaration adoption

**LOCATION:** Van Duzen Road (County Road 511), Post Miles (PM) 9.5-9.7, 11.2-11.6 and 12-15; Townships 1 and 2 South, Range 6 East, and Township 2 South, Range 7 East; Humboldt Base & Meridian (HBM), Ruth Lake Quad.

**PROJECT INFORMATION:**

- A) Planning Area: Unclassified
- B) Existing General Plan Designation: Primarily surrounded by Resource (RE) or Rural Residential (RR)
- C) Existing Zoning:
- D) Existing Land Use: Resource (RE) or Rural Residential (RR)
- E) Adjacent Land Use Information: Resource (RE) or Rural Residential (RR)

**BACKGROUND INFORMATION:**

The Trinity County Department of Transportation (TCDOT) is proposing a cooperative project with the Federal Highway Administration; Central Federal Lands Highway Division (CFLHD). The project will rehabilitate a total of 5.2 miles of roadway, with 3.6 miles on Van Duzen Road and 1.6 miles on Ruth Zenia Road. Both road function as primary access routes to the Six Rivers National Forest (SRNF) south of State Route 36 and provide the main transportation routes for the rural communities of Mad River, Ruth, Zenia, and Kettenpom in Trinity County, California. The project area encompasses approximately 45 acres and includes an approximately 72-foot-wide corridor and staging areas and paved pullouts associated with the proposed road improvements. The project area is located 68 miles southeast of Eureka, California and 85 miles west of Redding, California in the SRNF. CFLHD will manage and implement the project. As a Federal agency, CFLHD is responsible for the Federal environmental process under the National Environmental Policy Act (NEPA). A

NEPA Categorical Exclusion was completed by CFLHD in December 2017. Trinity County is the owner and operator of the road facilities, and will be responsible for acquiring the necessary right-of-way. Trinity County is the CEQA lead agency for the project.

Complete the following work on Van Duzen Road (County Road 501):

**Segment 1:** Van Duzen Road. Milepost 9.5 to 9.7 Description: 0.2 miles of minor 4R, curve widening, retaining wall, roadway and safety improvements.

- Curve widening
- Roadway reconstruction
- Upgrade guardrail
- Retaining wall
- Signing and striping
- Drainage improvements

**Segment 2:** Van Duzen Road: Milepost 11.2 to 11.6. Description: 0.4 miles of minor 4R, road widening, minor realignments including retaining walls and roadside safety improvements on Van Duzen Road.

- Roadway reconstruction
- Retaining walls
- New guardrail
- Roadway widening (Existing 20 feet wide to 22 feet wide)
- Roadway reclamation
- Signing and striping
- Drainage improvements

**Segment 3:** Van Duzen Road: Milepost 12 to 15. Description: 3 miles of 3R, pavement reclamation, culvert and guardrail replacement on Van Duzen Road.

- Pavement reclamation for entire length of segment
- Guardrail replacement
- Ditch cleaning
- Culvert cleaning and replacement/repairs
- Pave aprons (entrance areas) to designated pullouts, driveways, access points.
- Culvert repairs
- Erosion mitigation measures (riprap ditches and aprons at outlets of pipes)
- Signing and striping

Complete the following work on Ruth-Zenia Road (County Road 502), Post Miles (PM) 8.3-9.4 and 14.2-14.7; Township 1 South, Range 6 East, Humboldt Base & Meridian (HBM), Ruth Lake Quad:

Ruth-Zenia Road:

**Segment 4:** Ruth-Zenia Road: Milepost 8.3 to 9.4. Description: 1.1 miles of 4R, road widening, curve improvements, ditch protection on Ruth-Zenia Road.

- Curve widening
- Roadway widening (Existing 18 foot wide to 22 feet wide)
- Roadway reclamation
- Culvert replacement

- Ditch cleaning and Ditch protection (riprap lining)
- Pave aprons (entrance areas) to designated pullouts, driveways, access points.
- Signing and striping

**Segment 5:** Ruth-Zenia Road: Milepost 11.2 to 14.7. Description: 0.5 miles of 4R, road realignment, subgrade and drainage improvements on Ruth-Zenia Road.

- Roadway reconstruction
- Ditch rehabilitation/protection
- Culvert replacement
- Paved pullout
- Curve widening
- Signing and striping

#### Project Schedule:

The proposed road improvements are expected to be scheduled for 2019 and with construction expected to be completed within four months. Initial earthwork activities would be scheduled around the middle of May. For culvert improvements, work in waters of the U.S. would be scheduled during the dry season when there is little or no flow in the drainages. The dry season is typically between May and October. The construction year is subject to change based on the availability of funding and receipt of permits and approvals for the project.

#### **ENVIRONMENTAL EVALUATION:**

An evaluation of environmental impact (Initial Study/IS) was prepared for this project pursuant to the California Environmental Quality Act (CEQA) finding that this project (as mitigated) will not have a significant adverse impact on the environment. A Mitigated Negative Declaration (MND) of Environmental Impact was prepared on November 14, 2017. A summary of the mitigation measures can be found on page 9 of the Initial Study (attached at the end of this report).

#### **Environmental Scoping and Comments:**

TCDOT staff prepared the IS/MND. The IS/MND was filed with the State Clearinghouse for distribution to State agencies on November 15, 2017. All interested local and federal agencies, local emergency service agencies, and other interested parties received a copy of the IS/MND, or a notice telling them where the document was available just before or on December 14, 2017. The IS/MND was posted on the County's web site and made available at the Weaverville and Hayfork Public Libraries and transportation and planning offices. The public review period began on November 15 2017, and ended on December 14, 2017. A Notice of Availability and Intent to Adopt a Mitigated Negative Declaration was posted in the office of the County Clerk on November 14, 2017, and published in the Trinity Journal on November 15, 2017. Circulation documents are included in Exhibit A. The IS/MND was delivered to the Planning Commission on November 14, 2016.

No comments were received by the State Clearinghouse or directly by the County.

Potential impacts were determined not to be significant, or were reduced to less-than-significant levels by mitigation measures. See the IS/MND for a detailed environmental analysis. The IS/MND is included in Exhibit B.

**Mitigation Monitoring and Reporting Program:**


After the comment period, the County completed a Mitigation Monitoring and Reporting Program (MMRP). The MMRP is included as Exhibit C, for review and adoption by the Commission.

**STAFF RECOMMENDATION:**

Staff recommends the following:

Staff recommends that the Planning Commission adopt the Mitigated Negative Declaration and the Mitigation, Monitoring, and Reporting Program, finding that, on the basis of the whole record before the Commission, including the initial study, and mitigation, monitoring, and reporting program, that there is no substantial evidence that the project will have a significant effect on the environment and that a negative declaration reflects the commission's independent judgment and analysis.

Respectfully Submitted,

A handwritten signature in cursive script, reading "David Colbeck", is written over a horizontal line.

David Colbeck, Environmental Compliance Specialist  
Trinity County Department of Transportation

# EXHIBIT A CEQA CIRCULATION DOCUMENTS



EDMUND G. BROWN JR.  
GOVERNOR December 15, 2017

STATE OF CALIFORNIA  
GOVERNOR'S OFFICE of PLANNING AND RESEARCH  
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX  
DIRECTOR

David Colbeck  
Trinity County  
P.O. Box 2490  
Weaverville, CA 96093

Subject: Ruth-Zenia and Van Duzen Road Rehabilitation; Trinity County Roads 502 & 511  
SCH#: 2017112040

Dear David Colbeck:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on December 14, 2017, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044  
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2017112040  
**Project Title** Ruth-Zenia and Van Duzen Road Rehabilitation; Trinity County Roads 502 & 511  
**Lead Agency** Trinity County

**Type** MND Mitigated Negative Declaration  
**Description** The project is located 68 miles southeast of Eureka, Ca and 85 miles west of Redding, Ca in the Six Rivers National Forest. The purpose of the project is to improve road conditions by rehabilitating 3.6 miles of pavement along with drainage improvements along three separate segments on Van Duzen Rd and to realign portions of and resurface all of 1.6 miles of roadway in two separate segments on Ruth-Zenia Rd. Installation of guardrail, restriping, and construction of three retaining walls along Van Duzen Rd are also included in the project. The project is broken into the five segments.

**Lead Agency Contact**

**Name** David Colbeck  
**Agency** Trinity County  
**Phone** (530) 623-1365 **Fax**  
**email**  
**Address** P.O. Box 2490  
**City** Weaverville **State** CA **Zip** 96093

**Project Location**

**County** Trinity  
**City**  
**Region**  
**Lat / Long** 40° 18' 29.9" N / 123° 26' 20.15" W  
**Cross Streets** Ruth-Zenia and Van Duzen Rd  
**Parcel No.**  
**Township** 2S **Range** 6E **Section** 12 **Base** HBM

**Proximity to:**

**Highways**  
**Airports**  
**Railways**  
**Waterways** Van Duzen River  
**Schools**  
**Land Use** LU/Z: unclassified and GP: Resource

**Project Issues** Archaeologic-Historic; Biological Resources; Forest Land/Fire Hazard; Noise; Public Services; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality

**Reviewing Agencies** Resources Agency; California Coastal Commission; Department of Conservation; Department of Fish and Wildlife, Region 1; Cal Fire; Office of Historic Preservation; Department of Parks and Recreation; Caltrans, District 2; Office of Emergency Services, California; Native American Heritage Commission; Air Resources Board, Transportation Projects; Regional Water Quality Control Board, Region 1; State Water Resources Control Board, Division of Water Quality; State Lands Commission

**Date Received** 11/15/2017 **Start of Review** 11/15/2017 **End of Review** 12/14/2017

Note: Blanks in data fields result from insufficient information provided by lead agency.

**Notice of Exemption**

To: **X** County Clerk  
County of Trinity  
Trinity County Courthouse  
Weaverville, CA 96093

From: Trinity County Department of  
Transportation  
P.O. Box 2490  
Weaverville, CA 96093

**Project Title:** Junction City Bus Shelter Project

**Project Location - Specifier:** T33N R11W S12, MDBM

**Project Location - City:** Junction City

**Project Location - County:** Trinity

**Description of Nature, Purpose, and Beneficiaries of Project:**

The Trinity County Department of Transportation's Trinity Transit proposes to install a bus shelter at an existing bus stop on State Route 299 in Junction City, CA. The proposed location is within the Caltrans right of way directly across from the Junction City Store and adjacent to the former Junction City Café. The area is relatively flat and will not need to be graded. However, a contouring or curb will need to be included in order to facilitate drainage. Caltrans resurfaced State Route 299 through this area during the 2016 construction season, which raised the level of pavement. To bring the site up to ADA compliancy, the following will need to be done: A concrete pad will be installed approximately 15' X 9', which the bus shelter posts and bench attached with bolts. A detectable warning (yellow knobby pad) complying with Sections 11B-705.1.1 and 11B-705.1.2.4 will be installed as a transition between the road way and the bus shelter pad.

**Name of Public Agency Approving Project:** Trinity County Department of Transportation

**Name of Person or Agency Carrying Out Project:** Trinity County Department of Transportation

**Exempt Status: (check one)**

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number: Class 3 Section 15303**
- Statutory Exemption. State code number:

**Reasons why project is exempt:** The project would not create any substantial environmental impacts. Construction of the proposed shelter will not pose a risk to the environment or public safety. The project would require minimal grading and/or materials and would not require the removal of native vegetation or specimen trees. The completion of the project will further Trinity Transit's efforts to comply with Caltrans ADA requirements. CEQA Class 3 Categorical Exemptions under Article 19 consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. No exceptions pursuant to Section 15300.2 of CEQA apply.

**Lead Agency Contact Person:**  
David Colbeck  
**Title:** Environmental Compliance Specialist

**Area Code/Telephone/Extension:**  
(530) 623-1365 ext 3409

**Signature:** 

**Date:** 12/14/2017

**RECEIVED**

DEC 13 2017

TRINITY COUNTY  
CLERK/RECORDER/ASSESSOR

POSTED IN THE OFFICE OF  
THE TRINITY COUNTY CLERK

FROM: 12/13/17 TO: 1/15/18

# Affidavit of Publication

Road # 502 & 511

{ T.C. Department of Transportation  
 { P.O. Box 2490  
 { Weaverville, CA 96093

"Notice of Intent to Adopt a Mitigated Negative Declaration"

BY TRINITY JOURNAL

*See attached*

STATE OF CALIFORNIA  
 SS.  
 COUNTY OF TRINITY

Wayne R. Agner of the said County, being duly sworn, deposes and says:

That he is and at all times herein mentioned was a citizen of the United States, over the age of twenty-one years and that he is not a party to, nor interested in the above entitled matter;

That he is the publisher of The Trinity Journal, a newspaper of general circulation published in the Town of Weaverville, County of Trinity, and which newspaper at all times herein mentioned had and still has a bona fide subscription list of paying subscribers, and which newspaper has been established, printed and published at regular intervals in the said Town of Weaverville, County of Trinity, for a period exceeding one year next preceding the date of publication of the notice hereinafter referred to; and which newspaper is not devoted to nor published for the interests, entertainment or instruction of a particular class, profession, trade, calling, race, or denomination, or any number of same; that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

November 15, 2017

I hereby certify under penalty of perjury that the foregoing is true and correct. Executed at Weaverville, California, on the 15th day of November, 2017.

*Wayne R. Agner*  
 WAYNE R. AGNER  
 Publisher

RECORDED  
 NOV 17 2017  
 TRINITY COUNTY  
 DEPT. OF TRANSPORTATION



**NOTICE OF ROAD PROJECTS**

**NOTICE OF PUBLIC HEARING  
NOTICE OF INTENT TO ADOPT  
A MITIGATED NEGATIVE DECLARATION  
FOR THE PROPOSED**

Ruth-Zenia and Van Duzen Road Rehabilitation, Trinity County  
Roads 502 & 514, Red Butte  
Trinity County Department of Transportation (County) has prepared and proposes to adopt a Mitigated Negative Declaration for the Ruth-Zenia and Van Duzen Road Rehabilitation. Trinity County Roads 502 & 514. A Mitigated Negative Declaration has been prepared because no substantial evidence exists that the proposed project may have a significant environmental effect that cannot be fully mitigated to a less than significant level. The Trinity County Planning Commission will consider the proposed Mitigated Negative Declaration together with any comments received during the public review process to determine whether the project will have a previously unidentified significant impact on the environment.

