

Beckwourth-Genesee Road Project

Initial Study/Mitigated Negative Declaration

February 2014

Prepared for:
Plumas County
Department of Public Works
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Project Information

- 1. Project Title:** Beckwourth-Genesee Road Project
- 2. Lead Agency Name and Address:** Plumas County Planning Department
555 Main Street
Quincy, CA 95971
- 3. Contact Person and Phone Number:** Jim Graham, (530) 283-6169
- 4. Project Location:** Beckwourth, Plumas County, California; Sections 3, 4, 10, 11, 14, 23, and 26 of Township 23N, Range 14E; and Sections 16, 21, 28, and 33 of Township 24N, Range 14E
- 5. Description of Project:** Plumas County, in combination with the Federal Highway Administration and U.S. Department of Agriculture, Forest Service, is proposing to improve and realign the southern 9.6 miles of Forest Highway (FH) 177 (Beckwourth-Genesee Road) from State Route 70 in Beckwourth to County Road 111 in Clover Valley. The existing roadway is a combination of paved and unpaved surfaces. The project would improve the operational and design deficiencies of the roadway to be consistent with current design standards. The project would also include a realignment of FH 177 near Ceresola Ranch.
- 6. General Plan Designation:** Commercial, Suburban Residential, Resort and Recreation, Agricultural Preserve, Timber Resource Land, Rural Residential, and Secondary Suburban Residential
- 7. Zoning:** General Forest (GF), Agricultural Preserve (AP), Rural 10-Acre (R-10), Timberland Production (TPZ), Secondary Suburban (S-3), Suburban (S-1), Light Industrial (I-2), Convenience Commercial (C-3), and Periphery Commercial (C-2)
- 8. Surrounding Land Uses and Setting:** FH 177 traverses the boundary of the Crocker Meadows Wildlife Area administered by the California Department of Fish and Wildlife and the administrative boundary of the Plumas National Forest. Surrounding land uses include ranching, recreation, forest land, and rural residential. At the southern end of FH 177 near State Route 70 is the unincorporated community of Beckwourth.

9. Other Public Agencies Whose Approval May Be Required:

- Federal Highway Administration (project approval and funding)
- U.S. Department of Agriculture, Forest Service (project authorization)
- U.S. Army Corps of Engineers (Clean Water Act Section 404 Nationwide Permit)
- Central Valley Regional Water Quality Control Board (Clean Water Act Section 401 Water Quality Certification and Section 402 General Construction Activity Storm Water Permit)
- California Department of Forestry and Fire Protection (Forest Practice Act, Utility Right-of-Way Exemption)
- California Department of Transportation (encroachment permit)
- California Department of Fish and Wildlife (right-of-way, possible Section 1602 Fish and Game Code Streambed Alteration Agreement)
- Northern Sierra Air Quality Management District (Dust Control Plan approval)

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1 Introduction

1.1 Purpose of this Document

The Plumas County Department of Public Works (County), in combination with the Federal Highway Administration (FHWA) and the United States Department of Agriculture, Forest Service (Forest Service), is proposing to improve a segment of California Forest Highway 177 (FH 177), locally known as Beckwourth-Genesee Road, in an unincorporated area north of the community of Beckwourth in Plumas County, California. Part of the highway is also on the Plumas National Forest (PNF). The proposed project would rehabilitate, restore, resurface, and reconstruct a 9.6-mile section of FH 177 from Beckwourth north to an intersection in Clover Valley where Plumas County Road 111 continues northwesterly to Genesee, California, and FH 177 continues northeasterly to FH 176. The improvements are needed to correct roadway deficiencies, improve operational safety, support the PNF Land and Resource Management Plan (LRMP), and reduce maintenance needs. This Initial Study identifies the potential environmental impacts of the proposed project to determine whether the project may have a significant effect on the environment and identifies mitigation measures, where applicable, to reduce or avoid significant effects.

This Initial Study has been prepared pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines (14 California Code of Regulations 1500 et seq.). CEQA requires that public agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. Plumas County is a public agency with discretionary authority over the project and is the Lead Agency under CEQA. The proposed project would receive funding through the Federal Lands Access Program (FLAP, formerly known as the Forest Highway Program), which is part of the Public Lands Highway Program, and would require approvals from the FHWA. FHWA, as the National Environmental Policy Act (NEPA) Lead Agency, has prepared an environmental assessment (EA) to evaluate the environmental effects of the proposed project and issued a Finding of No Significant Impact (FHWA 2012). The project was called the California Forest Highway 177 (CA PFH 177-1(1)), Beckwourth to Clover Valley project in the EA, but the project name was changed when the funding program changed. The project is now known as the CA FLAP 111(1) Beckwourth-Genesee Road project. The Forest Service is a responsible agency and will also need to comply with NEPA as part of its approval process. Plumas County will be responsible for acquiring new right-of-way and easements, as necessary for the proposed project.

1.2 Supporting Technical Studies

This Initial Study incorporates information and analyses contained in the EA for the proposed project (FHWA 2012) and the supporting technical studies. The technical studies listed below are available for review at the County office in Quincy (1834 East Main Street, Quincy, CA 95971):

- Air Quality Technical Study for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2007a)

- Biological Assessment/Biological Evaluation for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2007b)
- Construction Impacts for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2008a)
- Geotechnical Report for CA PFH 177-1(1), Beckwourth-Clover Valley Road, Plumas National Forest, Plumas County, California (Henwood 2012)
- Growth Inducement Technical Study for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2007c)
- Hydraulics Recommendations, Beckwourth Clover Valley Route Improvements, Plumas National Forest, California (Blackler 2010)
- Land Use Technical Study for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2007d)
- Noxious Weed Risk Assessment for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2008b)
- Permitting Requirements for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2007e)
- Secondary and Cumulative Impacts for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2007f)
- Socioeconomics Technical Study for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2007g)
- Visual Resources Technical Study for California Forest Highway, 177 Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2007h)
- Water Body Modifications and Wildlife Impacts for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2007i)
- Wetlands, Waters of the U.S., and Riparian Vegetation Surveys for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2007j)
- Wildfire/Fire Hazards Technical Study for California Forest Highway 177, Beckwourth to Clover Valley Project, Plumas County, California (SAIC 2007k)

1.3 Document Organization

This document contains the following chapters:

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

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2 Project Description

2.1 Location

The project area encompasses 9.6 miles of FH 177 (Beckwourth-Genesee Road) in an unincorporated area of Plumas County and on the PNF, approximately 30 miles southeast of Quincy. It is on the *Reconnaissance Peak, Portola, and Crocker Mountain* U.S. Geological Survey 7.5-minute quadrangles (see Figure 1 at the end of this section). FH 177 begins on the north side of State Route (SR) 70 in Beckwourth and continues north-northeast onto the PNF for 21.45 miles until it intersects FH 176. The proposed project would improve and realign the southern 9.6-mile segment of FH 177 from SR 70 to County Road 111. The project area encompasses a 40- to 80-foot-wide corridor along FH 177 from SR 70 north to its intersection with County Road 111 and an 80-foot-wide corridor along the proposed realignment of FH 177 near the Ceresola Ranch (Figure 2). The anticipated total area of disturbance is 56 acres, with about 30 acres on the PNF.

2.2 Existing Facility Conditions

FH 177 is a two-lane road that provides local access for recreation, emergency response, school bus traffic, ranching, and Forest Service administration of activities occurring on the PNF, including fire suppression, mining, grazing, logging, recreation site maintenance, and watershed projects. The road also provides access to the state-owned Crocker Meadows Wildlife Area (CMWA). It is paved with an asphalt surface from Beckwourth to milepost (MP) 5.1 and from MP 9.6 to 21.45. From MP 5.1 to 9.6, the road has an unpaved gravel surface.

FH 177 connects with several other highways and local roads and is an important component of the transportation system serving the county and PNF. Plumas County has obtained traffic counts along FH 177 since 2005. The data indicate that traffic has been increasing at an average annual rate of about 4 percent, a rate of increase that is typical for low-volume rural highways in mountainous locations in California. The 2011 Seasonal Average Daily Traffic (SADT), derived from 2005 Plumas County traffic count data, was 152 vehicles. The projected 2031 SADT, which is based on a 4 percent annual traffic growth rate, is 344 vehicles. Most vehicles on the road are passenger vehicles (about 77.9 percent), with some recreational vehicles (16 percent), trucks (5.9 percent), and school buses (0.2 percent).

2.3 Project Objectives

The proposed project is designed to:

- Correct roadway deficiencies along a 9.6-mile segment of FH 177.
- Improve operational safety along FH 177.
- Support the LRMP for the PNF.
- Reduce Plumas County maintenance expenses for FH 177.

The FHWA identified the purpose and need for this project through its scoping process and obtained input from agency representatives. A detailed description of the purpose and need is included in the FHWA EA (FHWA 2012). A consistent-width roadway section that meets current design standards is needed to make the highway more conducive to safe and efficient recreational, residential, and forest commercial traffic. With the deteriorating condition of the road, maintenance efforts and costs are expected to increase substantially in the future, with the costs funded primarily by Plumas County. The proposed project must also be consistent with the PNF LRMP to support Forest Service management of the forest.

Specific project objectives include:

- Repair extensive pavement cracking and rutting between MP 2.5 and 5.1 and the poor gravel surface between MP 5.1 and 9.6.
- Replace the existing inadequate culverts and drainage structures along FH 177 with new culverts that can accommodate runoff from adjacent land and flow along Crocker Creek.
- Widen the road where needed to accommodate two-way traffic.
- Improve sight distances along the road by reducing sharp curves.
- Improve the intersection with County Road 111 at the terminus of the project at MP 9.6 to enhance the sight distance for turning.
- Provide safe pedestrian crossing at the Ceresola Ranch.
- Replace the existing bridge over Crocker Creek with a new bridge.