**Project Description**  
Trinity County, in cooperation with the Federal Highway Administration (FHWA) Central Federal Lands Highway Division (CFLHD) is proposing to improve a total of 5.2 miles of roadway on Van Duzen and Ruth-Zenia Roads in Trinity County. The Project of proposed action consists of rehabilitating 3.8 miles of pavement and improving drainage along three separate segments on Van Duzen Road and rehabilitating portions of and resurfacing 1.8 miles of two separate segments on Ruth-Zenia Road. Installation of guardrails, restriping, and construction of three retaining walls along Van Duzen Road are also included. The Project is broken into the five segments with three segments on Van Duzen Road and two segments on Ruth-Zenia Road.

The proposed road improvements are expected to be scheduled for 2019 and with construction expected to be completed within four months. Initial earthwork activities would be scheduled around the middle of May. For culvert improvements, work in waters of the U.S. would be scheduled during the dry season when there is little or no flow in the drainages. The dry season is typically between May and October. The construction year is subject to change based on the availability of funding and receipt of permits and approvals for the project.

The right-of-way through one segment of the project on Ruth-Zenia Road does not currently follow the existing alignment. The County will revise the right-of-way prior to construction to be parallel to the post-construction alignment. There will be no significant change in right-of-way areas.

FHWA/CFLHD will retain a construction contractor for the project. The contractor will be responsible for implementing standard construction practices and best management practices (BMPs) in accordance with FHWA's Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects. The contractor will implement the Special Contract Requirements specific to this project and will comply with applicable permits and authorizations, including environmental commitments identified for this project. During construction, one lane of the road will be closed resulting in minor delays. Flaggers on each end of the closure will manage traffic flow. At no time will both lanes of the road be closed.

**Project Location**

The Van Duzen Road work is comprised of three segments from milepost 9.5 to 9.7, milepost 11.2 to 11.6 and milepost 12 to 16. This work includes road reconstruction, retaining wall, curve widening and safety improvements, road widening, retaining walls, pavement reclamation as well as culvert and guardrail replacement. The work on the two Ruth-Zenia Road segments is proposed from milepost 8.3 to 9.4 and from milepost 14.2 to 14.7. This work includes road reconstruction and widening, curve improvements, roadside safety improvements as well as subgrade and drainage improvements due to ground water issue. The nearest towns are Ruth, Zenia and Mad River, California. The project sites can be found on the Ruth Lake 7.5 minute United States Geological Survey (USGS) quadrangles, Mount Diablo Base and Meridian. The majority of the project corresponds to existing Trinity County right-of-way with the remainder of the right-of-way access required from the United States Forest Service Six Rivers National Forest.

**Review Period**

This document is open to public review and comment from November 17, 2017 through December 18, 2017. Comments may be sent to the Trinity County Department of Transportation, Attention David Colbeck, P.O. Box 2490, Weaverville, CA 96093 or email to [tdcol@trinitycounty.org](mailto:tdcol@trinitycounty.org). Written comments are requested by 5:00 p.m. on the last day of the review period, Monday, December 18, 2017, but may be submitted at, or any time before, the Public Hearing.

**Document Availability**

Copies of the Public Draft Initial Study and Proposed Mitigated Negative Declaration are available for review on the County's website at <http://www.trinitycounty.org/Departments/Planning/planning.htm> under "Initial Studies" or at the following locations: Trinity County Library at 351 Main Street, Weaverville; Hayfork Branch Library at Highway 3 and Hyampom Road, Hayfork; Trinity County Department of Transportation at 31301 State Highway 3, Weaverville; Trinity County Planning Department at 61 Airport Road, Weaverville.

**Public Hearing**

Comments received on this Initial Study will be considered by the Trinity County Planning Commission prior to approval of the project. In a public hearing to be held at 7:00 p.m. or as soon thereafter as the matter can be heard on Thursday, January 11, 2018. The Planning Commission meets in the Library Conference Room, (Board of Supervisors Chambers) at 351 Main Street, Weaverville.

November 16, 2017

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EXHIBIT B

INITIAL STUDY AND  
PROPOSED MITIGATED NEGATIVE DECLARATION



# TRINITY COUNTY

## DEPARTMENT OF TRANSPORTATION

P.O. BOX 2490, WEAVERVILLE, CALIFORNIA 96093

PHONE (530) 623-1365 FAX (530) 623-5312

Email; [tcdot@trinitycounty.org](mailto:tcdot@trinitycounty.org)

### PROJECT INITIAL STUDY - ENVIRONMENTAL CHECKLIST AND EVALUATION OF ENVIRONMENTAL IMPACT

This document has been prepared by the Trinity County Planning Department as lead agency in accordance with the California Environmental Quality Act, CEQA (Public Resource Code, § 21000 *et seq.*).

**Date:** 11/17/2017

**Project No.:** PW-17-11

**Lead Agency:**

Trinity County Department of Transportation  
P.O. Box 2490 – 31301 State Highway 3  
Weaverville, CA 96093-2490  
Email: [dcolbeck@trinitycounty.org](mailto:dcolbeck@trinitycounty.org)  
(530) 623-1365 voice, (530) 623-5312 fax

**Project Planner:**

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

**Project Information:**

**Project Name:** Ruth-Zenia and Van Duzen Road Rehabilitation; Trinity County Roads 502 & 511

**Project Applicant(s):**

Trinity County Department of Transportation

**Agent:**

David Colbeck, Environmental Compliance Specialist

NOTE: This is a cooperative project with the Federal Highway Administration; Central Federal Lands Highway Division (CFLHD). CFLHD will manage and implement the project. As a Federal agency, CFLHD is responsible for the Federal environmental process under the National Environmental Policy Act (NEPA). A NEPA Categorical Exclusion was completed by CFLHD in October 2017. Trinity County is the owner and operator of the road facilities, and will be responsible for acquiring the necessary right-of-way. Trinity County is the CEQA lead agency for the project.

**Project Locations:**

Van Duzen Road (County Road 511), Post Miles (PM) 9.5-9.7, 11.2-11.6 and 12-15; Townships 1 and 2 South, Range 6 East, and Township 2 South, Range 7 East; Humboldt Base & Meridian (HBM), Ruth Lake Quad.

**Project Description:****Van Duzen Road:****Segment 1:**

Van Duzen Road. Milepost 9.5 to 9.7 Description: 0.2 miles of minor 4R, curve widening, retaining wall, roadway and safety improvements.

- Curve widening
- Roadway reconstruction
- Upgrade guardrail
- Retaining wall
- Signing and striping
- Drainage improvements

**Segment 2**

Van Duzen Road: Milepost 11.2 to 11.6. Description: 0.4 miles of minor 4R, road widening, minor realignments including retaining walls and roadside safety improvements on Van Duzen Road.

- Roadway reconstruction
- Retaining walls
- New guardrail
- Roadway widening (Existing 20 feet wide to 22 feet wide)
- Roadway reclamation
- Signing and striping
- Drainage improvements
- Signing and striping

**Segment 3**

Van Duzen Road: Milepost 12 to 15. Description: 3 miles of 3R, pavement reclamation, culvert and guardrail replacement on Van Duzen Road.

- Pavement reclamation for entire length of segment
- Guardrail replacement
- Ditch cleaning
- Culvert cleaning
- Culvert replacement/repairs
- Pave aprons (entrance areas) to designated pullouts, driveways, access points.
- Culvert repairs
- Erosion mitigation measures (riprap ditches and aprons at outlets of pipes)
- Signing and striping

Ruth-Zenia Road (County Road 502), Post Miles (PM) 8.3-9.4 and 14.2-14.7; Township 1 South, Range 6 East, Humboldt Base & Meridian (HBM), Ruth Lake Quad:

Complete the following work:

**Ruth-Zenia Road:****Segment 4:**

Ruth-Zenia Road: Milepost 8.3 to 9.4. Description: 1.1 miles of 4R, road widening, curve improvements, ditch protection on Ruth-Zenia Road.

- Curve widening
- Roadway widening (Existing 18 foot wide to 22 feet wide)
- Roadway reclamation
- Culvert replacement
- Ditch cleaning
- Ditch protection (riprap lining)
- Pave aprons (entrance areas) to designated pullouts, driveways, access points.
- Signing and striping

**Segment 5:**

Ruth-Zenia Road: Milepost 11.2 to 14.7. Description: 0.5 miles of 4R, road realignment, subgrade and drainage improvements on Ruth-Zenia Road.

- Roadway reconstruction
- Ditch rehabilitation/protection
- Culvert replacement
- Paved pullout
- Curve widening
- Signing and striping

**Project Schedule:**

The proposed road improvements are expected to be scheduled for 2019 and with construction expected to be completed within four months. Initial earthwork activities would be scheduled around the middle of May. For culvert improvements, work in waters of the U.S. would be scheduled during the dry season when there is little or no flow in the drainages. The dry season is typically between May and October. The construction year is subject to change based on the availability of funding and receipt of permits and approvals for the project.

**Construction Criteria and Methods:**

FHWA-CFLHD will retain a construction contractor for the project. The contractor will be responsible for implementing standard construction practices and best management practices (BMPs) in accordance with FHWA's Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-14) and the Special Contract Requirements specific to this project and for complying with applicable permits and authorizations, including environmental commitments identified for this project.

**Standard Environmental Commitments:**

**Water Quality**

- Before developing a material source, measure the sediment content of bodies of water adjacent to the work area that would receive drainage from the work area. Perform erosion and sediment control per the source development plan and the Storm Water Pollution Prevention Plan (SWPPP) or Erosion Control Plan.

**Land Use**

- Use only approved portions of the right-of-way for storing material or equipment. Provide additional space as needed. Do not use private property for storage without written permission of the owner or lessee. Submit copies of agreements and documents. Provide security for stored material. Restore Government-provided storage sites to their original condition.

#### All Resources

- Comply with applicable laws, ordinances, safety codes, regulations, orders, and decrees and with permits and agreements obtained by the Government for performing the work that is included in the contract. Obtain additional permits or agreements and modifications to Government-obtained permits or agreements that are required by the Contractor's methods of operation.

#### Vegetation

- Do not disturb the area beyond the construction limits. Replace trees, shrubs, or vegetated areas damaged by construction operations as directed.

#### Cultural and Paleontological Resources

- Do not excavate, remove, damage, alter, or deface any archeological or paleontological remains or specimens. Control the actions of employees and subcontractors on the project to ensure that protected sites are not disturbed or damaged. Should these items be encountered, suspend operations at the discovery site, notify the CO and continue operations in other areas. The CO would inform the Contractor when operations may resume at the discovery site.

#### Utilities

- Before beginning work in an area, contact the local utility locating service to mark the utilities. Protect utilities from construction operations. Cooperate with utility owners to expedite the relocation or adjustment of their utilities to minimize interruption of service and duplication of work.

#### Water Quality, Wetlands and Waters of the U.S.

- Do not operate equipment or discharge material within the boundaries of wetlands and the waters of the United States as defined by the federal and state regulatory agencies. Permits are issued by the U.S. Army Corps of Engineers per 33 USC § 1344 and delegated by the agency having jurisdiction. If an unauthorized discharge occurs:
  - (a) Prevent further contamination;
  - (b) Notify appropriate authorities and the CO; and
  - (c) Mitigate damages.

Construct and maintain barriers in work areas and in material sources to prevent sediment, petroleum products, chemicals, and other liquids and solids from entering wetlands or waters of the United States. Remove and properly dispose of barrier collected material. Do not revise terms or conditions of permits without the approval of the issuing agency.

- Do not ford running streams with construction equipment. Obtain approval from the CO to use temporary bridges or other structures whenever crossings are necessary. Immediately clear ephemeral drainages, intermittent and perennial streams, lakes and reservoirs of all work items, debris or other obstructions placed by or resulting from construction operations. Locate machinery servicing and refueling areas away from streambeds and washes to reduce the possibility and minimize the impacts of accidental spills or discharges.
- Construct silt fence, berms, and fiber rolls and socks to reduce the velocity of runoff to allow sediment to settle.
- Construct sediment retention structures of the following types:

- (a) Temporary sediment traps. Construct temporary sediment traps to detain runoff from disturbed areas and settle out sediment. Provide outlet protection.
- (b) Sediment basins. Construct sediment basins to store runoff and settle out sediment for large drainage areas. Excavate and construct sediment basins per Section 204. Construct riser pipes per Section 602. Provide outlet protection.

#### Hazardous Materials

- Submit a Spill Prevention, Control, and Countermeasure (SPCC) Plan if required at least 2 days before beginning work. If a SPCC plan is not required, submit a hazardous spill plan at least 2 days before beginning work. Describe preventative measures including the location of refueling and storage facilities and the handling of hazardous material. Describe actions to be taken in case of a spill. Do not use equipment with leaking fluids. Repair equipment fluid leaks immediately. Keep absorbent material manufactured for containment and cleanup of hazardous material on the job site. Notify the CO of hazardous spills.
- Sand or soils are not approved absorbent materials. Report the spill to the appropriate federal, state, and local authorities as required by the SPCC plan or hazardous spill plan.

#### Noxious Weeds

- Do not import into the project limits rock, sand, gravel, earth, subsoil, or other natural materials from a Contractor-selected non-commercial materials source that have not been certified free of noxious weeds. Materials imported into the project limits which do not include a noxious weed free certification may be rejected and ordered by the CO to be removed from the project limits. The CO has the discretion of requesting inspection of certified materials by a third party and rejecting the use of the source if noxious weeds or seeds thereof are found to be present.
- Conform to the Federal Seed Act, the Federal Noxious Weed Act, and applicable State and local seed and noxious weed laws.

#### Traffic, Visual Quality

- Maintain roadways as follows:
  - Construct and remove diversion roads and bridges as required by the traffic control plan.
  - Maintain intersections with trails, roads, streets, businesses, parking lots, residences, garages, farms, and other features.
  - Snow removal to facilitate the work is the Contractor's responsibility; snow removal to provide public access is the responsibility of the maintaining agency and would be performed at the maintaining agency's discretion; allow the maintaining agency access to perform snow removal.
  - Maintain a dust-free traveled way such that visibility and air quality are not affected and a hazardous condition is not created.
  - Remove accumulations of soil and other material from traveled way.
  - Do not allow water to pond on the traveled way.
  - Maintain the roadway, detours, and diversions in a safe and acceptable condition.
- Perform construction operations during the hours of daylight (one-half hour after sunrise to one-half hour before sunset). Where night operations are permitted, submit a night lighting system for approval.

- All road closures must be approved by the CO at least two weeks in advance. The Contractor shall advertise all closures to the public 7 days prior to the scheduled work. The Contractor shall provide a traffic and safety supervisor or “traffic control supervisor” (TCS) who is certified by the State highway agency or other acceptable certification program. The Contractor shall furnish the traffic control supervisor’s name, address, and 24-hour telephone number(s) at the preconstruction conference. The TCS shall develop a public information plan to be approved by the CO prior to beginning any on-site work. The plan shall be implemented throughout construction of the project, including periods of suspensions and work stoppages. The TCS must be available on the project every working day and on call 24 hours every day. The TCS shall maintain communications with the CO and provide information to Trinity County Department of Transportation, Six Rivers National Forest, emergency service providers, local news media, affected businesses, private individuals, local news media, and local organizations interested in the project whenever the construction schedule changes and when construction delays start and end.

#### Water Quality, Soils

- Provide soil erosion and sediment control measures per the contract erosion and sediment control plan, contract permits, Section 107, and this Section. Contract permits amend the requirements of this Section. Do not modify the type, size, or location of controls or practices without approval. The erosion and sediment control plan reflects special concerns and measures to protect resources. An alternate erosion and sediment control or stormwater pollution prevention plan, with necessary permits, may be submitted for approval per Subsection 104.03. Submit alternate erosion and sediment control proposals at least 30 days before their intended use. When soil erosion and sediment control measures are not functioning as intended, take corrective action to eliminate or minimize pollutants in stormwater discharges from the project. If wood chips are used, do not import without approval from the CO.
- Before grubbing or grading construct sediment controls around the perimeter of the project including filter barriers, diversion, and settling structures. Limit the combined grubbing and grading operations areas to 8 acres (3.2 hectares) of exposed soil at one time. Construct and implement soil erosion and sediment control measures as follows:
  - (a) Construct temporary controls in incremental stages as construction proceeds;
  - (b) Construct temporary slope drains, diversion channels, and earth berms to protect disturbed areas and slopes;
  - (c) When a soil disturbing activity within a portion of the project is complete, apply permanent measures to the finished slopes and ditches within 14 days;
  - (d) When a soil disturbing activity within a portion of the project has temporarily ceased, apply temporary measures within 14 days;
  - (e) Construct outlet protection as soon as culverts or other structures are complete;
  - (f) Construct and maintain soil erosion and sediment controls on and around soil stockpiles;
  - (g) Following each day’s grading operations, shape earthwork to minimize and control erosion from stormwater runoff; and
  - (h) Maintain stabilized construction exits to minimize tracking of soil onto existing roads.

#### Air Quality

- Provide an adequate water supply and apply water uniformly across the traveled way as necessary to control dust. Uniformly apply water using pressure-type distributors, pipelines equipped with spray



systems, or hoses with nozzles. Control dust within the construction limits as necessary including nights, weekends, and periods of non-work when the project is open to public traffic. When the project is not open to public traffic, control dust in areas of the project that have adjacent residences or businesses. Control dust on approved, active detours established for the project. Apply water at the locations, rates, and frequencies as ordered. Control dust on active haul roads, in pits and staging areas, and on the project during periods not covered above.

- Cover all trucks hauling dirt, sand, silt, or other loose materials or maintain at least 6 inches of freeboard.
- Construction vehicles will be kept in proper running condition and operated to reduce equipment idle time.

#### Vegetation

- Do not damage vegetation designated to remain. If damage occurs, repair or replace the vegetation in an acceptable manner. Where possible, preserve vegetation adjacent to bodies of water. Treat cuts or scarred surfaces of trees and shrubs with tree wound dressing.
- Apply turf establishment to finished slopes and ditches within 14 days after completion of construction on a portion of the site.
- Protect and care for seeded areas including watering when needed. Repair or apply supplemental applications of seed, mulch, fertilizer, and water as many times as needed until turf is established or final acceptance.

#### Water Quality, Hazardous Materials

- Construct structurally adequate debris shields to contain debris within the construction limits. Do not permit debris to enter waterways, travel lanes open to public traffic, or areas designated not to be disturbed. Handle material with lead paint contamination per Subsection 563.05 (of FP-14).

The FHWA and its Contractor will implement the requirements of the (NPDES) for erosion and storm water runoff control during construction as specified under the NPDES Construction General Permit No. 2009-0009-DWQ for California. This includes preparation of a Stormwater Pollution Prevention Plan (SWPPP) and filing a Notice of Intent with the North Coast Regional Water Quality Control Board. The Contractor will designate an erosion control/water quality supervisor who will be responsible for implementing the SWPPP.

Upon project completion, any excess spoils material will be hauled to a pre-approved spoils storage site and stabilized to prevent erosion. - Little, if any, spoils or asphalt is expected to be generated from this project.

Upon project completion the necessary final erosion controls will be implemented at the project site. All disturbed areas will be revegetated with native species. Revegetation of disturbed areas will consist of applying a seed mix of native grass species suitable for the area and approved by SRNF, followed by application of certified weed-free mulch and/or reserved topsoil. All seeding will be performed between October 31 and May 1 when soils are moist or expected to be moist soon after distribution.

#### **Right-of-Way:**

County right-of-way on these roads is through an easement over National Forest System land that covers 66 feet each side of centerline and all appurtenant cuts and fills. Where the roads pass through private property, the County generally has a 50-foot wide right-of-way. There will be new right-of-way acquired by the County.

Three existing driveways to a private property at the southern end of Segment 3 on the Van Duzen Road will be slightly modified, but will remain fully accessible. Two existing driveways to a private property in Segment 3 on the Ruth Zenia Road will be slightly modified, but will remain fully accessible.

One utility is within the project right-of-way. Contractor will cooperate with the utility owner, PG&E, to expedite the relocation or adjustment of their utilities to minimize interruption of service. .

### **Surrounding Land Uses:**

The project area is located between the communities of Mad River, Ruth and Zenia. Van Duzen Road, where segment #1, 2 and 3 are located, starts at State Highway 36 near Mad River, and runs south through a residential area that includes the Van Duzen School, a Community Hall, Southern Trinity Health Clinic and headquarters of STAR Ambulance service, and numerous residences. Van Duzen Roads terminates at the intersection with Ruth Zenia Road. Segment #4 and 5 are located on Ruth Zenia Road, west of the Community of Ruth.

Several scattered residences, a Forest Service station and the town Ruth are accessed through segment 4 of this project. The other section of roadway to be rehabilitated is on Ruth-Zenia Road is about 2.0 miles south of the intersection with Van Duzen Road. There are a few residences on this stretch of road until it reaches Zenia, where there is a store and a post office as well as rural residences. The Forest Service's Zenia Guard Station is located on this segment of road.

Most of the land adjacent to the roads is federal timberlands managed by Six Rivers National Forest. This area consists of heavily forested open space as well as the channels and floodplains of Van Duzen River, Bar Creek and Black Lassic Creek.

The school bus accesses the Van Duzen Elementary and Southern Trinity High Schools via Ruth-Zenia and Van Duzen Roads from Zenia. There are no mail routes within the project area. Mail is delivered from State Highway 36 to Ruth via Mad River Road east of the project, and mail to Zenia comes in from the west through Alder Point.

### **Environmental Setting:**

The project area is in the Central and Coastal Franciscan subsections of the Northern California Coast Ecological Subregion of California. This subregion encompasses mountains, hills, valleys and plains in the northern California Coast Ranges that are close enough to the Pacific Ocean for the climate to be modified greatly by marine influence. Summers are characterized by fog, cool temperatures and higher humidity than that inland. Precipitation is an annual 20 to 120 inches and annual temperature range is 40 to 60 degrees F. Streams and rivers flow in alluvial and weak bedrock channels to the Pacific Ocean. The Van Duzen joins the Eel River before reaching the Ocean south of Humboldt Bay.

The area west of South Fork Mountain is considered part of the Coast Ranges Province, which consists mostly of rocks of the Franciscan Formation. The project segments are located in the Van Duzen River Valley laying west and south of South Fork Mountain. Bedrock geology varies widely in composition over relatively short distances, but is generally metamorphic rocks with some marine sediments and some volcanics, including ultramafic rocks in some areas. The area is characterized by parallel ranges of folded, faulted and metamorphosed strata of Jurassic and Cretaceous age. The Van Duzen River has an appreciable alluvial plain, but tributary streams and the Mad River in this area are fairly incised and narrow with a thin layer of recent alluvium overlying shallow bedrock.

Vegetation in the project area consists of the Douglas-fir Series interspersed with mixed hardwood-conifer forest at the lower elevations. Assemblages of Douglas fir, Pacific madrone, Ponderosa pine, incense cedar and black oak, canyon live oak and various Manzanita species dominate the forest and hillslope landscapes.

**Other Public Agencies Whose Approval is Required:**

Six Rivers National Forest  
 U.S. Fish and Wildlife Service  
 California State Historic Preservation Office  
 North Coast Regional Water Quality Control Board  
 U.S. Army Corps of Engineers

**Environmental Factors Potentially Affected:**

The environmental factors checked below would be potentially affected by this project. The significance level is indicated using the following notation: 1=Potentially Significant; 2=Less Than Significant with Mitigation; 3=Less Than Significant.

3	Aesthetics	3	Agriculture Resources	3	Air Quality
2	Biological Resources	2	Cultural Resources	3	Geology / Soils
3	Greenhouse Gas Emissions	3	Hazards & Hazardous Materials	3	Hydrology / Water Quality
3	Land Use / Planning	3	Mineral Resources	3	Noise
3	Population / Housing	3	Public Services	3	Recreation
3	Transportation/Traffic	3	Utilities / Service Systems	2	Mandatory Findings of Significance

**Summary of Mitigation Measures:**

**Mitigation Measure IV-1: Biological Resources**

The contractor shall not conduct nighttime construction to prevent noise disturbance to nesting northern spotted owls and other sensitive species in the area. Construction is only permitted during daylight hours (per SC-14, with no nighttime approval allowed).

**Mitigation Measure IV-2: Biological Resources**

If active nests are identified during the nesting season, a no-disturbance buffer shall be established around the nests. The extent of the no-disturbance buffers shall be determined by a wildlife biologist and shall depend on the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographic or artificial barriers.

The purpose of the buffer is to avoid disturbance or destruction of the nest until after the breeding season, or until a wildlife biologist determines that the young have fledged (usually late-June to mid-July). Within this buffer, construction activities shall be avoided while the nest is considered active or sensitive to disturbance. However, construction activities can proceed if the biological monitor determines that the individual is not likely to abandon the nest during construction.

**Mitigation Measure IV-3: Biological Resources**

If tree and vegetation removal is scheduled between February 1st and September 15th, FHWA-CFLHD will retain a qualified biologist to conduct pre-construction surveys for active migratory bird nests and roosting bats. Breeding and nesting behaviors will be recorded, and nest locations will be documented using a GPS. If

active nests are documented, EC-3 shall be implemented. Additionally, trees to be removed will be inspected for cavities that may provide roosting habitat for pallid bat. Trees with cavities will be removed before April; however, if active roosting colonies are found, the trees will not be removed until after the maternal roosting season ends (typically in July). If tree and vegetation removal is scheduled between September 16th and January 31st, these measures are not required.

**Mitigation Measure IV-4: Biological Resources**

FHWA-CFLHD will retain a qualified botanist to conduct focused surveys for California globemallow and small-flowered Calycadenia in the project area between June and August (during its blooming period) before construction starts. If individuals are found, protective fencing and/or changes in Project designs may be required to minimize direct harm to the plant. FHWA-CFLHD will coordinate with USFS on required protection measures.

**Mitigation Measure V-1: Cultural Resources**

In the event that previously unidentified cultural or paleontological resources are encountered during construction, there shall be no further excavation or disturbance of that area. The construction crews shall stop work or avoid the materials and their context. The FHWA CO shall be notified immediately. A qualified archaeologist shall evaluate the find to determine its historical or archaeological significance. If the find is determined to be a significant historical, paleontological or archaeological resource, the archaeologist shall make recommendations for appropriate mitigation. Work in the area shall not resume until the mitigation measures recommended by the archaeologist have been implemented.

**Mitigation Measure V-2: Cultural Resources**

In the event that previously unidentified evidence of human burial or human remains are discovered, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. The Trinity County Coroner must be informed and consulted, per State law. If the coroner determines the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent. The most likely descendent will be given an opportunity to make recommendations for means of treatment of the human remains and any associated grave goods. Work in the area shall not continue until the human remains are dealt with according to the recommendations of the County Coroner, Native American Heritage Commission and/or the most likely descendent have been implemented.

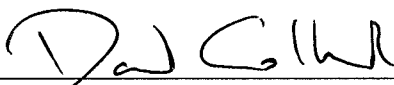
**Mitigation Measures XIV-1: Public Services**

School buses shall be allowed to pass through the construction without delay. The Contractor and CO shall coordinate with the school bus service to ensure that the closure schedule will allow for passage of school buses through the construction area without delay.

**Determination:**

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION, will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project (mitigation measures) have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
 \_\_\_\_\_  
 David Colbeck, Environmental Compliance Specialist  
 Trinity County Planning Department

11/14/17  
 \_\_\_\_\_  
 Date

For: Richard Tippet, Planning Director,  
 Trinity County Planning Department

**IV. Environmental Checklist and Explanatory Notes**

**I. AESTHETICS**

<b>Would the project:</b>	<b>Potentially Significant</b>	<b>Less Than Significant With Mitigation</b>	<b>Less Than Significant</b>	<b>No Impact</b>
a) Have an adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**I(a):** The project area is scenic, with forests, rivers and distant peaks, including Red Lassic and Black Lassic peaks, which are geological points of interest. However, the proposed project will have no effect on distant vistas. Only the surface of the road will be affected, and this effect will not be substantial or adverse.

**I(b):** The project is not within, or visible from, any State Scenic Highway. Van Duzen Road and Ruth-Zenia Road are listed in the Trinity County General Plan Circulation Element as being eligible for County Scenic Roadway status. However, no such designation has been made.