2.4 Proposed Project Description

The proposed project would involve improvements to approximately 9.6 miles of FH 177 from Beckwourth to Clover Valley. Details concerning the proposed project are provided below and are based on the EA prepared by FHWA (2012). Alternatives to the proposed project are discussed in Section 2.7, Alternatives.

To improve the safety and driver expectancy, the roadway would be paved to a standard 24-foot width to provide a minimum of two 10-foot lanes with 2-foot paved shoulders. The project would improve the operational and design deficiencies of the roadway to be consistent with current design standards. New right-of-way required for implementation of the proposed project would be minimized to the extent feasible. All acquisitions will conform to the applicable provisions of Public Law 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended and 49 Code of Federal Regulations Part 24, Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-assisted Programs.

As part of the road improvements described below, more than 50 culverts would be replaced along the highway, and a new bridge would be installed over Crocker Creek. Most of the culverts would be

the same size as the existing culverts and would be placed in the same location. Larger culverts would be needed in some locations to accommodate higher flows.

The proposed bridge would be a geosynthetic reinforced soil (GRS) bridge and would require abutments on both sides of the creek outside the active channel. Bridge installation is expected to take place during dry weather when the creek is dry and would not involve the placement of any structures in the creek.

The proposed project can be described as improvements to three functional segments:

Segment 1 (MP 0.0 to 1.7): This segment presently consists of a 22-foot-wide paved roadway that is in fair condition. Work in this section would involve improvements to restore, resurface, and rehabilitate the existing roadway surface, as well as minor drainage improvements in the roadway shoulder. The existing posted speed limit is 25 miles per hour (mph), which would be maintained.

A buried telephone line follows Segment 1; it is not anticipated to require relocation.

Segment 2 (MP 1.7 to 2.5): This segment is a currently paved section of roadway that passes through the Ceresola Ranch with several structures located immediately adjacent to both sides of the road. No speed limit is currently posted. The road narrows and has two sharp turns that contribute to poor visibility and pedestrian hazards. For this segment, the roadway would be realigned away from the existing ranch structures to the east in order to accommodate a roadway that meets current design standards. The proposed realignment considers environmental resources in the vicinity of the existing roadway in order to minimize adverse impacts on the CMWA and Clover Valley Lumber Company Railroad grade. Other alignments were considered and are discussed in Section 2.7.

The realigned roadway in Segment 2 would be constructed to include a consistent 24-foot-wide asphalt surface consisting of a minimum of two 10-foot-wide travel lanes with 2-foot-wide paved shoulders and a design speed of 30 mph. The design for Segment 2 is similar to that for Segment 3. The existing FH 177 through this segment would be abandoned after the new alignment is constructed, and the easement would be transferred back to the property owner.

A telephone line owned by AT&T may need to be relocated. Also, an overhead power line owned by Plumas Sierra Rural Electric Cooperative is in an area where the grade of the road would be raised, and height clearance may be an issue, requiring the power line to be relocated. FHWA will coordinate with Plumas Sierra Rural Electric Cooperative and AT&T to ensure that any necessary utility relocation occurs. The construction contractor will be required to properly locate all utilities, and, if any are located, necessary coordination with utility companies will occur throughout construction.

Segment 3 (MP 2.5 to 9.6): This segment begins where the realignment rejoins existing FH 177 and extends to MP 9.6, at the junction with County Road 111. This section of roadway varies in width from 16 to 28 feet. Between MP 2.5 and MP 5.1, the road consists of a 16- to 18-foot-wide asphalt surface that has extensive cracking and rutting, and between MP 5.1 and 9.6, the road consists of a 22- to 28-foot-wide unpaved gravel surface. No speed limit is currently posted. The proposed improvements would include rehabilitation, restoration, resurfacing, and reconstruction.

Reconstruction of this segment would include minor realignments, curve widening, drainage improvements, and replacement of a structural concrete stream crossing at MP 6.6. The reconstructed roadway would include a typical section similar to that described for Segment 2, which is a consistent 24-foot-wide asphalt surface with a minimum of two 10-foot-wide travel lanes with 2-foot-wide paved shoulders and a design speed of 30 mph. The existing inadequate culverts would be replaced, and the substandard stream crossing across Crocker Creek at MP 6.6 would be replaced with either a large box culvert or small bridge structure. Furthermore, the intersection at MP 9.6, the terminus of the project, would be reconfigured to address the existing inadequate configuration, which does not currently provide for good sight distance or adequate right-angle turning movements (FHWA 2004 as cited in FHWA 2012).

Construction Methods

The proposed project would involve clearing and grubbing of vegetation adjacent to the roadway within the construction limits to allow for construction of the new roadway and associated clear zone. A total of approximately 56 acres of vegetated areas would be cleared, including approximately 30 acres on the PNF. This action would involve cutting and removing large trees, some of which are merchantable timber. The PNF and the California Department of Fish and Wildlife (CDFW) would be reimbursed for the value of timber removed.

Standard construction equipment, such as pulverizers, pavers, rollers, loaders, excavators, graders, compactors, dump trucks, and pickup trucks, would be used to construct the improvements. Additional equipment for tree removal may also be used, such as mechanical feller (e.g., feller buncher or hotsaw), chainsaw, skidder, stroke delimber, chipper, shovel loader, chip van, and/or log truck.

Short-term closures of the road may occur at specific construction milestones. Advanced notification would be provided to the traveling public prior to any temporary closures. Emergency access would be maintained throughout construction. Operation and maintenance of the road in the project area are and will continue to be the responsibility of Plumas County.

Treatment of the existing roadway in sections that are realigned, mainly through the Ceresola property, would be negotiated during the right-of-way process with each respective property owner. The roadway easement on the Ceresola property would be transferred back to the property owner. Treatment options include obliterating the road, leaving it as it is, or rehabilitating it to natural conditions and will be determined in final design.

2.5 Construction Criteria and Specifications

FHWA would retain a construction contractor for construction of the proposed project. The contractor would be responsible for compliance with all applicable rules, regulations, and ordinances associated with proposed project activities and for implementing construction-related mitigation measures. Construction specifications would be in accordance with FHWA Standard Specifications in force at the time the construction contract is awarded. The standard construction practices that would be implemented are described in this section. Additional measures may be identified as mitigation measures in this document or in permits or other approvals required for the project.

Hazardous Materials Control

The construction contractor will be required to comply with all federal, state, and local laws and regulations controlling the introduction of pollution into the environment. Precautions will be taken to prevent pollution of streams and nearby waterways with silt, oils, fuels, bitumens, or other harmful materials. The contractor will be required to prevent pollution of the atmosphere from particulate and gaseous matter by implementing appropriate surface watering and proper maintenance of construction equipment.

In the event of an accidental spill by the construction contractor, containment measures will be implemented immediately. For an accidental spill of petroleum products in reportable quantities, or if hazardous materials are encountered during construction, FHWA or the County will report the spill to the appropriate federal, state, and local authorities and respond in accordance with all applicable regulations. If any staining within the construction limits, odoriferous scents, or other indication of hazardous material is encountered by the construction contractor, operations at the discovery site will be suspended and FHWA and the County will be immediately notified. Any such discovery will be investigated by qualified personnel and treated in accordance with federal, state, and local regulations.

Safety and Health Requirements

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

2.6 Tentative Schedule

The proposed project would take about 2 years to construct, with construction beginning in the fall of 2014 and finishing in the fall of 2016. The actual construction dates will depend on the acquisition of right-of-way and necessary environmental approvals and permits. Measures identified in the EA and this IS/MND may also affect the construction schedule or the timing of specific activities (e.g., to avoid disturbance to nesting birds).

2.7 Alternatives

Plumas County has considered several alternatives to the proposed project, including the no-project alternative. Under the no-project alternative, the 9.6 miles of FH 177 would not be reconstructed, resurfaced, restored, or rehabilitated. The road would be left in its existing condition with only routine maintenance conducted, and no geometric upgrades or design improvements would be implemented. The existing road width would remain inconsistent and have sharp curves, and roadway conditions would continue to deteriorate. No Forest Highway Funds would be expended on the project. Plumas County would continue maintenance activities, but maintenance costs would escalate over time.

The following alternative alignments were considered during the early design and planning phases, but were eliminated from further consideration:

- **Hillside Alignment:** This option would realign the roadway to the west of the developed portion of the Ceresola Ranch, into the hillside. This option would necessitate very large cuts and fills due to its location on the hillside and would have substantial visual impacts. Construction of retaining walls would help to minimize the visual impacts; however, the cost to construct this alternative would be about double that of the selected alignment. It would also not meet safety design criteria because of the steep grades and would be more difficult for Plumas County to maintain. Therefore, this option would not fully achieve the project objectives.
- **Near Meadow Alignment:** This option would realign the roadway to the east of the developed portion of the Ceresola Ranch, in the meadow portion of the working ranch. This option was deemed less desirable because it would disrupt ranch operations by bisecting the ranch pasture. It would be more costly and visually intrusive because of the need for an increased special rock embankment (about double that of other options). The special rock embankment would be incorporated into the design to minimize impacts on hydrologic connectivity through the meadow, which is considered farmland of local importance. This option would also require more property to be acquired from the CMWA, a Section 4(f) and Section 6(f) property because of its public ownership and use as a wildlife refuge.
- **Far Meadow Alignment:** This alignment is essentially the same as the proposed project, except that the alignment would shift where the roadway re-connects with the existing roadway north of the Ceresola Ranch developed area. This alignment would result in more impacts to the CMWA, a Section 4(f) and Section 6(f) property, as well as potential impacts to the historic Clover Valley Lumber Company Railroad.
- **Avoid CMWA:** This alternative would use the Hillside alignment, but instead of tying back into the existing road, it would turn west and run along the south border of the CMWA for approximately 0.5 mile until it reaches the PNF boundary. The alignment would then continue north in a best fit alignment through the forest, avoiding all CMWA land, tying back to the existing alignment 1,000 feet northwest of Forest Service Road FS23N41. All CMWA Section 4(f) and 6(f) property would be avoided with this option, but extensive cuts and fills on previously undisturbed land would have much greater environmental and visual impacts than other options. In addition, because this alternative would also use the Hillside alignment, it would not fully achieve the project objectives.
- **Reconstruct on Current Alignment:** The realignment options discussed above were considered but eliminated from further consideration because the magnitude of work that would be necessary to reconstruct the road to an acceptable design standard on its current alignment would have been extensive due to the present safety deficiencies, would likely necessitate removal and/or relocation of several built structures and involve unknown subsurface resources around these structures, or would require similar drainage modifications and costly special rock embankment as in the dismissed Near Meadow Alignment, described above. For these reasons, it was found to be more reasonable to realign the roadway.