**I(c):** The proposed project would not introduce any elements that would degrade the existing visual character or quality of the site or surrounding area. Road and stream crossing structures are already present within the project area. The proposed project would be introducing similar types of structure in an area that is already developed. Along with guardrails in some locations, the roads will have new, slightly wider pavement and brighter striping.

**I(d):** Construction and operation of the proposed project are not expected to result in increased glare in the project area and no lighting is proposed as part of the proposed project.

**II. AGRICULTURE RESOURCES**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. <b>Would the project:</b>	<b>Potentially Significant</b>	<b>Less Than Significant With Mitigation</b>	<b>Less Than Significant</b>	<b>No Impact</b>
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program in the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for timber production (TPZ)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Involve other changes in the existing environment that, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural use, or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**II(a):** The project study area does not contain lands mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program. Soils within the project area are not prime agricultural soils.

**II(b):** The project study area is within or adjacent to existing roadways and would not split any existing agricultural parcel. In addition, none of the parcels near the project sites are currently under a Williamson Act contract.

**II(c):** The project will not cause rezoning of timberland zoned timber production. The project will benefit timber operations in the National Forest and other, private timber lands by improving the roads serving these areas.

**II(d):** Construction and operation of the Project would not result in the conversion of farmlands to a non-agricultural use, or forest lands to non-forest use.

**III. AIR QUALITY**

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. <b>Would the project:</b>	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

III(a-c): The project does not conflict with or obstruct implementation of applicable air quality plans. Trinity County is in attainment for all criteria pollutants and federal standards. The area occasionally exceeds the state standard for particulate matter. The completed project is not expected to result in an increase in traffic or vehicle miles traveled, and so no increase in vehicle emissions will result. During construction, the project will not contribute to an exceedance of the particulate matter standard, because of its short duration and because the areas to be disturbed are mostly road base consisting of sand and gravel which do not generate fine dust particles that would travel out of the immediate work area. However, standard dust control measures will be implemented during construction to minimize the amount of airborne dust.

III(d): There are no sensitive receptors such as schools, hospitals, day care centers, or residences located within the project limits. However, there are several residences located adjacent to the project site. The project will generate dust and heavy equipment exhaust during construction, but not in substantial

concentrations. However, the standard practices stated above in the Construction Criteria and Methods section will be implemented to control and minimize air pollutants during construction.

III(e): The project would not create objectionable odors or otherwise degrade the atmospheric environment. After construction, the project will not generate any airborne contaminants beyond those generated by the existing roadway system.

**IV. BIOLOGICAL RESOURCES**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Have an 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have an adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have an adverse effect on Corps of Engineers jurisdictional wetlands either individually or in combination with the known or probable effects of other activities through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Otherwise degrade the biotic environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**IV(a):** A biological survey was performed for the project area by Amec Foster Wheeler Environment & Infrastructure, Inc. Based on the field survey, a records search of the California Department of Fish and Game Natural Diversity Database and Northern Spotted Owl Database, consultation with SRNF biologists and botanists, and a species list from the U.S. Fish and Wildlife Service (USFWS), AMEC prepared a Biological Assessment to assess the effects of the project on any listed endangered, threatened or candidate wildlife species or Forest Service sensitive wildlife species. Federally listed species potentially present include Northern spotted owl and steelhead trout. AMEC also reviewed the proposed project to determine whether the proposed action would result in a trend toward federal listing of any sensitive plant or fungi species listed on the Forest Service Region 5 sensitive plant list.

Several State listed or other sensitive animal and plant species are potentially present in the project area: Northern Spotted Owl, California Globemallow, Foothill Yellow-legged Frog, Fringed Myotis bat, Northern Goshawk, Pallid Bat, Southern Torrent Salamander, Western Bumble Bee, Western Pond Turtle. Other



California fully protected and species of special concern that are potentially present in the project area include: Pacific Tailed Frog, small-flowered Calycadenia Golden Eagle, Bald Eagle, Fisher – West Coast DPS and Sonoma Tree Vole.

The Biological Assessment and desktop review of habitat and project details concludes that project may impact, but will not result in a trend towards State or Federal listing or loss of viability for these species, with the exception of the Northern Spotted Owl. The Biological Assessment concludes that the project Northern Spotted Owl **may affect, and is likely to adversely affect” NSO, and the project would have “no adverse effect” to Critical Habitat.**

## **Northern Spotted Owl**

### **Direct Effects**

The Project would require the removal of vegetation and four trees within the Action Area. All four trees planned for removal do not occur within USFWS delineated NSO nesting/roosting or foraging habitat and are not considered potential nesting trees. Vegetation removal would only occur along roadsides and would primarily include herbaceous non-native, disturbed areas with some smaller shrubs intermixed. Habitat quality for NSO is considered low to non-habitat in these areas and could be used for foraging at best. Based on the data provided by the USFWS, nesting/roosting and foraging habitat overlaps with project impact areas; however, these areas were reviewed during field efforts and were determined to be foraging habitat at best, and no areas were considered nesting/roosting habitat. **As a result of the Project, and based on field analysis of impact areas, 1.8 acres of permanent impacts and 11.8 acres of temporary impacts would occur within USFWS designated habitat areas, which have been determined to be NSO foraging habitat at best.**

Excessive noise generated during the nesting season when noise disturbance can impact nesting NSO (February 1 to August 1) has the potential to disrupt breeding and foraging behaviors of NSO, or result in reduced reproductive performance. To assess the potential effects of noise on NSO, the USFWS published a guidance document in 2006 (USFWS 2006). This guidance promotes consistent and reasonable determinations of effects for activities that occur in or near suitable NSO habitat. The analysis relies on a simple comparison of Project-generated sound levels against ambient conditions to evaluate potential impacts of noise to NSO. This guidance applies to activities within the jurisdictional area of the Arcata Fish and Wildlife Office (AFWO); generally, that area including Humboldt, Del Norte, and Trinity Counties, western Siskiyou County, and Mendocino County exclusive of the Russian River watershed.

Ambient noise levels for the Project were estimated based on USFWS recommendations (USFWS 2006) and were determined to be considered High due to the consistent travel of logging trucks and large semis on Van Duzen and Ruth-Zenia Roads. High levels reach 81 to 90 decibels (dB) and commonly include the following activities: medium- and large-sized construction equipment, large diesel engines, RVs, and large trucks and buses (USFWS 2006). Logging trucks are predicted to emit up to 97 dB at 50 feet. Ambient noise level assumptions were discussed and agreed upon with the USFWS (USFWS 2016e). Noise from construction equipment would be the primary source of noise disturbance associated with the Project. The loudest equipment that would be used for the Project would include jackhammers and pile drivers and associated noise would be 101 dB at 50 feet (USFWS 2006). Using ambient noise levels and the estimated construction noise levels, the Action Area required to evaluate noise impacts was determined to be 500 feet (150 meters) wide. This is based on the ambient noise levels being considered High (81 to 90 dB) and Project activity noise levels being Extreme (101 to 110 dB) (USFWS 2006).

NSO may be harassed from sound when either of the following conditions occurs: elevated noise levels are 20 to 25 dB above ambient levels; or noise levels are above 90 dB (USFWS 2006). Construction noise is predicted to be 20 dB above ambient noise levels and would exceed 90 dB, therefore has potential to disturb NSO in the vicinity. No protocol-level surveys for nesting NSO were completed for the Project, therefore it is assumed the species is present within nesting/roosting and foraging habitat areas. Construction-related noise within the Action Area that overlaps with nesting/roosting or foraging habitat and that occurs during the nesting season (February 1 to August 1) may disrupt NSO behavior due to elevated noise levels.

Although impacts to NSO may result from construction activities, impacts are reduced by several factors. Sound attenuates as a function of distance from the source and can vary according to topography and vegetation. Typical forest habitat vegetation, as is present in much of the Action Area, can reduce noise levels up to 6 dB per doubling of distance from the noise source (USFWS 2006). Therefore, noise levels would decrease with increasing distance from the point source. Additionally, NSO that utilize habitat adjacent to the road corridor may be conditioned to noise from vehicle traffic (Delaney & Grubb 2004; USFWS 2006). NSO nest sites located in noisy habitats are exposed to higher levels of noise and visual disturbance and have likely habituated to human activities (USFWS 2006), from which these elevated noise levels are generated from. The likelihood that birds will be occupying habitats within 500 feet (150 meters) of the Action Area is low, and noise levels would not greatly exceed levels that currently occur along Ruth-Zenia and Van Duzen Roads. Construction noise levels at most would reach 20 dB higher than ambient levels and would only be 4 to 13 dB higher than logging trucks that frequent the roadways.

Noise from construction is most likely to disrupt NSO in areas that contain nesting/roosting and foraging habitat within the Action Area. Segments or portions of segments within the Action Area that contain minimal USFWS NSO habitat types and that could be constructed during nesting season with fewer disturbances to NSO include:

- Segment 1 – The majority of the Action Area is classified No Habitat with some nesting/roosting habitat in the southwestern portion of the Action Area and a small amount of foraging habitat to the west.
- Segment 2 – The northern half of the Segment is classified as No Habitat and the southern half is nesting/roosting.
- Segment 3 – The portion of the Action Area adjacent to the road is classified as No Habitat, but nesting/roosting and foraging habitats are located within 100-400 feet from the road at various locations.
- Segment 4 – The majority of the Action Area is classified as No Habitat, with some foraging habitat to the east of the roadway and to the southeast of the Action Area.
- Segment 5 – The majority of the Action Area is classified as nesting/roosting habitat, with so foraging habitat west of the road.

NSO can also be affected by visual disturbances from Project-generated activities. USFWS concludes that spotted owls may be harassed by Project-generated visual disturbances if the Project is within 328 feet (100 meters) of the base of a nest tree or suitable habitat (USFWS 2006). However, intervening vegetation and topography in combination with NSO nesting habits reduce the potential for visual disturbance. **Visual impacts are less than significant with implementation of the following mitigation measures:**

**Mitigation Measure IV-1:**

The contractor shall not conduct nighttime construction to prevent noise disturbance to nesting northern spotted owls and other sensitive species in the area. Construction is only permitted during daylight hours

**Mitigation Measure IV-2:**

If active nests are identified during the nesting season, a no-disturbance buffer shall be established around the nests. The extent of the no-disturbance buffers shall be determined by a wildlife biologist and shall depend on the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographic or artificial barriers. The purpose of the buffer is to avoid disturbance or destruction of the nest until after the breeding season, or until a wildlife biologist determines that the young have fledged (usually late-June to mid-July). Within this buffer, construction activities shall be avoided while the nest is considered active or sensitive to disturbance. However, construction activities can proceed if the biological monitor determines that the individual is not likely to abandon the nest during construction.

**Mitigation Measure IV-3:**

If tree and vegetation removal is scheduled between February 1st and September 15th, FHWA-CFLHD will retain a qualified biologist to conduct pre-construction surveys for active migratory bird nests and roosting bats. Breeding and nesting behaviors will be recorded, and nest locations will be documented using a GPS. If active nests are documented, EC-3 shall be implemented. Additionally, trees to be removed will be inspected for cavities that may provide roosting habitat for pallid bat. Trees with cavities will be removed before April; however, if active roosting colonies are found, the trees will not be removed until after the maternal roosting season ends (typically in July). If tree and vegetation removal is scheduled between September 16th and January 31st, these measures are not required.

**Indirect Effects**

Removal of four trees and roadside vegetation that is primarily comprised of herbaceous non-native species and disturbed areas is not expected to result in degraded, downgraded, or removal of NSO nesting/roosting or foraging habitat. Visitation and use of Van Duzen and Ruth-Zenia Roads are not expected to increase as a result of the Project. The majority of the Project involves culvert replacements and minor road improvements, which are not predicted to increase the use of the roadways. Therefore, the Project would have no indirect effects to NSO.

**Critical Habitat Effects**

Critical habitat (ICC-2) boundaries for NSO overlap with areas of the. Critical habitat is designated by identifying Primary Constituent Elements (PCEs) that provide physical and biological features necessary for the species' survival. Based on current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, the USFWS has determined that the PCEs specific to the NSO are:

- PCE 1: Forest types that are conifer or evergreen dominated and may be in early-, mid-, or late seral stages and that support the northern spotted owl across its geographical range.
- PCE 2: Habitat that provides for nesting and roosting. In many cases the same habitat also provides for foraging (PCE 3). Nesting and roosting habitat provides structural features for nesting, protection from adverse weather conditions, and cover to reduce predation risks for adults and young.
- PCE 3: Habitat that provides for foraging, which varies widely across 446 the northern spotted owl's range, in accordance with ecological conditions and disturbance regimes that influence vegetation structure and prey species distributions. Across most of the owl's range, nesting and roosting

habitat 9 is also foraging habitat, but in some regions northern spotted owls may additionally use other habitat types for foraging as well.

- PCE 4: Habitat to support the transience and colonization phases of dispersal, which in all cases would optimally be composed of nesting, roosting, or foraging habitat (PCEs 2 or 3), but which may also be composed of other forest types that occur between larger blocks of nesting, roosting, and foraging habitat.

Habitat containing all four PCEs can be found within the Biological Survey Area but habitat is not present in the existing roadway prism where temporary and permanent impacts would occur. Habitat that supports PCEs is located within the Pacific Douglas-fir and mixed conifer-fir vegetation communities. Within the Biological Survey Area, PCE's can be found in the following areas of Project Segments:

- Segment 1: All four PCEs are present from MP 9.6 to 9.7 except in roadway prism
- Segment 2: Entire Segment contains all four PCEs except within the roadway prism and the western half of the road from approximately MP 11.2 to 11.3.
- Segment 3: Segment contains scattered components of all four PCEs within the Pacific Douglas-fir vegetation community. The western half of the road segment contains excellent habitat with all four PCEs. A large portion of the eastern half of the road segment is recently burned and therefore PCEs are scattered throughout the eastern half. PCEs are not present from approximately MP 14.5 to 15 on the eastern half of the road, from approximately MP 14.5 to 14.9 on the western half of the road, and within the entire roadway prism.
- Segment 4: All four PCEs are present from MP 9.1 to 9.2. PCEs are absent in the remaining portions of the Segment and within the entire roadway prism.
- Segment 5: All four PCEs are present from approximately MP 14.6 to 14.7. PCEs are absent from the entire roadway prism. Habitat that supports nesting/roosting and foraging was identified by the USFWS as being present within the Biological Survey Area and the Action Area (USFWS 2016e). The Douglas-fir and mixed conifer-fir vegetation communities contain mid-seral conifer stands with high canopy closure, stumps, snags, and downed trees, and open space under the upper canopy for foraging.

A total of 15.1 acres of temporary impact areas and 1.93 acres of permanent impact areas overlap with designated NSO critical habitat. Removal of vegetation and one tree overlap with designated NSO critical habitat. Vegetation removal would only occur along roadsides and would primarily include herbaceous non-native species vegetation communities, which do not meet the Primary Constituent Elements (PCEs) that provide physical and biological features necessary for the species' survival. The tree to be removed is not within USFWS-designated nesting/roosting or foraging habitat, and therefore does not meet the PCEs that provide physical and biological features necessary for the species' survival. Since vegetation and tree removal would not result in the removal of PCEs, effects to critical habitat are considered discountable.

Therefore, the Biological Assessment concludes that **the project "may affect, and is likely to adversely affect" NSO, and the project would have "no adverse effect" to critical habitat** as direct impacts to NSO and designated critical habitat from vegetation removal resulting from the Project are insignificant and discountable. It will not remove any potential foraging, nesting or dispersal habitat, and, while the project area does contain suitable habitat, the area was surveyed to protocol and no detections were made. Impacts are therefore considered less than significant.

### Fish Species

The Biological Assessment concludes that the project will have **no effect on the Southern Oregon/Northern California Coho Salmon** because the project lies outside of their known or expected range due to migration

barriers at Salmon Falls on the Van Duzen River and Split Rock on the North Fork Eel River. While habitat for the species exists within and near the project, the Biological Assessment concludes that the project will have **no effect on the California Coastal Chinook Salmon or Northern California Steelhead** due to construction distances from waterways and the implementation of best management practices (BMPs) during the project.

#### **Yellow Billed Cuckoo**

Similarly, the Biological Assessment concludes that very little habitat for Western Yellow-billed Cuckoo (YBCU) exists within the project area. The only location of potential habitat is at the very northern end of Segment 3, near the Van Duzen River. No impacts to riparian habitat would occur in this area. Additionally, the area is planned to be used only for staging and would not require any realignments or road expansion that would encroach on existing habitat. Therefore, **the Project will have no effect on Yellow-billed Cuckoo.**

#### **Bald Eagle**

The Biological Assessment concludes that while habitat for the bald eagle, a fully protected species, exist to the east of the project near Ruth Lake, it is unlikely to reside in the Project area. Therefore, **the Project will have no effect on bald eagle.**

#### **Foothill Yellow-legged frog**

The foothill yellow-legged frog could occur in Bar Creek, Black Lassic Creek, and the Van Duzen River near Project impact areas. No in-stream work is planned for these waterways, which would result in no direct impacts to the frog's primary habitat. No wetlands were present within the Project impact areas, and therefore the secondary habitat would incur no impacts. Smaller tributaries in the area that flow only during wet periods would not provide year-round permanent water that this species prefers. This species could potentially move during daily activities into the Project roadway where construction would occur and therefore could be directly impacted by construction. However, this is extremely unlikely due to the preference for aquatic habitat and therefore is considered a negligible impact. Noise from construction, as well as visual disturbances from increased activity during construction could affect individuals. Sediment and erosion resulting from construction activities near Bar Creek, Black Lassic Creek, and the Van Duzen River are not expected to indirectly affect this species due to the implementation of Project BMPs. For these reasons, **the Project may impact Foothill yellow-legged frog but is less than significant because it will not result in a trend towards State or Federal listing or loss of viability.**

#### **Northern Goshawk**

Habitat within Project impact areas is not considered to be high-quality for northern goshawk due to noise and activity from traffic and availability of nesting habitat. However, much of the habitat in the vicinity of the Project could support northern goshawk and provide low to moderate quality nesting and high quality foraging. Four trees are planned for removal near the roadway, which are unlikely to be used as nesting habitat but could be used for perching while foraging. Indirect, long-term impacts would occur from the permanent removal of the four trees along the roadside corridor, decreasing the amount of low-quality habitat available for the species. Conservation measures would minimize impacts to any individuals potentially using the trees. Noise from construction could affect individuals, as well as visual disturbance from increased activity during construction. For these reasons, **the Project may impact northern goshawk, but will not result in a trend towards Federal or State listing or loss of viability and is therefore not considered significant.**

### **Southern Torrent Salamander**

The southern torrent salamander could inhabit permanent aquatic environments, including Bar Creek, Black Lassic Creek, and the Van Duzen River, and associated riparian zones near coniferous forests near the Project. No in-stream work is planned for these waterways, which would prevent direct impacts to the species' primary habitat. No wetlands were present within the Project impact areas, and therefore would incur no impacts. Smaller tributaries that flow only during wet periods are unlikely to provide year round permanent water that this species prefers. This species could potentially move during daily activities or seasonal movements into the Project roadway where construction would occur and therefore could be directly impacted by construction. However, this is extremely unlikely due to the preference for aquatic habitat and therefore is considered a negligible impact. Noise from construction, as well as visual disturbances from increased activity during construction could affect individuals. Sediment and erosion resulting from construction activities near Bar Creek, Black Lassic Creek, and the Van Duzen River are not expected to directly or indirectly affect this species due to the implementation of BMPs (*Construction Criteria and Methods Section*). For these reasons, **the Project may impact southern torrent salamander, but the impact is less than significant because it will not result in a trend towards State or Federal listing or loss of viability.**

### **Western Bumble and Obscure Bumble Bee**

The western bumble bee could occur in areas adjacent to roadways that provide habitat for the species. Food sources, including buckwheat, sweet clover, thistle, and starthistle species, were found near the roadway. Approximately 3.5 acres of permanent and 22.3 acres of temporary vegetation removal and ground disturbance would occur along the roadsides and therefore could directly disturb habitat present for the species. Indirect, long-term impacts would occur from the permanent removal of 3.5 acres of vegetation along the roadside corridor, decreasing the amount of habitat available for the species following completion of the Project. Although vegetation removal would occur, not all vegetation removal would include habitat for this species, and therefore is an overestimate of potential habitat impacts. BMPs would minimize impacts to any individuals that potentially use the areas as habitat. For these reasons, **the Project may impact western bumble bee, but the impact is less than significant because it will not result in a trend towards State or Federal listing or loss of viability.**

### **Western Pond Turtle**

The western pond turtle could inhabit permanent aquatic environments, including Bar Creek, Black Lassic Creek, and the Van Duzen River and associated riparian zones. No in-stream work is planned for these waterways, which would prevent direct impacts to the turtle's primary habitat. Because western pond turtles use permanent water bodies, in-water work in other ephemeral washes that bisect the Project impact areas is not expected to affect this species. Western pond turtle nests in riparian and upland habitats. Riparian habitat would not be disturbed as a result of the Project, and the only upland habitats disturbed are roadside areas that do not provide nesting habitat. Therefore, the Project would not impact nesting habitat. This species could potentially move during daily activities or seasonal movements into the Project roadway where construction would occur and therefore could be directly impacted by construction. However, this is extremely unlikely due to the preference for aquatic habitat and therefore is considered a negligible impact. Noise from construction, as well as visual disturbances from increased activity during construction could affect individuals. Sediment and erosion resulting from construction activities near Bar Creek, Black Lassic Creek, and the Van Duzen River are not expected to directly or indirectly affect this species due to the implementation of BMPs. For these reasons, **the Project may impact western pond turtle, but the impact is less than significant because it will not result in a trend towards State or Federal listing or loss of viability.**

### **Pallid Bat**

Vegetation removal could directly impact habitat for this species from removal of roadside vegetation in open areas of all vegetation communities present. Approximately 3.5 acres of permanent and 22.3 acres of temporary vegetation removal and ground disturbance would occur along the roadsides in the existing roadway prism and therefore could directly disturb foraging habitat present for the species. Indirect, long-term impacts could occur from the permanent removal of 3.5 acres of vegetation along the roadside corridor, decreasing the amount of foraging habitat available for the species following completion of the Project. Although vegetation removal would occur, not all vegetation removal would include habitat for this species, and therefore is an overestimate of potential habitat impacts. Additionally, habitat that would be removed is of low quality due to the proximity of the roadway and is less likely to be used by the species due to frequent traffic on the roadway. Four trees are planned for removal as a result of the Project and could impact the availability and use of the trees for roosting. Noise from construction, as well as visual disturbances from increased activity during construction, affect foraging or roosting individuals within the Action Area. Conservation measures, BMPs and the mitigation measure listed below would minimize impacts to any individuals that potentially use the areas as habitat. For these reasons, **the Project may impact pallid bat, but will not result in a trend towards State listing or loss of viability, and is less than significant with the mitigation stated above under Northern Spotted Owl that requires pre-construction surveys.**

### **Silver-haired and Long-eared Myotis Bat**

Vegetation removal could directly impact foraging habitat for this species from removal of roadside vegetation in forest edge openings within Oregon white oak, mixed conifer-fir, and Pacific Douglas-fir vegetation communities. Approximately 3.5 acres of permanent and 22.3 acres of temporary vegetation removal and ground disturbance would occur along the roadsides in the existing roadway prism and therefore could directly disturb habitat present for these species. Indirect, long-term impacts could occur from the permanent removal of 3.5 acres of vegetation along the roadside corridor, decreasing the amount of habitat available for the species following completion of the Project. Although vegetation removal would occur, not all vegetation removal would include habitat for this species, and therefore is an overestimate of potential habitat impacts. Additionally, habitat to be removed is of low quality due to the proximity of the roadway and is less likely to be used by the species due to frequent traffic on the roadway. Noise from construction, as well as visual disturbances from increased activity during construction could affect foraging or roosting individuals within the Action Area. Conservation measures and BMPs would minimize impacts to any individuals that potentially use the areas as habitat. For these reasons, **the Project may impact silver-haired and long-eared Myotis bat, but the impact is less than significant because it will not result in a trend towards State or Federal listing or loss of viability.**

### **Fringed Myotis Bat**

Fringed myotis' (*Myotis thysanodes*) range overlaps with the Project. The species is widespread in California and can occur almost anywhere but the Central Valley and the Colorado and Mojave Deserts (CDFW 2016d). It can occur in a variety of habitats, but usually is found in areas with elevations from 4,000 to 7,000 feet. Preferred habitats include pinyon-juniper woodlands, valley foothill hardwood and mixed hardwood-conifer forests. Foraging occurs over water or open habitats by gleaning from foliage. Roosting and maternal roosting occurs in caves, mines, buildings, and crevices. Maternal roosts are occupied from late April to September. The species consumes beetles, moths, spiders, and orthopterans. Individuals are active shortly after sunset to four to five hours after sunset and hibernate from October through March (CDFW 2016d). No CNDDDB occurrences are present within the nine closest quadrants to the Project (CDFW 2016b).

Within the Biological Survey Area, foraging habitat for this species is located in riparian areas near water sources with open canopies. Foraging individuals could occur in willow and riparian mixed hardwood vegetation communities. Open areas within mixed hardwood-conifer forests would also provide habitat for the species within the Biological Survey Area and exists within the Oregon white oak, mixed conifer-fir, and Pacific Douglas-fir vegetation communities. No caves, mines, buildings, or crevices that would provide roosting or maternal roosting habitat exist within the Biological Survey Area.

Vegetation removal could directly impact foraging habitat for this species from removal of roadside vegetation in forest edge openings within Oregon white oak, mixed conifer-fir, and Pacific Douglas-fir vegetation communities. Approximately 3.5 acres of permanent and 22.3 acres of temporary vegetation removal and ground disturbance would occur along the roadsides in the existing roadway prism and therefore could directly disturb habitat present for the species. Indirect, long-term impacts could occur from the permanent removal of 3.5 acres of vegetation along the roadside corridor, decreasing the amount of habitat available for the species following completion of the Project. Although vegetation removal would occur, not all vegetation removal would include habitat for this species, and therefore is an overestimate of potential habitat impacts. Additionally, habitat to be removed is of low quality due to the proximity of the roadway and is less likely to be used by the species due to frequent traffic on the roadway. Noise from construction, as well as visual disturbances from increased activity during construction could affect foraging or roosting individuals within the Action Area. Conservation measures and BMPs would minimize impacts to any individuals that potentially use the areas as habitat. For these reasons, **the Project may impact fringed myotis, but will not result in a trend towards State or Federal listing or loss of viability.**

## **California Fully Protected Species and Species of Special Concern**

### **Golden Eagle**

The golden eagle is a fully protected species that has minimal habitat within the project area. Habitat within Project impact areas is not considered to be high-quality for golden eagle due to a need for open terrain for hunting; grasslands, deserts, savannahs, and early successional stages of forest and shrub habitats. However, some of the habitat in the vicinity of the Project could support golden eagle and provide low quality nesting and moderate quality foraging. Four trees are planned for removal near the roadway, which are unlikely to be used as nesting habitat but could be used for perching while foraging. Indirect, long-term impacts would occur from the permanent removal of the four trees along the roadside corridor, decreasing the amount of low-quality habitat available for the species. For these reasons, **the Project may impact golden eagle, but the impact is less than significant because it will not result in a trend towards Federal or State listing or loss of viability.**

### **Pacific tailed frog**

The Pacific tailed frog is a CDFW species of concern. It occurs in montane hardwood-conifer, redwood, Douglas-fir & ponderosa pine habitats and is restricted to perennial montane streams. Pacific tailed frog could occur in Bar Creek, Black Lassic Creek, and the Van Duzen River near Project impact areas. No in-stream work is planned for these waterways, which would result in no direct impacts to the frog's primary habitat. No wetlands were present within the Project impact areas, and therefore would incur no impacts. Smaller tributaries in the area that flow only during wet periods would not provide year-round permanent water that this species prefers. This species could potentially move during daily activities into the Project roadway where construction would occur and therefore could be directly impacted by construction. However, this is extremely unlikely due to the preference for aquatic habitat and therefore is considered a



negligible impact. Noise from construction, as well as visual disturbances from increased activity during construction could affect individuals. Sediment and erosion resulting from construction activities near Bar Creek, Black Lassic Creek, and the Van Duzen River are not expected to indirectly affect this species due to the implementation of Project BMPs. For these reasons, **the Project may impact Pacific tailed frog, but the impact is less than significant because it will not result in a trend towards Federal or State listing or loss of viability.**

### **Fisher – West Coast DPS**

The fisher (*Pekania pennanti*) is considered a USFS sensitive species and CDFW species of special concern. Fisher use late-successional habitats with dense canopy closure, large diameter trees (conifers and hardwoods) and snags or downed trees with cavities and other deformities (USFWS 2012). Suitable habitat for fishers consists of large areas of mature, dense forest stands with snags and greater than 50 percent canopy closure (CDFW 2016d). Fisher inhabits forested areas from sea level along the California-Oregon coast to elevations as high as 8,530 feet in the Sierra Nevada Mountains (USFWS 2012). Fishers den in a variety of protected cavities, brush piles, logs, or under an upturned tree. Hollow logs, trees, and snags are especially important. Young born February through May and remain with the female until late autumn. Fishers are primarily nocturnal or crepuscular, but sometimes display diurnal activity (CDFW2016d). Fishers have a diverse diet including birds, squirrels, mice, shrews, voles, reptiles, insects, plants, fruit, and dead animals. Small and mid-sized mammals are the most common prey items eaten by fishers in the Pacific Northwest. Fishers search for prey in forested stands, avoiding openings (USFWS 2013).