2.8 Required Permits and Approvals

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

Table 1. Anticipated Permits and Approvals

Approving Agency	Permit/Approval	Required for
<i>Federal Agencies</i>		
U.S. Army Corps of Engineers	Section 404 Clean Water Act permit	Discharge of fill material into Crocker Creek and unnamed drainages
Federal Highway Administration	Funding authorization; NEPA compliance	Federal Lands Access Program; NEPA
Forest Service – Plumas National Forest	NEPA compliance; project authorization	Work on National Forest System lands; NEPA
<i>State Agencies</i>		
California Department of Forestry and Fire Protection	ROW Exemption (Section 1104.1 of the Forest Practice Act)	Removal and sale of commercial tree species on timberland within a public ROW
California Department of Transportation	Encroachment Permit	Work within the ROW of SR 70
California Department of Fish and Wildlife	Easement across land	Realignment of road across State-managed lands
	Section 1602 Fish and Game Code Streambed Alteration Agreement	Impacts to streams and associated riparian vegetation on non-federal lands
Regional Water Quality Control Board	Coverage under the General Construction Activity Storm Water Permit (Section 402 of the Clean Water Act, 40 CFR Part 122)	Stormwater discharges associated with construction activity for greater than 1 acre of land disturbance
	Water Quality Certification	Compliance with Section 401 of the Clean Water Act
<i>Local Agencies/Others</i>		
Northern Sierra Air Quality Management District	Dust Control Plan approval	Compliance with Rule 226 (Dust Control) for soil disturbance greater than 1 acre
Plumas County	Project approval; CEQA compliance	
Private Landowner	Easement	Temporary construction easement through private land to accommodate realignments

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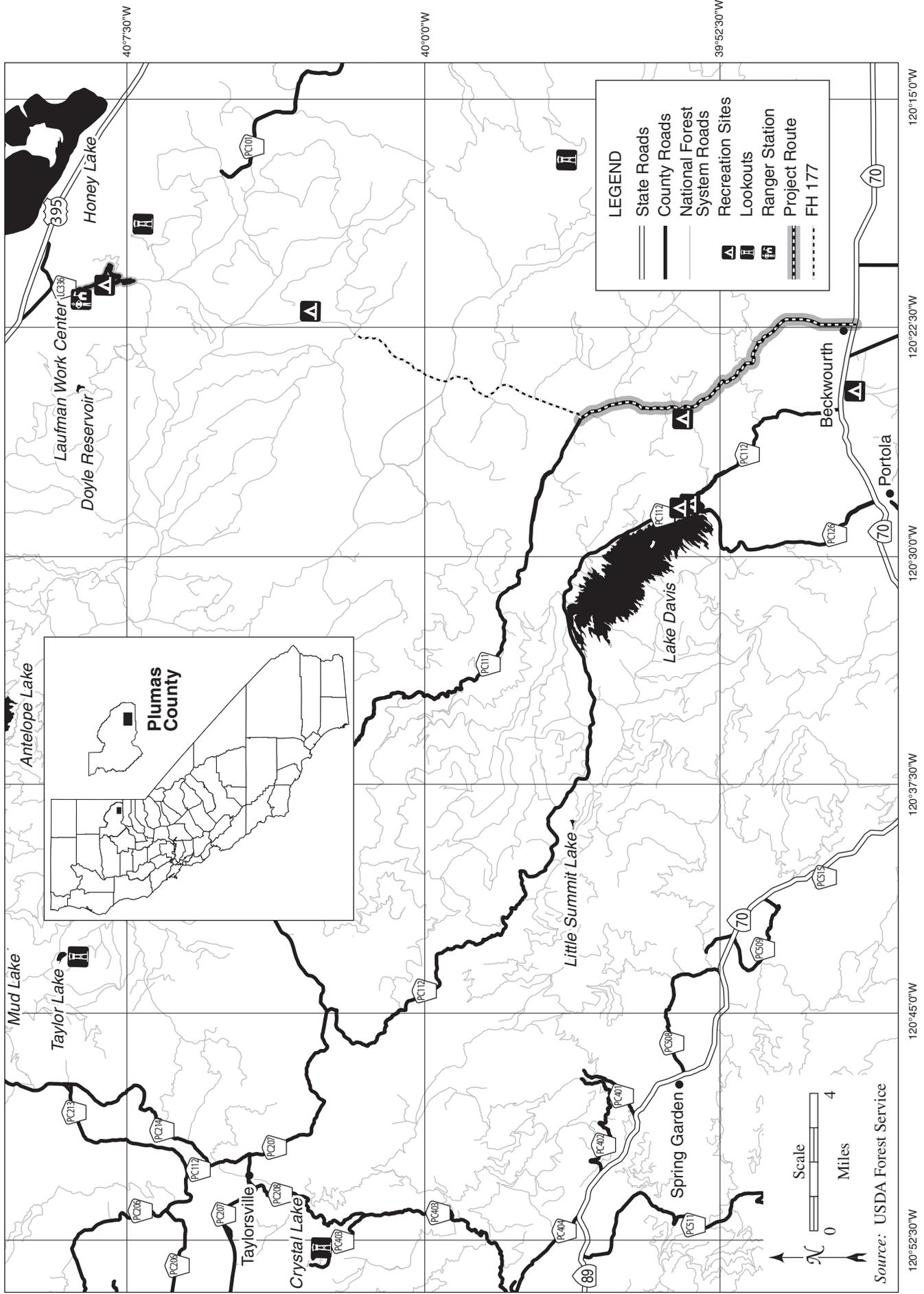
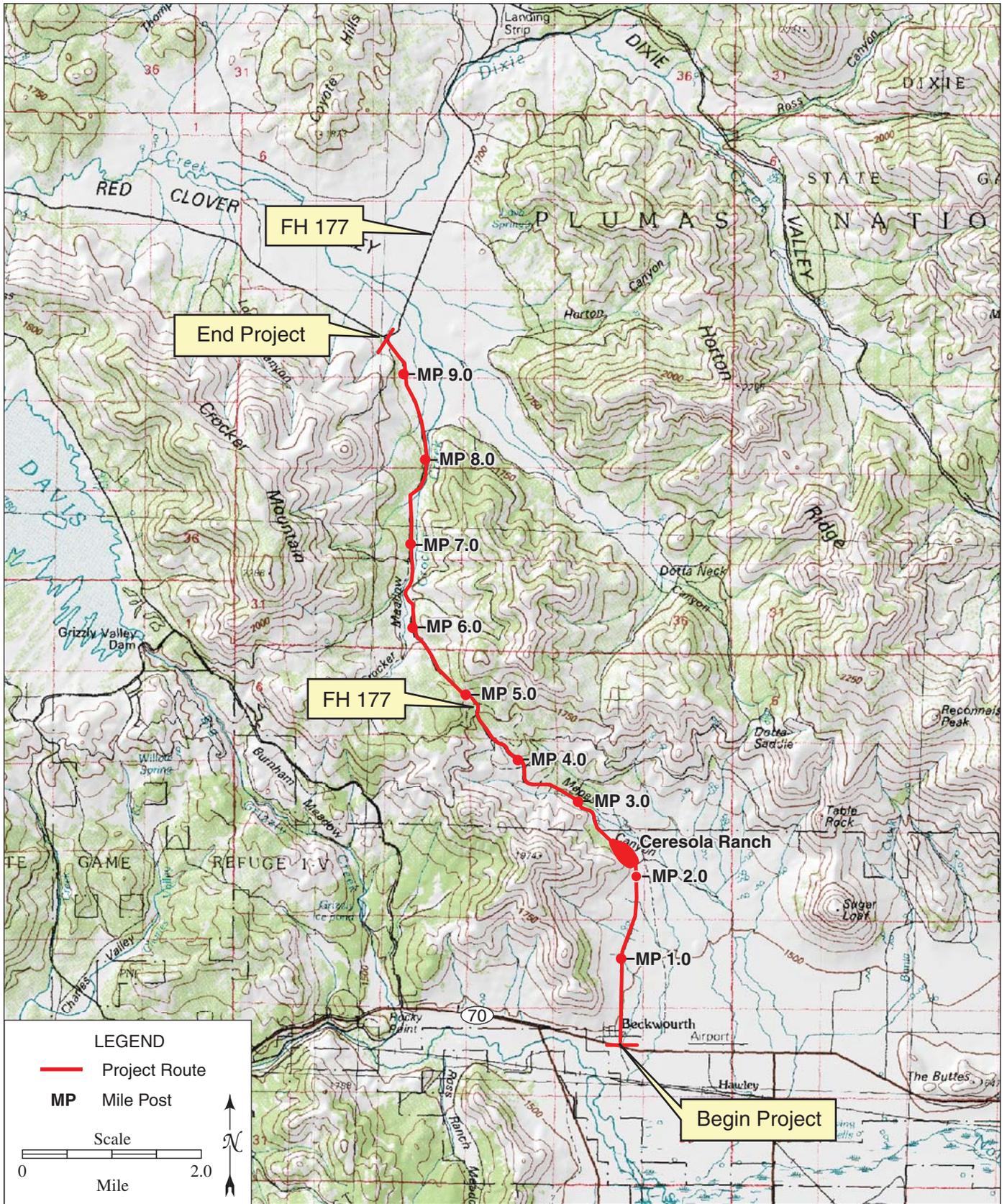


Figure 1. Vicinity Map

Source: SAIC 2007b



Source: SAIC 2007b

Figure 2. Proposed Project Location

3 Initial Study Checklist

3.1 Introduction

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

Addressed in this section are the following 17 environmental categories:

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

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

- **No Impact:** No impact to the environment would occur as a result of implementing the proposed project.
- **Less-than-Significant Impact:** Implementation of the proposed project would not result in a substantial and adverse change to the environment and no mitigation is required.
- **Less than Significant With Mitigation Incorporated:** A “significant” impact that can be reduced to a less-than-significant level with the incorporation of project-specific mitigation measures.
- **Potentially Significant Impact:** Implementation of the proposed project could result in an impact that has a “substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project” (CEQA Guidelines Section 15382).