Within the Biological Survey Area, denning habitat for this species is not likely present. Mixed conifer fir and Pacific Douglas-fir vegetation communities would provide adequate foraging habitat for the species, especially in areas with snags, a high density of mature trees, and 50 percent canopy closure, which was noted as present within the Biological Survey Area. Roadside vegetation would not provide habitat for this species. For these reasons, **the Project may impact fisher, but the impact is less than significant because it will not result in a trend towards Federal or State listing or loss of viability.**

### **Sonoma Tree Vole**

The Sonoma red tree vole is a CDFW species of concern. It occurs in the north coast fog belt from Oregon border to Sonoma County in Douglas-fir, redwood & montane hardwood-conifer forests. The Sonoma red tree vole feeds almost exclusively on Douglas-fir needles but will occasionally take needles of grand fir, hemlock or spruce. With 33 percent of the project area covered by Douglas-fir community forest type, much of the habitat in the vicinity of the Project could support Sonoma tree vole and provide low to moderate quality nesting and moderate to high quality foraging. If present, individuals of the species could incur direct and indirect impacts from permanent and temporary tree and vegetation removal. Additionally, noise and visual disturbances could directly impact species present in the vicinity of the Project as a result of construction equipment and presence of construction personnel. The available habitat is on the fringe of the coastal fog belt. Food gathering occurs primarily at night when construction is halted. For these reasons, **the Project may impact Sonoma tree vole, but the impact is less than significant because it will not result in a trend towards Federal or State listing or loss of viability.**

### **Plants**

Several species of special and/or sensitive plants were reviewed for their potential occurrence in the vicinity of the project. Based on a desktop review of State Ranked species, which included a review of recorded occurrences, known range, and habitat requirements of each species, as well as a field reconnaissance survey; it was determined that the following special-status species have the potential to occur in the survey

area: small-flowered calycadenia and California Globemallow. Specialized surveys for the species were not conducted during baseline surveys. There will be no effect on the remainder of the listed plant species because work activities will be limited to already disturbed areas where these plants are not expected to occur.

### **California Globemallow and Small-flowered Calycadenia**

Although not seen during surveys because protocol-level plant surveys were not conducted, California globemallow and small-flowered calycadenia could still occur along Ruth-Zenia and Van Duzen Roads where Project impacts would occur. Approximately 3.5 acres of permanent and 22.3 acres of temporary vegetation removal and ground disturbance would occur along the roadsides in the existing roadway prism and therefore could directly disturb habitat present for the species. Indirect, long-term impacts would occur from the permanent removal of 3.5 acres of vegetation along the roadside corridor, decreasing the amount of habitat available for the species. Although vegetation removal would occur, not all vegetation removal would include habitat for this species, and therefore is an overestimate of potential habitat impacts. BMPs that are part of the Project would require temporary disturbance areas to be reseeded with native vegetation. No direct removal of the species is expected due to the implementation of Conservation Measures. As a result of the removal of vegetation that provides potential habitat for the species, the Project may impact California globemallow and small-flowered calycadenia, but is less than significant, with the mitigation below, because it will not result in a trend towards State or Federal listing or loss of viability.

#### **Mitigation Measure IV-4:**

**FHWA-CFLHD will retain a qualified botanist to conduct focused surveys for California globemallow and small-flowered calycadenia in the project area between June and August (during its blooming period) before construction starts. If individuals are found, protective fencing and/or changes in Project designs may be required to minimize direct harm to the plant. FHWA-CFLHD will coordinate with USFS on required protection measures.**

### **Critical Habitat**

Implementation of the proposed project will not result in any effect on critical habitat designated by the USFWS for the Marbled Murrelet, Southern Oregon/Northern California Coho Salmon, California Coastal Chinook Salmon or Northern California Steelhead.

### **Noxious Weeds**

The Nonnative/Ornamental grasses community is found along the roadside and comprises 20 percent (10.8 acres) of the Biological Survey Area. Dominant species in this vegetation community include yellow starthistle (*Centaurea solstitialis*), vinegar weed (*Trichostema lanceolatum*), fringed brome (*Bromus ciliates*), wild oat (*Avena fatua*), and bristly dogtail grass (*Cynosurus echinatus*). These annual grasses and invasive weeds are already well established along the roadsides, because of frequent disturbance and the high probability of weed introductions from vehicles passing through. While total avoidance is not possible, the implementation of standard construction practices and environmental commitments listed above will minimize the spread of these weed species due to project construction.

**IV(b):** Riparian Mixed Hardwood forest types is 0.07 percent (0.04 acres) of the project and Willow (*Salix* spp.) is 0.1 percent (0.07 acres). The Project crosses over Black Lassic Creek (which branches off of the Van

Duzen River), the Van Duzen River, and Bar Creek (which branches off of the West Fork of the North Fork Eel River).

No in-water work or riparian habitat removal is planned for these waterways.

No in-water work or removal of riparian vegetation would occur as a result of the Project. Above Black Lassic Creek (Segment 1), the Project plans to widen the roadway curve, add a retaining wall inside of the curve and upgrade the guardrail already present. Construction would occur 55 to 60 feet from the culvert openings in this area. Above Bar Creek (Segment 5), the Project plans to widen the existing curve to allow for ease of driving. Construction would occur at least 50 feet from the culvert openings in this area. No work is planned for the area where the Van Duzen River is close to the Project and crosses the Biological Survey Area at the southern end of Segment 3. Construction would occur at least 40 feet from the Van Duzen River.

The Biological Assessment states that one area at the very northern end of Segment 3, surrounding the Van Duzen River, provides riparian habitat. However, no impacts to riparian habitat would occur in this area. Additionally, the area is planned to be used only for staging and would not require any realignments or road expansion that would encroach on existing habitat. As required by standard practices, seeding shall be done between October 31 and May 1 when soils are moist or expected to be moist soon after distribution.

**IV(c):** Waters of the United States within the project area consist of the perennial streams described above. No wetlands are located in the project area.

The NHD identifies several USGS "blue-lined" streams within the Survey Area including the Van Duzen River, Bar Creek, and Black Lassic Creek. Additionally, the project crosses approximately 25 unnamed "blue-lined" tributaries. The area is composed primarily of ephemeral drainages, numerous intermittent channels, and four perennial streams. During the July 20-21, 2016 jurisdictional waters of the U.S. assessment and subsequent evaluation of aerial imagery of the Survey Area, Amec Foster Wheeler identified a total of approximately 0.48 acres of drainages exhibiting Ordinary High Water Mark (OHWM) indicators. Water resource surveys identified three perennial channels crossing the Survey Area totaling 456 linear feet, eleven intermittent channels crossing the Survey Area totaling 1,055 linear feet, 24 ephemeral channels crossing the Survey Area totaling 2,506 linear feet in length, and 17 roadside ditches totaling 4,227 linear feet. NHD-mapped or blue line-drainages that were confirmed to be present during field surveys included two ditches totaling 364 linear feet, 17 ephemeral channels totaling 2,210 linear feet, seven intermittent channels totaling 767 linear feet, and three perennial streams totaling 456 linear feet.

A total of 0.05 acres of permanent and 0.19 acres of temporary impacts would occur to Waters of the United States (WOUS) as a result of the Project. Impacts would result from removal of existing culverts and installation of new culverts in those same locations. Additional impacts include drainage improvements such as rip-rap at outlets or extending culverts where appropriate. No other impacts are anticipated as a result of this project. Project activities within waters of the U.S. are subject to permitting requirements of Section 404 of the Clean Water Act. Given the scope of Project activities, permitting is anticipated to occur under Nationwide Permit 14, Linear Transportation Projects.

**IV(d):** As noted in section IV(a), no fish migration occurs in the project area. Any culvert work will be completed when channels and ditches are dry. Once the project is complete, there will be no new barriers to fish migration.

**IV(e-f):** The project will not conflict with any local policies or ordinances protecting biological resources, or with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. The project area is not subject to any specific ordinances or plans regarding biological resources.

**IV(g):** The project, as mitigated by the practices stated above and in the Project Description, will not degrade the overall biotic environment. Once construction is complete and revegetation has re-established, the biotic environment will be of equal or better quality than the existing environment.

**V CULTURAL RESOURCES**

Would the project.	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Cause an adverse change in the significance of a historical resource, as defined in Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause an adverse change in the significance of an archaeological resource, pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**V(a-d):** Amec Foster Wheeler Environment & Infrastructure, Inc. of Riverside, CA performed a Cultural Resources Inventory of the areas potentially affected by the proposed project for FHWA. The records search found no previously identified cultural resources recorded within any of the road segments comprising the Area of Potential Effect (APE) footprint.

A total of five cultural resources have been previously recorded within a mile of the APE, all within a mile of APE Segment 4, situated to the south of the Segment. The cultural resources within a mile of the APE Segment 4 include four lithic scatters, a historic wooden gate, a historic foot path and several “blazed” trees of unknown significance.

Given the results of previous archaeological studies in the APE and vicinity and the proximity of previously documented resources, the historic and prehistoric archaeological and sensitivity at the APE Segments 1, 2, 3 and 5 appear to be low. At APE Segment 4, the prehistoric archaeological sensitivity appears to be moderate-to-high and the historic archaeological sensitivity appears to be moderate.

Through the research approaches listed above, this study did not encounter any “historic properties” within the APE. During the Phase I survey, three refuse scatter sites, comprised mostly of historic beverage cans, were encountered in three discrete locations on the eastern road shoulder of APE Segment 3. The refuse scatter sites are older than 50 years, but do not appear to be eligible for the National Register of Historic Places (NRHP) and therefore do not qualify as a “historic properties” under National Historic Preservation Act (NHPA). In addition, the road, although originally constructed longer than 50 years ago, has been modified significantly including modern asphalt, striping, signs, culverts, and thus lacks the integrity of design to be considered eligible for listing as a “historic properties” under NHPA.

The Phase I Cultural Resources Inventory report (AMEC 2016) concluded there is a diminished likelihood the intact cultural resources would be encountered during construction based on the research, field surveys,

and heavily disturbed nature of the road corridor. If cultural resources are encountered during the undertaking, all work shall cease and the Six Rivers National Forest archaeologist will be notified immediately to assess the nature of the find.

**Mitigation Measure V-1:**

In the event that previously unidentified cultural or paleontological resources are encountered during construction, there shall be no further excavation or disturbance of that area. The construction crews shall stop work or avoid the materials and their context. The FHWA CO shall be notified immediately. A qualified archaeologist shall evaluate the find to determine its historical or archaeological significance. If the find is determined to be a significant historical, paleontological or archaeological resource, the archaeologist shall make recommendations for appropriate mitigation. Work in the area shall not resume until the mitigation measures recommended by the archaeologist have been implemented.

**Mitigation Measure V-2:**

In the event that previously unidentified evidence of human burial or human remains are discovered, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. The Trinity County Coroner must be informed and consulted, per State law. If the coroner determines the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent. The most likely descendent will be given an opportunity to make recommendations for means of treatment of the human remains and any associated grave goods. Work in the area shall not continue until the human remains are dealt with according to the recommendations of the County Coroner, Native American Heritage Commission and/or the most likely descendent have been implemented.

**VI. GEOLOGY AND SOILS**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Would the project result in disturbance of ultra-mafic rock or soils potentially containing naturally occurring asbestos?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**VI(a):** Geotechnical studies for each project area were conducted by Amec Foster Wheeler in 2017.

Geology of this MLRA consists of Mesozoic marine sandstones and shale. All of the rocks within the MLRA have been metamorphosed to some extent. The southern half of the MLRA contains an older Paleozoic marine sediment cut by Mesozoic volcanics (USDA, NRCS 2016b).

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The project site lies in the northern reach of the California Coast Ranges Province, bordered by the Klamath Mountains Province on the east and the Pacific Ocean on the west. The Coast Range Province is underlain by Mesozoic and Cenozoic rocks of the Franciscan Complex, Coast Range Ophiolite, and Great Valley Sequence. The Franciscan Complex is subdivided into three fault-bounded belts, extending generally northwest-southeast, and including the Eastern, Central, and Coastal Belts. Rocks exposed across the project site are mapped as the Central Belt, and include a mélangé with interleaved blocks of folded and broken sequences of sandstone and shale turbidites (McLaughlin and others, 2000). The Central Belt was accreted to the Eastern Belt along the Grogan-Red Mountain fault zone, which extends northwest-southeast along Ruth Lake on the east side of the project area (Figure 4). The Pine Butte fault is considered to be part of the structural boundary of the Central and Eastern Belts; it also trends northwest through the area west of Ruth Lake, and passing along the top of the ridge just east of Section 4. The Mule Ridge fault extends northwest-southeast in the area west of Segments 1, 2, 3, and 5). The Coastal Belt lies west of the project area, and was accreted to the Central Belt along the northwest-southeast trending Coastal Belt Thrust (McLaughlin and others, 2000).

In the project area, the primary bedrock units exposed along Van Duzen and Ruth-Zenia roads include mélangé of locally tuffaceous argillite) and meta-graywache, meta argillite, and other undivided sandstone and shale deposits of the Yolla Bolly terrane. Localized blocks of chert, basalt, and other rocks occur within the mélangé and metagraywache. Quaternary (post-2.6 Ma) fluvial terrace deposits are present along the base and margins of the river valleys, and are dominantly sand, gravel, cobbles and boulders, with some local deposits of fine-grained materials.

Quaternary landslide deposits of varying size from tens of meters up to several kilometers in width and length are mapped within the mélangé and meta-graywache bedrock. Numerous active landslides were observed on natural and modified slopes and in road embankments throughout the project area. There are landslides mapped along several of the proposed roadway improvement areas. In most cases, the landslides are potentially large. Although we were generally unable to identify specific evidence of active sliding during the field investigation performed for this study, future sliding and corresponding distress to adjacent roadways, retaining walls, culverts, etc., is possible. The roadway improvements planned are not substantial enough to mitigate the occurrence of these generally large landslides.

**VI(a)(i):** The Eatons Rough Fault (including the Mule Ridge fault) is of particular concern because it passes directly west of Van Duzen and Ruth-Zenia Roads. No clear evidence for late Quaternary displacement has

been identified on the Mule Ridge fault, but as it extends between the Holocene active Bartlett Springs and Mad River fault zones, it is the likely structure by which slip on the Bartlett Springs fault zone is transferred to the Mad River fault zone. As the Mule Ridge fault passes close to portions of Van Duzen and Ruth-Zenia Roads, rupture of this fault may result in significant ground shaking and ground deformation within the project area. However, the project is rehabilitation of an existing road in approximately the same location. No structures are proposed. The area would be subject to seismic shaking, but the project would not expose people to additional risk of loss, injury or death.

**VI(a)(ii):** The site(s) of the proposed road improvements are expected to be subject to strong ground shaking. Based on data collected during the field investigation, the existing embankments consist of generally loose fill. There is visual evidence that the existing embankments have experienced some degree of settlement which has caused depressions and cracking in discrete pavement locations. During future strong ground shaking at the site(s), the existing embankments may experience additional compression, which may be expressed as settlement or distress at the pavement, or retaining wall, surface(s).

**VI(a)(iii):** Liquefaction is not expected to pose a hazard to the proposed roadway improvements due to the clayey nature of the subsurface materials and lack of groundwater observed in the soils explored.

**VI(a)(iv):** There are landslides mapped along several of the proposed roadway improvement areas. In most cases, the landslides are potentially large. Specific evidence of active sliding has not been identified but future sliding and corresponding distress to adjacent roadways, retaining walls, culverts, etc., is possible. The roadway improvements planned are not substantial enough to mitigate the occurrence of these generally large landslides.

Temporary and permanent excavations into existing hillsides may be required for the construction of the proposed roadway improvements. Structural orientations must be considered in determining the slope of proposed cuts. In general, temporary slope inclinations shall not be excavated steeper than the dip of the foliations of the rock. When present, unfavorable jointing and fracturing could also adversely affect the stability of cut slopes in rock.

The stability of existing slopes was not evaluated. No new permanent slopes are currently planned.

**VI(b):** Extensive measures will be included in the project specifications to prevent soil erosion during construction. Project plans call for silt fences and straw rolls at specific locations throughout the project. Silt fences are required at the toes of fills. Sediment logs (straw rolls) will be required as temporary sediment barriers at culvert inlets and outlets. See Construction Criteria and Methods Section in the Project Description.

When construction is complete, permanent erosion control measures such as retaining walls and rock slope protection will result in better erosion control at the various sites than what presently exists.

**VI(c-d):** The potential for landslides is low as discussed above. The soils and bedrock material at the project sites are not subject to lateral spreading, subsidence or liquefaction, and are not expansive.

**VI(e):** The project does not involve septic tanks or other wastewater disposal systems.

**VI(f):** In the project area, the primary bedrock units exposed along Van Duzen and Ruth-Zenia roads include a mélange of locally tuffaceous argillite and metagraywache, meta argillite, and other undivided sandstone and shale deposits of the Yolla Bolly terrane. Localized blocks of chert, basalt, and other rocks occur within the mélange and metagraywache. The soils and bedrock underlying the site are not ultra-mafic and do not contain asbestos. This activity would not result in release of asbestos to the air.

**VII. GREENHOUSE GAS EMISSIONS**

		Less Than	
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Would the project:	Potentially Significant	Significant With Mitigation	Less Than Significant	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**VII(a):** The proposed road rehabilitation project could generate greenhouse gas emissions during construction. In order to determine the significance of the impact, a “carbon foot-print” was estimated based on the proposed project’s generation of greenhouse gas (GHG) emissions (primarily CO<sub>2</sub>). Project activities that would offset potential impacts were weighed into the equation. The following quantities of combustible fuel and vegetation disturbance were used to determine the carbon footprint for the proposed project: an average of 10 gallons/day of diesel fuel would be used by construction equipment, (assuming 3 pieces of heavy equipment, which have an average fuel consumption of 10 gallons per day. Types of heavy equipment used for construction activities would include an excavator, dozer, dump truck, scraper, loader, and grader). It would take approximately 250 days to complete construction activities for the proposed project. Based on the project construction estimates, the proposed project would produce approximately 25 metric tons of CO<sub>2</sub> over the 3-year duration of construction.

Vegetation removal resulting from project activities would also increase greenhouse gasses. However, replanting and natural re-seeding within the project area would offset this increase over a five-year period. Use of the finished project by vehicles would not increase from existing conditions, so no net long-term increase in GHG emissions would occur.

Based on the above calculations, which estimate the project’s carbon emissions, the proposed project would not generate significant increases in GHGs or an ongoing increase in the demand for off-site energy production because there would be no new facilities constructed. While the project’s GHG emissions associated with the use of heavy equipment would be measurable over the course of the project, GHG emissions and any effects on global climate change would not be cumulatively significant considering: the amount of GHG emissions generated by construction of the proposed project, the fact that the finished project will not increase vehicle miles travelled, and the current local and regional air quality conditions, which are in attainment of Federal air quality standards.

**VII(b):** The North Coast Unified Air Quality Management District has not adopted a plan, policy, or regulation for reducing GHG emissions. The State of California has adopted several regulations related to GHG emissions reduction. These include efforts to reduce tailpipe emissions and diesel exhaust that result fuel combustion engines. Project operations would adhere to statewide efforts aimed at minimizing GHG emissions.

**VIII. HAZARDS AND HAZARDOUS MATERIALS**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



c) Have hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site that 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Be 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, and consequently result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be located within the vicinity of a private airstrip, and consequently result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**VIII(a-b):** Construction will involve use of heavy equipment, concrete, possibly drilling muds if further geotechnical testing is required and removal of old culverts. Minor equipment maintenance involving the transfer of fuels, oils, greases, hydraulic fluids and solvents may occur during construction. Release of such materials in transport, transfer or use is possible during construction.

The SWPPP, described in the Project Description, will include a list of potentially hazardous materials to be used in construction, as well as spill prevention and material management controls and practices to prevent the release of pollutants into storm water. A Spill Prevention, Control, and Countermeasures plan will also be required if the volume of fuel or oil in a single container exceeds 600 gallons, or if the total storage volume of petroleum products at any one site exceeds 1,320 gallons. The SWPPP must include a sampling and analysis program for pollutants not visually detectable in storm water, and a statement of the Contractor’s “good housekeeping” practices and requirements, including vehicle wash-down areas, onsite and offsite tracking control, protection of equipment storage and maintenance areas, and sweeping of highways and roadways related to hauling activities.

In addition to the SWPPP, the contract specifications will include those water quality protection measures described in the Construction Criteria and Methods section above.

**VIII(c):** There are no existing or proposed schools within ¼ mile of any of the project sites.

**VIII(d):** Amec Foster Wheeler, Inc. conducted an Initial Site Assessment (ISA) of the project (AMEC 2007c) . The project in this area consists only of rehabilitating existing road surface, the project will not expose potentially contaminated soil or groundwater. The project will not result in contamination of the property or exposure of the public to toxins. None of the sites was found to be a listed or known hazardous materials site. No previous industrial activity or known hazardous materials releases have occurred at any of these locations.

**VIII(e):** Rehabilitation of the existing road will not interfere with flight safety or bring large numbers of people into the airport Safety Area, and is entirely compatible with the uses allowed in Compatibility Zone D.

**VIII(f):** The project is not within a mile of a private airport or airstrip.

**VIII(g):** The project will not interfere with emergency response services or the emergency evacuation of residences in the vicinity. At least one-way traffic will be maintained through most of the work. Traffic will be controlled by flag people, or temporary signals, with delays limited to a maximum of 30 minutes most of the time.

Regardless of the construction schedule, emergency access through any of the construction sites will be accommodated in accordance with the FHWA standard operating procedures.

**VIII(h):** The project does not involve construction of habitable structures or other facilities that would attract people to the wildland fire interface. As mentioned above, in the event of a wildfire or other emergency, the road will be opened. The Forest Service fire prevention plan is in effect on this project and will be required in the contract specifications.

**IX. HYDROLOGY AND WATER QUALITY**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Violate any applicable water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Place housing within a 100-year floodplain, as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place within a 100-year floodplain structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury, or death involving: 1) flooding, including flooding as a result of the failure of a levee or dam, or 2) inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Otherwise degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Change the amount of surface water in a water body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k) Change currents or the course or direction of water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

movements?				
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**IX(a):** The project will not generate wastewater. However, construction projects can result in violations of water quality standards if erosion and sedimentation is not controlled, if hazardous materials are discharged, or if disturbed areas are left unvegetated. Standard Measures to prevent these impacts are discussed in the Project Description under *Construction Criteria and Methods*. With these standard measures in place, the project will not violate any water quality standards or waste discharge requirements.

When construction is complete, permanent erosion control measures such as retaining walls, subdrains, rock slope protection and better hydraulic capacity at culverts will result in slightly better water quality at the various sites than what presently exists.

**IX(b):** The project will not use groundwater or interfere with groundwater recharge. A very small amount of new impermeable area will be created by the wider road section and curves. However, these areas are surrounded by vast areas of permeable soils.

**IX(c-d):** The courses of the various streams to be crossed will not be altered. The replaced culverts will either have greater hydraulic capacity, the same capacity, or in one case be reduced by 2". This will not affect flood elevations but will prevent roadway flooding and reduce erosion at the stream crossings.

**IX(e):** No change in the amount of stormwater runoff water flows would result from the project and impact Stormwater drainage systems.

**IX(f):** The project is not a housing project and would not place such structures into a mapped 100-year floodplain.

**IX(g):** The culverts and rock slope protection installed or replaced will technically be within the 100-year floodplain of small intermittent or ephemeral streams . As mentioned above, the new culverts will maintain or increase the hydraulic capacity of the crossings. The culverts will be designed to withstand a 100-year or greater flood.

**IX(h):** The project would not attract people to flood prone areas or cause new areas to become prone to flooding. Therefore, it will not expose people or structures to a significant risk of loss, injury, or death involving flooding or inundation by seiche, tsunami, or mudflow.

**IX(i):** The measures to protect water quality are stated in the project description under *Construction Criteria and Methods* . The project will not degrade water quality.

**IX(j-k):** No change in the amount or course of surface water flows would result from the project, either through withdrawal, redirection, or loss of permeable area, for the reasons explained earlier in this section.

**X. LAND USE AND PLANNING**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural communities' conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**X(a):** The project will not physically divide a community or change land use patterns in any way. The roads to be rehabilitated are already established.

**X(b):** The project site is not a land use development project. It is rehabilitation and replacement of existing infrastructure. It is not inconsistent with any element of the Trinity County General Plan.

**X(c):** The project sites are not subject to any habitat conservation plan or natural community conservation plan. The project is consistent with the policies of the Six Rivers National Forest Land and Resource Management Plan (SRNF 1995).

**XI. MINERAL AND ENERGY RESOURCES**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Result in the loss of availability of a known mineral that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in the use of energy or non-renewable resources in a wasteful or inefficient manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XI(a-b):** The project will not affect the availability of any mineral resources. Any placer and aggregate deposits in the area would continue to be available after road construction.

**XI(c):** The project is a short-term construction project that would not result in the use of energy or non-renewable resources in a wasteful or inefficient manner.

**XII. NOISE**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Generate or expose persons to noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generate or expose persons to excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Be 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, and consequently expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be within the vicinity of a private airstrip, and consequently expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XII(a):** The only noise generated by this project would be during construction. Noise from construction is not expected to exceed standards established in the Noise Element of the General Plan. Construction activities may expose occupants of nearby residences to short-term noise but is minimally greater than existing truck traffic. No other sensitive receptors are located near the proposed project sites.

**XII(b):** Vibrations will be generated by heavy equipment moving earth, and compaction of soils. The vibrations will be short term, during daylight hours only, and not close enough to be felt by any sensitive receptors.

**XI(c):** The finished project will not result in a permanent increase in noise levels.

**XII(d):** Use of heavy equipment during project construction will cause some noise for a short period of time at each site. Afterwards, there would be no substantial increase in permanent ambient noise. As discussed above, this temporary increase in noise will not be significant, because of the distance to residences, etc.

**XII(e):** The project is not located within an airport land use plan or within two miles of a public airport.

**XII(f):** The project is not located within two miles of a private airstrip.

**XIII. POPULATION AND HOUSING**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XIII(a-c):** The project is rehabilitation and replacement of existing infrastructure with no expansion of capacity. It would not induce population growth in the communities of Mad River, Ruth or Zenia. It would not increase traffic capacity or extend road access beyond what is available without the project. The project will have no effect on population, nor will it displace housing or businesses.

**XIV. PUBLIC SERVICES**

Would the project result in 1) adverse physical impacts associated with the provision of new or physically altered governmental facilities, or 2) the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

f) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**XIV(a) – (f):** The project involves repair of public infrastructure with no expansion of capacity. It would not create a need for any new or physically altered government facilities. As mentioned above, under Section VIII “Hazards”, temporary effects on emergency services that may be created by work on the road can be mitigated by quickly opening the road. Effects on school bus service will be mitigated by the following Mitigation Measure:

**Mitigation Measures XIV-1:**

**School buses shall be allowed to pass through the construction without delay. The Contractor and CO shall coordinate with the school bus service to ensure that the closure schedule will allow for passage of school buses through the construction area without delay.**

**XV. RECREATION**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XV(a-b):** The project does not involve the use or expansion of recreational facilities. Temporary blockages are possible but not likely. All project segments are expected to be completed with only 30 minute maximum delays.