3.2 Environmental Setting, Impacts, and Mitigation Measures

	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
I. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially 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) Substantially 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 substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

FH 177 (also referred to as Beckwourth-Genesee Road) is classified as a “scenic road” in the Plumas County General Plan; “scenic roads” provide important access to views of near or distant scenic areas (Plumas County 2013). FH 177 is not designated as a state scenic highway and is not within view of a designated state scenic highway (Caltrans 2011). FH 177 traverses a variety of important scenic resources, including undulating topography, extensive mixed conifer forest habitat, open grassland areas, and scrub habitats. Crocker Creek runs adjacent to and crosses the roadway at one location (MP 6.6). The views of contiguous natural areas along this travel corridor are important visual resources.

Northbound travelers along FH 177 experience prominent foreground views of Jeffrey pine forest, open grassland habitat, and scrub habitat. As motorists approach the divide between Mapes Canyon and Crocker Canyon, foreground vistas of wetland and riparian habitat are unobstructed. Prominent background views of the foothills and steeper slopes of Horton Ridge and Crocker Mountain are experienced from FH 177. These lands provide a visually important background to the project area. In summary, existing views from the FH 177 and surrounding lands contain several important visual attributes: expansive Jeffrey pine forests, open grasslands, and Crocker Mountain, with the distant Horton Ridge serving as a background. The undeveloped forest lands visible from FH 177 are the dominant visual characteristic. The combination of these features visible from several public vantage points enhances the visual quality surrounding FH 177.

Travelers along SR 70 may have brief views of construction activities along FH 177 in Segment 1, but most views would be screened by intervening development in Beckwourth. Several residences in Beckwourth would have views of the project area, though some views would be blocked by development in Beckwourth. Likewise, construction activities would be visible to motorists and Ceresola Ranch residents, although some views would be blocked by the existing ranch buildings.

Discussion of Impacts

- a, c) ***Less than Significant Impact.*** In Segment 1, the proposed road improvements would take place within the existing right-of-way and would not substantially alter the visual character of the highway. Construction activities would be temporarily visible to motorists traveling along FH 177 and to nearby Beckwourth residents, but the improved road would be similar to the current road and would not change views of or from the roadway.

In Segment 2, the realignment of the highway east of the Ceresola Ranch would involve extensive vegetation removal and grading in a previously undisturbed area. However, construction activities would be temporary and disturbed areas within the construction corridor would be revegetated after completion. In addition, the new road would not necessarily be visible from these locations, although it may look like an open corridor. Permanent views along the realigned portion of the road would be similar to existing views; however, they would consist of slightly different resources, including the eastern side of the ranch structures and operations, as well as the more natural views of Jeffrey pine forest, open grassland habitat, and scrub habitat set against the foothills to the east.

In Segment 3, the proposed improvements would include minor realignment, curve widening, vegetation clearing, and drainage improvements and would result in minimal changes to the overall visual character of the highway and surrounding area. Construction activities would be temporarily visible to motorists, and the removal of trees within 7 to 10 feet of the roadway to improve the sight distance and meet design standard clear zone safety requirements would degrade the foreground view along the highway. Although trees would be removed in the right-of-way, the dense forest habitat along this segment would help retain the overall visual character of the area surrounding the highway and the road improvements would not substantially affect the surrounding viewshed or alter more distant views from the roadway.

While the proposed project would temporarily alter views of and from the project area during construction activities, it would not substantially alter permanent views of or from the roadway. Views are expected to remain similar to current conditions and would not obstruct the expansive views of open grasslands, scrub habitat, and Jeffrey pine forests set against the backdrop of the foothills of the Horton Ridge and Crocker Mountain from residences in the vicinity or motorists along FH 177 or SR 70.

- b) ***No Impact.*** The proposed project would not affect scenic resources within a state scenic highway because none of the roads in the project vicinity are designated by the state as a scenic highway.
- d) ***Less than Significant Impact.*** The project would not include installation of any lighting fixtures or include design components that would create additional daytime glare. All construction activities would occur during the daytime; therefore, lighting fixtures would not be required to illuminate proposed roadway improvements. The project would create new sources of light during the night from vehicles traveling along the realigned portion of FH 177 from MP 1.7 to 2.5. No residences are present in this area, and the new source of light would not significantly affect the views of residences at Ceresola Ranch because light would be partially

screened by intervening vegetation and the direction in which vehicles would be traveling would not direct light towards the residences.

II. AGRICULTURAL AND FOREST RESOURCES — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<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, or cause rezoning of, forest land (as defined by Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

No important farmland has been mapped in Plumas County by the Farmland Mapping and Monitoring Program. Land on the Ceresola Ranch property is considered farmland of local importance because it is designated as Agricultural Preserve by the County. The land is currently used for grazing. Land in the northern portion of the project area, in Sections 21 and 16 of Township 24N, Range 14E, is currently under a Williamson Act contract (California Department of Conservation 2013a). This land is currently used for grazing.

Adjacent and nearby lands on the PNF contain forests that may be used for forestry practices or subject to periodic vegetation management. The County has designated these lands as Timber Resource Land in the general plan (Plumas County 2013). In addition, the majority of these lands are zoned as General Forest, with a small portion zoned as Timber Production (Plumas County 2012). The PNF LRMP designates some lands in the vicinity of the project area as having a timber emphasis (USFS 1988).

Discussion of Impacts

- a) **No Impact.** The proposed project would not affect any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

- b) **No Impact.** The proposed project would involve road improvements on lands under Williamson Act contract, but these improvements are not expected to convert any land to non-agricultural use. FH 177 presently goes through these lands and the overall use of the land would not change because of the project. In addition, there is a setback fence separating the current roadway from the grazing lands that would not have to be moved.
- c, d) **Less than Significant Impact.** Although the project would convert a small amount of forest lands to non-forest use, it would not conflict with the current zoning designations or cause rezoning of those lands. Approximately 30 acres of vegetation on PNF land would be removed. This action would involve cutting and removing large trees, some of which are merchantable timber, to realign and widen the road. The PNF and CDFW would be reimbursed for the value of timber removed. FH 177 presently goes through these forest lands and the overall use of the land would not change because of the project. As the amount of forest land to be converted would be relatively small and the use of the land would not change, the impacts would be less than significant.

In addition, the road improvements made to FH 177 could allow for increases in future timber production in the vicinity of the project area, which could be a beneficial effect. The improved road would allow for greater access to timberlands, which in turn could lead to increases in active timber production on those lands.

- e) **Less than Significant Impact.** A section of FH 177 between MP 1.8 and 2.5 through the Ceresola Ranch would be realigned to the east across the meadow pastureland. This alignment would convert approximately 3 acres of rangeland to the newly constructed roadway and its associated right-of-way. Relocation of the existing road corridor is not expected to interfere with cattle grazing activities, although the overall available land would be decreased. Suitable fencing would be provided to ensure no conflicts exist with the roadway and grazing cattle. The old roadbed has the potential to be restored or left in place after it is transferred back to the private property owner. If the roadbed is restored, it may allow the roadbed alignment to be used for ranch operations.

III. AIR QUALITY — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

III. AIR QUALITY — Would the project:

- e) Create objectionable odors affecting a substantial number of people?

<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Plumas County is in the Mountain Counties Air Basin, and air quality is regulated by the Northern Sierra Air Quality Management District. The county has generally good air quality, but air pollutants from the Sacramento region, and to a lesser extent the San Francisco Bay Area, are occasionally transported into the county during strong northerly winds. Wildfires also create a source of smoke and poor air quality, primarily during the summer months. The primary air pollutant of concern in Plumas County is particulate matter (PM₁₀ and PM_{2.5}).

The state established California ambient air quality standards for 10 criteria pollutants. The California Air Resources Board is tasked with assigning area designations based on available air quality data and the California standards. The California standards are more stringent than the national ambient air quality standards established by the U.S. Environmental Protection Agency, which also classifies areas as attainment, nonattainment, or unclassified based on the national standards. The state has classified Plumas County as nonattainment for respirable particulate matter (PM₁₀) and as attainment or unclassified for other California standards. The County is in attainment for all national standards. The primary sources of pollutants contributing to the nonattainment designation for PM₁₀ are wood stoves, wind-blown dust from dirt roads and ground-disturbing activities, and burning or combustion of fuels. Ozone is also a concern, but the levels of pollutants that create ozone are below ambient air quality standards. Carbon monoxide (CO) is a pollutant of concern at the local level in areas of heavier vehicle traffic. In the project area, the primary sources of air pollution are vehicle traffic and wind-blown dust. Adjacent sources of air pollution could include ranch operations and domestic sources such as fireplaces.