**XVI. TRANSPORTATION/TRAFFIC**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

g) Adversely affect rail, waterborne, or airborne transportation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**XVI(a):** Traffic delays during construction are summarized below:

Construction-caused traffic delays will be kept to a maximum on 30 minutes per passage through the project. Flaggers on each end of the closure will manage traffic flow. At no time will both lanes of the road be closed.

As stated in maintenance of roadways as standard practice in the Construction Criteria and Methods section, access will be provided through the work zone immediately upon arrival at the job site for emergency vehicles, including those carrying County, State and U.S. Government personnel responding to emergency situations. The Contractor shall be prepared at all times to immediately cease construction operations and restore the roadway such that emergency passage can be afforded such vehicles at any time regardless of the traffic control plan in effect. In addition, Mitigation Measure XIII-1 requires that school buses shall be allowed to pass through without delay.

**XVI(b):** The finished project will not increase traffic on Van Duzen or Ruth-Zenia Roads. There could be a minor, temporary increase on alternate roads if drivers prefer to avoid traffic delays. However, the project will not create an increase in traffic that would exceed the County’s level of service standards or otherwise conflict with congestion management plans on Van Duzen or Ruth Zenia Roads, either during or after construction.

**XVI(c):** The project will have no effect on air traffic patterns.

**XVI(d):** The project will improve safety on all three roads by widening curves, reducing flooding and erosion problems, installing guardrails, and rehabilitating the structural sections, pavement, and striping on Van Duzen and Ruth-Zenia Roads.

**XVI(e):** As mentioned previously, there will be short term temporary traffic delays and closures. However, impacts on emergency access are fully ameliorated by the standard Construction Criteria commitments, which require the contractor to open the road for emergency vehicles, regardless of the activity going on and the road closure schedule that is in effect at the time.

**XVI(e):** As mentioned previously, there will be short term temporary traffic delays and closures. However, impacts on emergency access are fully ameliorated by the standard Construction Criteria commitments, which requires the contractor to open the road for emergency vehicles, regardless of the activity going on and the road closure schedule that is in effect at the time.

**XVI(f-g):** The project will have no effect on buses, bicycles, rail, waterborne or air transportation.

**XVII. UTILITIES AND SERVICE SYSTEMS**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, for any of the following utilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Water treatment or distribution facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ii) Wastewater collection, treatment, or disposal facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Storm water drainage facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Electric power or natural gas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Communications systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XVII(a-e):** The project will not generate wastewater requiring treatment, and will not require public water, power, natural gas or communications systems. Stormwater flows naturally and no facilities are required.

**XVI(f-g):** The project will not generate sufficient waste to have an impact on landfill facilities. However, construction crews will be responsible for the disposal and/or recycling any construction waste, as required by law. No waste will be left on site.

**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE**

Would the project:	Potentially Significant	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 probably future projects, as defined in Section 15130.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**XVIII(a):** Construction related disturbance, especially in-channel (intermittent/ephemeral) work, could affect air quality, special-status wildlife species and their associated habitat, water quality, and soils. Species that could be affected by the project are Northern Spotted Owl, California Globemallow, Small-Flowered Calycadenia Foothill Yellow-Legged Frog, Fringed Myotis, Northern Goshawk, Pallid Bat, Southern Torrent Salamander, Western Bumble Bee, Western Pond Turtle, Silver-Haired Bat, Long-Eared Myotis Bat, Golden Eagle, Pacific Tailed Frog, Fisher, Sonoma Tree Vole. Mitigation measures have been incorporated into the proposed project (See Section IV Biological Resources) to address impacts on affected special-status wildlife species and any associated riparian wetland habitat. Impacts on air quality, water quality, and soils are also addressed above and mitigated to less-than-significant levels in the applicable sections above. Cultural resources are not likely to be affected. However, because there is a potential to impact previously undiscovered cultural resources or human remains during project activities, standard construction methods and mitigation measures have been incorporated into the proposed project to ensure protection of previously undiscovered cultural resources and human remains (See Section V Cultural Resources).

**XVIII(b):** The project would include improvements to an existing transportation system by replacing existing drainage structures, widening the roads and rehabilitating roadway pavement. The project would not introduce new development into a previously undeveloped area. The project site is near resource and rural residential uses, and within the Six Rivers National Forest. Existing open space will be maintained. Impacts associated with the project would be limited to the construction phase for the most part and can be fully mitigated for at the project level. As a result, cumulative impacts are considered to be less than significant.

**XVIII(c):** The proposed project, particularly during the construction phase, could result in a variety of impacts on human beings. Potential adverse effects on nearby residential areas along Ruth-Zenia and Van Duzen Roads are related to temporary noise and decreases in air quality resulting from construction activities. Section III *Air Quality* contains a mitigation measure that will be implemented to avoid or minimize potentially adverse effects to humans generated by the construction and operation of the proposed project.

**References**

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## EXHIBIT C

# MITIGATION, MONITORING, AND REPORTING PROGRAM

# **Ruth-Zenia and Van Duzen Road Rehabilitation Project;**

## Trinity County Roads 502 & 511

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### **Mitigation Monitoring and Reporting Program**

#### *Introduction*

This document comprises the Mitigation Monitoring and Reporting Program (MMRP) for the Ruth-Zenia and Van Duzen Road Rehabilitation Project (project). The purpose of this document is to memorialize the mitigation responsibilities of the Trinity County Department of Transportation (TCDOT) and the Federal Highway Administration - Central Federal Lands Highway Division (CFLHD) in implementing the proposed project.

Mitigation is defined by the California Environmental Quality Act (CEQA) – Section 15370 as a measure that

- avoids the impact altogether by not taking a certain action or parts of an action;
- minimizes impacts by limiting the degree or magnitude of the action and its implementation;
- rectifies the impact by repairing, rehabilitating, or restoring the impacted environment;
- reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project; or
- compensates for the impacts by replacing or providing substitute resources or environments.

Mitigation measures provided in this MMRP have been identified in the *Summary of Mitigation Measures* section of the Initial Study/ Proposed Mitigated Negative Declaration (IS/MND) prepared by TCDOT on November 14, 2017, and are considered feasible and effective in mitigating project-related environmental impacts. These measures were also summarized in the *Environmental Checklist and Explanatory* section.

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

### *Legal Requirements*

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

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

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

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

### *Intent of the Mitigation Monitoring and Reporting Program*

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

### *Development and Approval Process*

The timing elements for implementing mitigation measures and the definition of the approval process are provided in detail throughout this MMRP to assist CFLHD and TCDOT staff by providing the most usable monitoring document possible.

### *Authorities and Responsibilities*

The County, functioning as the CEQA Lead Agency, will have the primary responsibility for the monitoring and enforcement of the MMRP and will be responsible for coordination of monitoring activities, documentation and investigation of complaints and maintenance of records concerning the status of all approved mitigation measures

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

### *Resolution of Noncompliance Complaints*

Any person or agency may file a complaint that alleges noncompliance with the mitigation measure(s) adopted as part of the approval process for the proposed project. The complaint shall be directed to the County, via the Department of Transportation, Environmental Compliance Specialist, David Colbeck (31301 State Highway 3/P.O. Box 2490, Weaverville, CA 96093-2490), in written form describing the purported violation in detail. The County shall conduct an investigation and determine the validity of the complaint. If noncompliance with a mitigation measure is verified, the County shall take the necessary action(s) to remedy the violation. Complaints shall be responded to in writing including descriptions of the County's investigation findings and the corrective action(s) taken, if applicable.

### *Summary of Monitoring Requirements*

Table 1, which follows, summarizes the mitigation measures and associated monitoring requirements proposed for the project. The mitigation measures are presented in the same form as originally prescribed in the IS/MND – *Environmental Checklist and Explanatory Notes*, and *Summary of Mitigation Measures*. The mitigation measures are organized by environmental issue area (i.e., Air Quality, Biological Resources, etc.). Table 1 consists of the following four columns:

- Mitigation Measure(s): Lists the mitigation measure(s) identified for each potentially significant impact discussed in the IS/MND for the project. The same mitigation numbering system used in the IS/MND is carried forward in this MMRP.
- Timing/Implementation: Indicates at what point in time or project phase the mitigation measure will need to be implemented.
- Responsible Parties (tasks): Documents which agency or entity is responsible for implementing mitigation measures and what, if any, coordination is required (e.g., approval). If more than one party has responsibility under a given mitigation measure, the tasks of each individual party is identified parenthetically (e.g., “implementation” or “monitoring”).

- Verification: Provides spaces to be initialed and dated by the individual responsible for verifying compliance with each specific mitigation measure.

Acronyms used in Table 1 are explained below, in order of their appearance in the table:

CFLHD	Central Federal Lands Highway Division
NCUAQMD	North Coast Unified Air Quality Management District
USFWS	United States Fish and Wildlife Service
NCRWQCB	North Coast Regional Water Quality Control Board
USACE	United States Army Corps of Engineers
CalEMA	California Emergency Management Agency

**Table 1. Summary of mitigation monitoring requirements**

Mitigation Measure	Timing/ Implementation	Responsible Parties (Task)	Verification (Date and Initials)
<b>BIOLOGICAL RESOURCES</b>			
<p><b>Impact IV (a):</b> Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.</p>			
<p><b>Impact IV (c):</b> Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.</p>			
<p><b>Mitigation Measure IV-1: Biological Resources</b></p> <p>The contractor shall not conduct nighttime construction to prevent noise disturbance to nesting northern spotted owls and other sensitive species in the area. Construction is only permitted during daylight hours (per SC-14, with no nighttime approval allowed).</p>	Preconstruction/Construction	<p>CFLHD (contract specifications, monitoring)</p> <p>Contractor (implementation)</p> <p>County (complaint resolution)</p>	
<p><b>Mitigation Measure IV-2: Biological Resources</b></p> <p>If active nests are identified during the nesting season, a no-disturbance buffer shall be established around the nests. The extent of the no-disturbance buffers shall be determined by a wildlife biologist and shall depend on the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographic or artificial barriers.</p> <p>The purpose of the buffer is to avoid disturbance or destruction of the nest until after the breeding season, or until a wildlife biologist determines that the young have fledged (usually late-June to mid-July). Within this buffer, construction activities shall be avoided while the nest is considered active or sensitive to disturbance. However, construction activities can proceed if the biological monitor determines that the individual is not likely to abandon the nest during construction.</p>	Preconstruction/Construction	<p>CFLHD (contract specifications, monitoring)</p> <p>Contractor (implementation)</p> <p>County (complaint resolution)</p>	



Mitigation Measure	Timing/ Implementation	Responsible Parties (Task)	Verification (Date and Initials)
<p><b>Mitigation Measure IV-3: Biological Resources</b></p> <p>If tree and vegetation removal is scheduled between February 1st and September 15th, FHWA-CFLHD will retain a qualified biologist to conduct pre-construction surveys for active migratory bird nests and roosting bats. Breeding and nesting behaviors will be recorded, and nest locations will be documented using a GPS. If active nests are documented, EC-3 shall be implemented. Additionally, trees to be removed will be inspected for cavities that may provide roosting habitat for pallid bat. Trees with cavities will be removed before April; however, if active roosting colonies are found, the trees will not be removed until after the maternal roosting season ends (typically in July). If tree and vegetation removal is scheduled between September 16th and January 31st, these measures are not required.</p>	<p>Preconstruction/Construction</p>	<p>CFLHD (contract specifications, monitoring)</p> <p>Contractor (implementation)</p> <p>County (complaint resolution)</p>	
<p><b>Mitigation Measure IV-4: Biological Resources</b></p> <p>FHWA-CFLHD will retain a qualified botanist to conduct focused surveys for California globemallow and small-flowered Calycadenia in the project area between June and August (during its blooming period) before construction starts. If individuals are found, protective fencing and/or changes in Project designs may be required to minimize direct harm to the plant. FHWA-CFLHD will coordinate with USFS on required protection measures.</p>	<p>Preconstruction/Construction</p>	<p>CFLHD (contract specifications, monitoring)</p> <p>Contractor (implementation)</p> <p>County (complaint resolution)</p>	

<b>CULTURAL RESOURCES</b>			
<p><b>Impact V (a): Cause an adverse change in the significance of a historical resource, as defined in Section 15064.5?</b></p> <p><b>Impact V (b): Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15065.5</b></p> <p><b>Impact V (d): Disturb any human remains, including those interred outside of formal cemeteries</b></p>			
<p>Mitigation Measure V-1: Cultural Resources</p> <p><b>In the event that previously unidentified cultural or paleontological resources are encountered during construction, there shall be no further excavation or disturbance of that area. The construction crews shall stop work or avoid the materials and their context. The FHWA CO shall be notified immediately. A qualified archaeologist shall evaluate the find to determine its historical or archaeological significance. If the find is determined to be a significant historical, paleontological or archaeological resource, the archaeologist shall make recommendations for appropriate mitigation. Work in the area shall not resume until the mitigation measures recommended by the archaeologist have been implemented.</b></p>	<p>Preconstruction/Construction</p>	<p>CFLHD (contract specifications, monitoring)</p> <p>Contractor (implementation)</p> <p>County (complaint resolution)</p>	
<p>Mitigation Measure V-2: Cultural Resources</p> <p>In the event that previously unidentified evidence of human burial or human remains are discovered, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. The Trinity County Coroner must be informed and consulted, per State law. If the coroner determines the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent. The most likely descendent will be given an opportunity to make recommendations for means of treatment of the human remains and any associated grave goods. Work in the area shall not continue until the human remains are dealt with according to the recommendations of the County Coroner, Native American Heritage Commission and/or the most likely descendent have been implemented.</p>	<p>Preconstruction/Construction</p>	<p>CFLHD (contract specifications, monitoring)</p> <p>Contractor (implementation)</p> <p>County (complaint resolution)</p>	

<b>Public Services</b>			
<p><b>Would the project result in 1) adverse physical impacts associated with the provision of new or physically altered governmental facilities, or 2) the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Schools</b></p>			
<p><b>Mitigation Measures XIV-1:</b>                       School buses shall be allowed to pass through the construction without delay. The Contractor and CO shall coordinate with the school bus service to ensure that the closure schedule will allow for passage of school buses through the construction area without delay.</p>	<p>Preconstruction/Construction</p>	<p>CFLHD (contract specifications, monitoring)                       Contractor (implementation)                       County (complaint resolution)</p>	