Sensitive receptors include people who have a high sensitivity to air pollution, especially children, seniors, and sick persons. Locations of sensitive receptors can include residences, hospitals, and schools. There are multiple residences in the town of Beckwourth on the western side of FH 177, as well as south of the intersection of FH 177 and SR 70. Ceresola Ranch also contains several residences. In addition, there are five schools and one hospital within 5 miles of the southern end of the project area (MP 0.0).

Naturally occurring asbestos is a concern in Plumas County because it is known to be present in certain soils and can pose a health risk if released into the air. The County General Plan identifies those areas with potential to contain asbestos in soils (Plumas County 2013). Ground disturbance activities within these areas are subject to additional regulatory requirements to minimize human exposure potential. Soils in the project area do not have potential to contain naturally occurring asbestos.

Discussion of Impacts

a, b) ***Less than Significant with Mitigation Incorporated.*** Construction activities would result in short-term increases in fugitive dust (PM₁₀ and PM_{2.5}) and other emissions from the following: use of heavy equipment that generates dust, exhaust, and tire-wear emissions; soil disturbance; materials used in construction; and construction traffic. The PM₁₀ and ozone precursor emissions could contribute to regional or local violations of air quality standards and adversely affect sensitive receptors (e.g., residents) in nearby areas. Most construction-related emissions would be expected to remain localized around the project area and dissipate within the immediate vicinity, based on the surrounding topography and vegetation. However, some emissions could be carried further from the project area and affect regional air quality, despite their temporary nature. Construction-related air quality impacts could be significant. Implementation of Mitigation Measure AQ-1 would ensure compliance with Northern Sierra Air Quality Management District rules for visible emissions (Rule 202), nuisance (Rule 205), dust control (Rule 226), and cutback and emulsified asphalt paving materials (Rule 227) and with FHWA Standard Specification Section 158 Guidelines. A dust control plan will be submitted to the air district in accordance with Rule 226, and all measures in the plan will be implemented during construction, reducing impacts to a less-than-significant level. With implementation of the measure, the project would be consistent with applicable air quality plans in the area and would not affect air quality planning.

The improved road would not be designed to increase traffic along FH 177; instead, it would improve safety conditions for travelers using the road. Use of the road would remain the same, and traffic would not be expected to increase as a result of the improvements. Long-term emissions from traffic using FH 177 would be similar to current conditions and would not increase as a result of the proposed project.

Mitigation Measure AQ-1: Implement air pollution and dust control measures.

Air pollution and dust control will conform to FHWA Standard Specification Section 158 Guidelines for dust control during construction operations and Northern Sierra Air Quality Management District rules for visible emissions (Rule 202), nuisance (Rule 205), dust control (Rule 226), and cutback and emulsified asphalt paving materials (Rule 227). The contractor will be required to implement a dust control program to limit fugitive dust emissions and submit a dust control plan to the air district.

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

- Cover trucks hauling soil and other loose material or maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer) pursuant to California Vehicle Code (Section 23114) and air district Rule 226.
- When the highway is not open to public traffic, control dust near inhabited residences or places of business.

- Use water or other dust suppressants to control dust within the construction limits at all hours when the highway is open to public traffic.
 - Use water or other dust suppressants on active haul roads, material stockpiles, pits, staging areas, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.
 - Clean (sweep or wash with water) equipment used on unpaved surfaces prior to entering SR 70 or other paved roads to prevent tracking materials onto the highway.
 - Minimize idling time of vehicles and equipment and shut off equipment when not in use pursuant to California Code of Regulations (Title 13, sections 2449(d)(3) and 2485).
 - Maintain construction equipment in proper working condition according to manufacturer's specifications, and check it daily to ensure it is in proper running condition before it is operated.
- c) ***Less than Significant Impact.*** As discussed under items a and b above, the project would result in minor construction-related emissions. It would not result in a cumulatively considerable net increase of any criteria pollutant. The project would cause short-term air quality impacts in the vicinity of the project area as a result of construction activities; however, it would not result in long-term or cumulatively considerable increases in air pollutant emissions for which Plumas County is currently in nonattainment (PM₁₀). Paving of the entire roadway in the project area would also reduce long-term fugitive dust emissions from vehicles using the highway and reduce the potential for soil erosion, particularly in areas where the roadway is currently an unpaved gravel surface. The temporary increase in air pollutant emissions associated with construction activities would result in less-than-significant contributions to cumulative pollutant levels in the region.
- d) ***Less than Significant Impact.*** Sensitive receptors near Beckwourth and Ceresola Ranch could be exposed to temporary air pollutants from construction activities such as fugitive dust, CO, and ozone precursors. However, construction activities would be temporary, lasting no more than 2 years, and emissions would not be substantial with implementation of air pollution and dust control measures (Section 2.5). Compliance with air district rules would also ensure that construction activities do not create major dust or exhaust plumes. With the minor and temporary nature of emissions, sensitive receptors would not be exposed to substantial pollutant concentrations.
- e) ***Less than Significant Impact.*** Construction activities would involve the use of gasoline or diesel-powered equipment that emits exhaust fumes and asphalt paving, which has a distinctive odor during application. These activities would take place intermittently throughout the workday, and the associated odors are expected to dissipate within the immediate vicinity of the work area. Persons near the construction work area may find these odors objectionable. However, the limited number of receptors, infrequency of the emissions, rapid dissipation of the exhaust into the air, and short-term nature of the construction activities would result in less-than-significant odor impacts.

IV. BIOLOGICAL RESOURCES — Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The most common plant community within and adjacent to the project area is Jeffrey pine (*Pinus jeffreyi*) dominated forest with smaller areas of sagebrush scrub (dominated by Great Basin sagebrush [*Artemisia tridentata*]), mixed chaparral, open grasslands, mesic swales and herbaceous wetlands, and riparian habitat generally associated with Crocker Creek and its tributaries.

Crocker Creek, a perennial stream, flows north through the project area and crosses FH 177 at a concrete stream crossing. The creek continues north and east of the project area to the North Fork Feather River. The creek supports a riparian corridor ranging from 50 to 100 feet wide that generally includes an overstory of willows interspersed with herbaceous emergent vegetation dominated by rushes, sedges, and other wetland plant species. Crocker Creek and other smaller features including natural intermittent drainages, seeps, and man-made holding ponds are waters of the United States. These features and the riparian habitats associated with Crocker Creek are described in more detail in the Wetland Delineation Report for this project (SAIC 2007j).

Riparian areas are typically associated with streams and include areas dominated by shrubby willows (riparian scrub) or trees, such as cottonwoods (riparian forest or individual trees). In the project area, all areas that supported willows or cottonwoods were mapped as riparian habitat. This habitat is found in several locations, with the greatest amount associated with Crocker Creek.

The vegetation communities in and near the project area provide habitat for a diversity of plant and wildlife species, including several special-status species. The potential for a species to occur in or near the project area was initially assessed by FHWA in the biological assessment/biological evaluation for the proposed project (SAIC 2007b) and updated in the EA based on a subsequent field review in 2010 (FHWA 2012). The list of species considered in that document was supplemented with other species typically considered in CEQA documents (e.g., state species of concern, rare plants) and updated using queries of U.S. Fish and Wildlife Service (USFWS) records, the California Natural Diversity Database (CNDDDB), and California Native Plant Society (CNPS) records for the *Reconnaissance Peak*, *Portola*, and *Crocker Mountain* U.S. Geological Survey (USGS) quadrangles. Special-status wildlife species that may use the habitats in the project area or vicinity are outlined in Table 2. Special-status plant species that may occur in the project area or vicinity are outlined in Table 3.

Raptors, including hawks and falcons, are birds of prey legally protected under the Migratory Bird Treaty Act, as amended, as well as several other statutes, executive orders, and federal agency policies. Several raptor species were observed in the area during spring and summer surveys conducted by SAIC (2007b), including red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chrysaetos*), American kestrel (*Falco sparverius*), and northern harrier (*Circus cyaneus*). Each of these species is commonly associated with the habitats in the project area and may forage and nest in the general vicinity. Other species that are commonly found in Jeffrey pine-dominated woodlands at this altitude include bald eagle (*Haliaeetus leucocephalus*), merlin (*Falco columbarius*), sharp-shinned hawk (*Accipiter striatus*), and Cooper’s hawk (*Accipiter cooperii*).

Table 2: Special-Status Animal Species with Potential to Occur in or near the Project Area

Scientific Name	Common Name	Status (Fed/State/ Forest Service)	Potential to Occur in Project Area ¹
<i>Hypomesus transpacificus</i>	Delta smelt	T/E/-	NO
<i>Oncorhynchus tshawytscha</i>	Central Valley spring-run chinook salmon	T/T/-	NO
<i>Oncorhynchus tshawytscha</i>	Winter-run chinook salmon, Sacramento River	E/E/-	NO
<i>Rana muscosa</i>	Mountain yellow-legged frog	C/CE, SSC/FSS	NO
<i>Accipiter gentilis</i>	Northern goshawk	-/SSC/FSS	YES
<i>Aquila chrysaetos</i>	Golden eagle	-/FP/-	YES
<i>Dendroica petechia</i>	Yellow warbler	-/SSC/-	YES
<i>Empidonax traillii</i>	Willow flycatcher	-/E/FSS	YES
<i>Grus canadensis tabida</i>	Greater sandhill crane	-/T, FP/FSS	NO

Table 2: Special-Status Animal Species with Potential to Occur in or near the Project Area

Scientific Name	Common Name	Status (Fed/State/ Forest Service)	Potential to Occur in Project Area ¹
<i>Haliaeetus leucocephalus</i>	Bald eagle	-/E, FP/FSS	NO
<i>Strix nebulosa</i>	Great gray owl	-/E/FSS	NO
<i>Antrozous pallidus</i>	Pallid bat	-/SSC/FSS	YES
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	-/CT, SSC/FSS	YES
<i>Gulo gulo</i>	California wolverine	PT/T, FP/FSS	NO
<i>Lasiurus blossevillii</i>	Western red bat	-/SSC/FSS	YES
<i>Martes pennanti</i>	Fisher	C/CT, SSC/FSS	NO
<i>Taxidea taxus</i>	American badger	-/SSC/-	YES

¹ Potential for occurrence assumes the species could be present as more than just a migrant or foraging species (e.g., as a nesting or roosting species).

Notes:

FSS = Forest Service Sensitive

T = Threatened

P = Proposed

FP = Fully Protected

E = Endangered

C = Candidate

SSC = California Species of Special Concern

Table 3: Special-Status Plant Species with Potential to Occur in the Project Area

Common Name (<i>Scientific Name</i>)	Blooming Period	Status (Fed, State, RPR, Forest Service)	Potential to Occur in Project Area
Lemmon's milk-vetch (<i>Astragalus lemmonii</i>)	May-August	-/1B.2/FSS	YES
Lens-pod milk-vetch (<i>Astragalus lentiformis</i>)	May-July	-/1B.2/FSS	YES¹
Pulsifer's milk-vetch (<i>Astragalus pulsiferae</i> var. <i>pulsiferae</i>)	May-August	-/1B.2/FSS	YES
Hillman's silverscale (<i>Atriplex argentea</i> var. <i>hillmanii</i>)	June-September	-/2B.2/-	YES
Sheldon's sedge (<i>Carex sheldonii</i>)	May-August	-/2B.2/-	YES¹
Alkali hymenoxys (<i>Hymenoxys lemmonii</i>)	June-August	-/2B.2/-	YES
Sierra Valley ivesia (<i>Ivesia aperta</i> var. <i>aperta</i>)	June-September	-/1B.2/FSS	YES
Plumas ivesia (<i>Ivesia sericoleuca</i>)	May-October	-/1B.2/FSS	YES
Santa Lucia dwarf rush (<i>Juncus luciensis</i>)	April-July	-/1B.2/FSS	YES

Table 3: Special-Status Plant Species with Potential to Occur in the Project Area

Common Name (<i>Scientific Name</i>)	Blooming Period	Status (Fed, State, RPR, Forest Service)	Potential to Occur in Project Area
Sagebrush loeflingia (<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>)	April-May	-/-/2B.2/-	NO
Modoc County knotweed (<i>Polygonum polygaloides</i> <i>ssp. esotericum</i>)	May-September	-/-/1B.1/-	YES
Sticky pyrrocoma (<i>Pyrrocoma lucida</i>)	July-October	-/-/1B.2/FSS	YES
Green-flowered prince's plume (<i>Stanleya viridiflora</i>)	May-August	-/-/2B.3/-	YES

¹ Species was observed in the project area (FHWA 2012).

Notes:

RPR = California Rare Plant Rank

FSS = Forest Service Sensitive

1B. Plants rare, threatened, or endangered in California and elsewhere.

2B. Plants that are rare, threatened, or endangered in California but more common elsewhere.

xx.3 Not very endangered in California

xx.2 Fairly endangered in California

xx.1 Seriously endangered in California

Discussion of Impacts

- a) ***Less than Significant with Mitigation Incorporated.*** The proposed project could affect eight special-status animal species that may use the upland and riparian habitats in the project area, as discussed below. Twelve special-status plants could also be affected by the proposed project. The proposed project would not affect any federally listed species. FHWA, as the NEPA Lead Agency, has prepared an EA to evaluate the environmental effects of the proposed project and issued a Finding of No Significant Impact (FHWA 2012). The Forest Service is a responsible agency and will also need to comply with NEPA as part of its approval process. The FHWA EA incorporated Forest Service input on impacts to Forest Service Sensitive species.

Nesting Special-Status Birds. Construction activities in the vicinity of Crocker Creek could result in the disturbance of nesting birds, such as yellow warbler, if present in the riparian habitat during construction. Furthermore, construction activities near Crocker Creek would result in a loss of approximately 0.16 acre of Forest Service-designated “emphasis habitat” and marginally suitable nesting and foraging habitat for the willow flycatcher (SAIC 2007b). The willow flycatcher is not likely to nest in the project area, though, because of the marginal quality of the riparian habitat. Construction activities also have the potential to remove trees used by northern goshawks for perching, roosting, and nesting (SAIC 2007b). Construction activities during the nesting season for special-status birds (typically March through August) could result in the loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Activities outside this season are less likely to adversely affect the species, but they could result in birds being flushed from the area as a result of noise, equipment operations, and other

construction-related disturbance. These disturbances would constitute a significant impact. The birds would be able to use suitable habitat in surrounding areas and could return to the project area following construction (e.g., during the next nesting season). Implementation of Mitigation Measures BR-1, BR-2, and BR-3 would reduce potentially significant impacts to a less-than-significant level.

Special-Status Mammals. Suitable habitat for American badger occurs within the wooded and open habitats, including the agricultural field near Ceresola Ranch. Construction activities have the potential to temporarily displace individual badgers if they are present during construction; however, comparable habitat is available surrounding the project area and any individuals temporarily displaced would likely return to the project area when construction is completed (SAIC 2007b). A small amount of badger habitat would be removed as part of the road improvements; however, this loss of habitat is negligible and would not substantially contribute to the overall loss of habitat for the species. Project impacts to American badger would be less than significant.

Special-Status Bats. Construction activities could result in the removal of trees and snags potentially used by pallid bat, silver-haired bat, Townsend's big-eared bat, and western red bat for roosting. Foraging activities are unlikely to be affected by construction noise and increased human presence because these impacts would be temporary and construction activities would not be scheduled at dusk or in the evenings when the species are most likely feeding. Construction activities are unlikely to affect maternal roosts due to the lack of rocky outcrops, caves, or manmade structures being affected by the project. The potential loss of daytime roosts due to the removal of trees in the project area could result in a significant impact on the bats. Implementation of Mitigation Measure BR-3 would reduce this impact to less than significant.

Migratory Nesting Birds. Construction activities during the nesting season for migratory birds and raptors (typically March through August) could disrupt nesting activities and adversely affect migratory birds using habitat in or near (typically within 250 feet) the work area. Impacts would be the same as those described for special-status birds. Implementation of Mitigation Measures BR-1, BR-2, and BR-3 would reduce potentially significant impacts to a less-than-significant level.

Special-Status Plant Species. Suitable habitat for alkali hymenoxys, Lemmon's milkvetch, Pulsifer's milkvetch, Sierra Valley ivesia, Plumas ivesia, sticky goldenweed, Hillman's silverscale, Modoc County knotweed, Santa Lucia dwarf rush, Sheldon's sedge, and green-flowered prince's plume is present throughout the project area (SAIC 2007b). Although no known occurrences of these species have been reported in the project area, these plants may still be found in suitable habitat because previous surveys were not definitive for all species. The removal of sensitive plant populations or individuals could be a significant impact.

Lens-pod milkvetch is known to occur in the vicinity of the project area and was identified during the SAIC (2007b) surveys within the project area. The road improvements could remove individuals of this species, which would be a significant impact.

The project has the potential to significantly affect all special-status plant species with potential to occur in project area due to habitat being present. Implementation of Mitigation Measure BR-3 would reduce possible impacts to a level considered less than significant.

Mitigation Measure BR-1: Conduct worker awareness training.

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

Mitigation Measure BR-2: Schedule construction to avoid disturbance to special-status species.

If practicable, construction activities, vegetation removal, and removal of the existing creek crossing will be scheduled to avoid the breeding season (March through August) for special-status birds, bats, migratory birds, and raptors. Due to weather constraints in Plumas County, all construction activities may not be able to avoid the breeding season for these species, and pre-construction surveys will be implemented if construction is necessary between March and August (see Mitigation Measure BR-3). If practicable, vegetation removal will be scheduled between September and February to prevent the removal of active nests, roosts, or dens.

Mitigation Measure BR-3: Conduct pre-construction surveys.

If construction activities must be scheduled between March and August, a qualified biologist will conduct a pre-construction survey within 500 feet of the work area to locate active nest, den, or roost sites of special-status birds, migratory birds, raptors, and bats. The survey should be conducted no more than 15 days prior to the initiation of construction and should be repeated if work stops for more than one week during the breeding period for these species.

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

For bats, if a maternity roost or hibernacula is present, in consultation with CDFW, a qualified biologist will determine the extent of construction-free zones around active nurseries until the mother and young have dispersed. If a non-breeding bat hibernacula is found in a tree or snag scheduled for removal, the individuals will be safely evicted, under the direction of a qualified bat biologist (as determined by a memorandum of understanding with CDFW), by opening the roosting area to allow air flow through the cavity. Removal of the tree or snag will follow no earlier than the following day (i.e., at least one night should be provided between initial disturbance for air flow and the demolition). This action will allow bats to leave the roost

during dark hours, which increases their chance of finding new roosts. Trees with roosts that require removal should first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape at night.

Before the start of project construction, a qualified biologist will conduct a pre-construction survey within potential habitat in the project area to locate the following special-status plant species: alkali hymenoxys, Lemmon's milkvetch, Pulsifer's milkvetch, Sierra Valley ivesia, Plumas ivesia, sticky goldenweed, Hillman's silverscale, Modoc County knotweed, Santa Lucia dwarf rush, Sheldon's sedge, green-flowered prince's plume, and Lens-pod milkvetch. The survey will be conducted during the appropriate blooming period of the species (generally late spring to early summer; refer to Table 3), and two visits may be needed to cover the range of blooming periods. If any special-status plant species are located within the project area, those plants would be avoided, to the extent practicable, or relocated to a suitable location outside the area of disturbance at the discretion of the Forest Service if on National Forest System lands or of CDFW if on other lands.

Mitigation Measure BR-4: Implement avoidance measures for special-status species during construction.

If American badger is encountered during construction, activities in the vicinity will cease until one or more of the following occur:

- The animal leaves the work area.
 - Appropriate corrective measures have been implemented (e.g., relocation of the animal to appropriate habitat identified by a qualified biologist, outside of the area of disturbance).
 - It has been determined that the animal will not be harmed.
- b) ***Less than Significant with Mitigation Incorporated.*** The project would affect approximately 0.38 acre of riparian habitat due to the removal of vegetation (primarily willows) (FHWA 2012). Approximately 0.16 acre of this amount would be removed in the vicinity of Crocker Creek (SAIC 2007j). The construction of the new road alignment at Ceresola Ranch would remove approximately 0.12 acre of riparian habitat (FHWA 2012). Other alignments were considered for the project, but the proposed alignment would minimize the removal of sensitive riparian areas. Other riparian habitat would be affected by the installation of culverts and other road improvements. The removal of riparian habitat would be permanent in areas where the road is widened or realigned, and no opportunities for re-establishment of riparian vegetation exist. This would be considered a significant impact. Implementation of Mitigation Measure BR-5 would ensure that impacts to riparian habitat are minimized through project design and that riparian habitat is restored to offset any permanent loss.

Mitigation Measure BR-5: Minimize and compensate for riparian vegetation impacts.

The FHWA will design the road improvements to minimize impacts to riparian areas and will identify methods to restore or revegetate riparian areas following construction. Methods for protecting topsoil, salvaging vegetation, replanting riparian vegetation, and monitoring restored

areas will be identified in the wetland mitigation plan (see Mitigation Measure BR-6). Implementation of the wetland mitigation plan will be the responsibility of FHWA. In addition, if determined necessary by CDFW, FHWA or its contractor will enter into a Streambed Alteration Agreement pursuant to Section 1602 of the Fish and Game Code for impacts to streams and their associated riparian areas. The wetland mitigation plan will be submitted to CDFW as part of the notification process for its review and approval.

- c) ***Less than Significant with Mitigation Incorporated.*** The project would affect up to approximately 0.611 acre of wetlands that are under the jurisdiction of the U.S. Army Corps of Engineers (FHWA 2012). Approximately 0.257 acre of wetlands associated with Crocker Creek would be affected by construction of the new bridge and widening of the roadway (SAIC 2007j). The construction of the new road alignment at Ceresola Ranch would affect approximately 0.185 acre of wetlands (FHWA 2012). Other impacts to wetlands would be associated with road widening and realignment. The project has been designed to avoid and minimize wetlands to the greatest extent practicable. Impacts to wetlands associated with seeps may be considered temporary as the source of water would not be affected and it is likely that the wetland would re-establish naturally once construction is complete. In places where the new road is wider than the existing road, the size of the wetland may be reduced, and portions of the wetland outside the disturbance area could be indirectly affected by increased erosion and sedimentation.

The project would affect up to approximately 0.146 acre of other waters of the United States (FHWA 2012). The construction of the new road alignment at Ceresola Ranch would affect up to approximately 0.077 acre of other waters of the United States as a result of four new stream crossings (FHWA 2012). These impacts are primarily a result of culvert installation, and the culverts would maintain flow in the streams or drainages once the road is in place.

The total amount of impacts on waters of the United States (currently estimated at 0.757 acre) will be refined based on the final project design. The design will minimize the discharge of fill into the waters, to the extent practicable. Because of the potential net loss of wetlands and the discharge of fill into wetlands and other waters of the United States, impacts would be considered significant. Implementation of Mitigation Measures BR-6, BR-7, BR-8, and BR-9 would reduce these impacts to a less-than-significant level.

Mitigation Measure BR-6: Comply with terms of a Section 404 permit.

The FHWA will apply for a Section 404 permit from the U.S. Army Corps of Engineers for project components that would result in the discharge of fill material into waters of the United States, such as road fill, culverts, and bridge abutments. FHWA will comply with all terms and conditions of the 404 permit. A wetland mitigation plan will be developed and, as noted in the EA (FHWA 2012), permanent losses of wetlands will be mitigated in coordination with the Corps. Mitigation for the loss of wetlands and other waters may be achieved through purchasing credits (1:1 acreage ratio) at a Corps-approved mitigation bank or by payment of in-lieu fees to a Corps-approved in-lieu fee program (according to current fee schedule). Documentation of payment shall be submitted to the Corps.

Mitigation Measure BR-7: Schedule work in waterways outside the wet season.

The FHWA or its contractor will schedule all work in waterways during periods of low-flow or no-flow (about June through October), as practicable, as noted in the EA (FHWA 2012).

Mitigation Measure BR-8: Minimize impacts to waters of the United States.

To minimize impacts to waters of the United States adjacent to the roadway during construction, the contractor will be required to implement the following measures, as noted in the EA (FHWA 2012):

- Erosion control measures, such as silt fencing or sediment logs, will be erected and maintained during construction in all locations where wetlands are found within 16 feet of the toe of slope.
- Appropriate erosion and sedimentation control will be applied on cut or fill slopes disturbed by construction. An erosion control seed mix must be approved by the Forest Service prior to use.
- Construction equipment, employee parking, and materials staging areas will be restricted to the existing roadway or specially designated areas away from wetland areas. Machinery servicing and refueling areas will be located away from streambeds and wetlands to reduce the possibility and minimize the impacts of accidental spills or discharges.

Mitigation Measure BR-9: Implement stream bank stabilization measures.

The contractor will ensure that banks of stream channels do not have the potential to become destabilized and slough off into streams, as noted in the EA (FHWA 2012). Most of the streams and drainages in the project area do not have steep banks, but in areas with steeper slopes, this measure may include the installation of retaining walls or other permanent mechanical erosion control methods since temporary structures, such as silt fencing, require periodic replacement. Temporary structures would be appropriate during construction and in seeded or revegetated areas until vegetation can become established.

- d) ***Less than Significant Impact.*** Road improvements and realignments could affect long-term movement corridors of wildlife (specifically deer) in the proximity of FH 177. Fencing would be installed on either side of the realigned highway and could have the potential to affect deer movement. The fencing would be designed to be deer-friendly and allow deer movement across the roadway in accordance with CDFW requirements (see Mitigation Measure LUP-1), and the impact would be less than significant. In addition, repaving and realignment may result in minor increased traffic on FH 177; however, any increase in traffic would be negligible and would not substantially increase the risk to migrating wildlife. Therefore, the project would not substantially increase the potential for interference with wildlife migration routes.
- e, f) ***No Impact.*** The proposed project would be consistent with the Plumas County General Plan and would not conflict with local policies or ordinances protecting biological resources. No

habitat conservation plans or natural community conservation plans have been adopted for the region.

V. CULTURAL RESOURCES — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Cause a substantial 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 a substantial 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"/>

Environmental Setting

Prehistory, Ethnography, and History

Northern Sierra Valley is located at the boundary of the ethnographic territory of the Mountain or Northeastern Maidu and the Washoe. The Mountain Maidu were present throughout what is today Plumas County and sections of Lassen County as well. They had a robust population in Genesee Valley and traveled frequently to the southeast into the Squaw Queen and Red Clover Valley areas for generations. The Washoe people occupied a large area, including much of the western Great Basin and into the central and northeastern Sierra Nevada.

At the beginning of the California Gold Rush, lands of the Washoe and Maidu were overrun by gold seekers and emigrants. Several of the early visitors were impressed with what they saw and, by 1851, permanent settlements were present in American Valley, Indian Valley, and elsewhere. A number of large ranches were well established in the area by the end of the decade. During the early 1850s, ranchers provided hay, butter, and beef to the mines in Sierra County. In the 1860s the demand for dairy products rose dramatically, and ranchers and farmers responded by providing great quantities of agricultural exports to the surrounding areas. Because Plumas County products were widely exported (even reaching San Francisco), the farmers and ranchers of eastern Plumas County sought to improve roads to support freighting and business in general. Transportation was a constant limiting factor. Sometime in the mid-1860s the early trail between the Sierra Valley and Red Clover Valley was upgraded to a wagon road. Then in the late 1860s, a wagon road from the Red Clover Valley was completed to the Genesee Valley, which was already connected to the Indian Valley by a good road. This allowed ranchers and farmers to move their goods more readily to markets within and outside of Plumas County.

By the early 1900s, the automobile was the up and coming mode of transportation. Beginning in 1900, roads were used to transport timber. Around 1910, the Marsh Lumber Company constructed a

narrow gauge railroad that ran alongside portions of the old road between Mapes Ranch and the south end of Red Clover Valley. The road saw even more substantial use during railroad logging operations for the Clover Valley Lumber Company in the 1920s and beyond. The company's employees and families used the road constantly. The road was, and still is, used continuously by the Forest Service, ranchers, and stockmen as well as by the public for recreation.

Documented Cultural Resources

A total of seven cultural resource sites and one isolated find have been recorded within the project area (Table 4), and six other cultural resources have been documented in the vicinity. Five of the cultural resources in the project area have been identified as eligible for listing on the National Register of Historic Places (NRHP) (SAIC 2009). These resources are also assumed to be eligible for listing on the California Register of Historical Resources (CRHR).

Although FH 177 crosses through the Ceresola Ranch, the structures that make the ranch eligible for listing on the NRHP are outside the project area. The Beckwourth Emigrant Trail follows FH 177 through the project area. This trail is a segment of the California National Historical Trail, which was established by Congress in 1992 as part of the National Trails System Act. No remaining visible remnants of the trail exist within the roadway right-of-way; any remnants were likely destroyed by construction of the Beckwourth-Genesee Road (FH 177). The FHWA completed consultation with the California State Historic Preservation Officer pursuant to Section 106 of the National Historic Preservation Act in December 2011. Documentation of the correspondence can be found with the EA prepared for this project (FHWA 2012).

Table 4. Cultural Resources Documented in the Project Area

Site Number	Forest Service Site Number	NRHP Eligibility Criteria	Site Description
CA-PLU-1997/H	FS 05-11-51-0025	D	A large scatter of prehistoric flaked and ground stone artifacts and a historic trash dump
CA-PLU-1998/H	FS 05-11-51-0279	A, C and D	The Clover Valley Lumber Company railroad grade system that operated between 1920 and 1957
CA-PLU-2425/H	FS 05-11-51-0447	D	A scatter of prehistoric flaked stone artifacts and a historic ranch/homestead
CA-PLU-2715/H	FS 05-11-51-1111	A, C and D	The Marsh Lumber Company narrow gauge railroad that operated between ca. 1909 until approximately 1914
CA-PLU-2762/H	FS 05-11-51-877	Not Eligible	A historic trash dump
CA-PLU-2763/H	FS 05-11-51-0878	D	The Horton Brothers Lumber Company mill that operated between ca. 1890 and 1903
CA-PLU-2778/H	FS 05-11-51-0617	Not Eligible	A scatter of seven prehistoric flaked stone artifacts and the historic "Pappas Camp," a railroad logging camp
No trinomial assigned	FS 05-11-51-0873 and FS 05-11-52-0223	Segments within APE Not Eligible	Historic Beckwourth-Genesee Road

Discussion of Impacts

- a, b) ***Less than Significant with Mitigation Incorporated.*** The proposed project would result in ground disturbance in five cultural resources sites eligible for listing on the NRHP and CRHR and could result in significant impacts on the resources. Other documented cultural resources may also be affected by construction activities; however, these resources were determined not to be eligible for listing and the impacts would not be significant. Because of the presence of documented cultural resources in the APE, the potential for buried resources is high, and previously undiscovered resources could also be affected during construction of the road improvements. The anticipated impacts to each of the eligible sites are described below.

Multi-Component Site (CA-PLU-1997/H)

Ground disturbance in a portion of the multi-component site could affect approximately a 1,615-square-foot area that contains intact archaeological deposits (SAIC 2009). Other disturbance within the site is not expected to affect buried cultural deposits. These impacts would affect a portion of the site and could affect its eligibility for listing.

Clover Valley Lumber Company Railroad (CA-PLU-1998/H)

The proposed project would affect 16 individual segments associated with the Clover Valley Lumber Company Railroad, including 10 eligible segments and six segments determined to be non-contributing due to the loss of physical and historical integrity, primarily from having been destroyed by construction of the modern road alignment (FH 177). The 10 contributing segments are 4,282 feet long, which is about 1.5 percent of the entire 54-mile-long railroad (SAIC 2009). These impacts could affect the eligibility of this site for listing on the NRHP or CRHR.

Multi-Component Site (CA-PLU-2425/H)

The proposed project would disturb about 615 square feet of a multi-component site during construction. However, evaluative testing conducted by ERO Resources Corporation (2011) determined that the intact portion of the prehistoric site is outside of the area that would be affected by the proposed project. The project-related impacts would not be expected to affect the eligibility of this site for listing on the NRHP or CRHR.

Marsh Lumber Company Railroad (CA-PLU-2715/H)

The proposed project would disturb two segments of the Marsh Lumber Company Railroad; however, both segments were determined to be non-contributing to the overall eligibility of the railroad. The total length to be affected by the project is approximately 1,420 feet (SAIC 2009). The project-related impacts would not be expected to affect the eligibility of this site for listing on the NRHP or CRHR.

Horton Brothers Lumber Company Mill Site (CA-PLU-2763/H)

The proposed project would disturb about 1.1 acres of the Horton Brothers Lumber Company Mill Site (SAIC 2009). These impacts could affect important resources associated with the mill site and could affect its eligibility for listing on the NRHP or CRHR.

Beckwourth Emigrant Trail

Due to the fact that work in this area is confined to minor rehabilitation, any possible remnants of the Beckwourth Emigrant Trail would not be affected because work would not involve new ground disturbance in those areas. Implementation of Mitigation Measure CR-1 would ensure that construction activities do not disturb remnants of the trail.

The proposed project would result in ground disturbance in three cultural resources sites eligible for listing on the NRHP and CRHR and could affect other previously undiscovered resources, which could result in significant impacts on cultural resources. Impacts on two other sites eligible for listing would not be expected to affect the sites' eligibility and would be less than significant. Mitigation Measures CR-1, CR-2, and CR-3 would be implemented in order to reduce impacts to less-than-significant levels.

Mitigation Measure CR-1: Implement a Historic Properties Treatment Plan.

In accordance with the Memorandum of Agreement (MOA) between the Federal Highway Administration Central Federal Lands Highway Division, the USDA Forest Service, Plumas National Forest, and the California State Historic Preservation Officer, FHWA will implement the Historic Properties Treatment Plan, California Forest Highway 17–Beckwourth to Clover Valley, CA-PLU-1997, CA-PLU-1998, CA-PLU-2763, Plumas County, California, February 2012 for the proposed project. Avoidance measures have and will continue to be incorporated into the design of the project. Mitigation will include historical research and interpretative signs for historic sites and data recovery at archaeological sites. FHWA will implement the measures as outlined in the signed MOA for the project.

Mitigation Measure CR-2: Avoid impacts to the Beckwourth Emigrant Trail.

To ensure no impacts occur to the adjacent Beckwourth Emigrant Trail, all work in the vicinity of the trail will be restricted to the existing roadway prism. If any new ground disturbance is necessary along the trail, a historical archaeological monitor meeting the Secretary of the Interior's Standards for Historic Archeology will be present during ground-disturbing activities. If resources associated with the trail are exposed, all work in the vicinity will stop and the archaeological monitor will assess the resources and consult with FHWA and the Forest Service (if on National Forest System land) to determine the need for measures to protect or recover the resources in accordance with the Historic Properties Treatment Plan for the project. Appropriate measures will be implemented prior to resuming ground-disturbing activities in the area.

Mitigation Measure CR-3: Implement measures to avoid disturbance to undocumented cultural resources.

If FHWA determines during implementation of the Historical Property Treatment Plan or after construction of the project has commenced that either the implementation of the plan or the project will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, FHWA will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3). FHWA at its discretion may, hereunder and pursuant to 36 CFR § 800.13(c), assume any discovered property to be eligible for inclusion in the National Register.

- c) ***No Impact.*** Paleontological resources that have been found in Plumas County include various radiolaria associated with limestone deposits and cherts and various plants associated with Tertiary period deposits (Durrell 1987, University of California Museum of Paleontology 2012). The ground disturbance caused by the project would mostly occur in previously disturbed areas and would not be expected to disturb paleontological resources. No unique geologic features are present in the APE.
- d) ***Less than Significant with Mitigation Incorporated.*** Although the majority of the project area has been previously disturbed, there is undisturbed land in the road realignment east of Ceresola Ranch. Based on the prehistoric and historic uses of the area, human remains are not expected to be affected by construction activities (SAIC 2009). However, ground-disturbing activities could expose previously undiscovered remains, particularly in the undisturbed area of the realignment, and result in significant impacts if the remains are human. Implementation of Mitigation Measure CR-4 would help ensure that any potential impacts on human remains are less than significant.

Mitigation Measure CR-4: Implement measures to avoid disturbance of human remains.

In the event that human remains are encountered during the archaeological fieldwork stipulated in the Historic Properties Treatment Plan, fieldwork will proceed according to the following protocol:

- The unit bearing the remains will be secured and the discovery will remain unexcavated until consultation occurs with the FHWA, the State Historic Preservation Officer, PNF, and consulting Tribes.
- Human remains and associated funerary items will be removed according to the provisions agreed upon during consultation. Because of logistical issues, any excavated remains will be temporarily housed with the PNF until outside analyses occur, if any, and during the period following analysis and before reburial.
- Consultation will determine the nature and extent of any analysis to be performed on human remains prior to internment under the Native American Graves Protection and Repatriation Act. Minimum analysis includes the determination of age and gender. Additional analyses may include various methods that determine general health conditions at the time of death.

VI. GEOLOGY AND SOILS — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
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?	<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 type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on strata or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

Environmental Setting

FH 177 lies along the western edge of the Basin and Range Province at the edge of the Sierra Nevada (Alt and Hyndman 2000 as cited in FHWA 2012). Quaternary lake deposits and alluvium underlie the project area just north of the town of Beckwourth to about MP 2.2 (Burnett and Jennings 1962 as cited in FHWA 2012). The hillside to the west of FH 177 in the project area consists of Mesozoic granitic rocks (granite, granodiorite) and Tertiary volcanics, which formed andesite, basalt, and pyroclastic rocks that are highly variable both laterally and vertically and underlie portions of the project area. The meadow northeast of Ceresola Ranch consists of alluvium deposited from the adjacent creek. Granitic and volcanic rocks are present between MP 2.5 and MP 5.0, and Miocene volcanics in the form of pyroclastic rocks are found to about MP 8.0. At the northern end of the project area between about MP 8.0 and MP 9.7 Quaternary lake deposits of Clover Valley, consisting of sands, silts, and clays, are encountered.

The Beckwourth area is traversed by many old faults that are no longer active, including two major faults that trend northwest to southeast and dip slightly to the east. The Grizzly Valley Fault trace dissects FH 177, and the Hot Springs Fault trace parallels the Grizzly Valley Fault about 1 mile southwest of the project area. Seismic activity in the Beckwourth–Clover Valley area comes from the Mohawk-Honey Lake Zone, rather than a specific fault. This right lateral strike slip fault zone is considered a “C-Zone Fault” by the California Geologic Survey (2002 as cited by Henwood 2012) and is described as a distributed dextral shear zone carried from Western Nevada with a maximum earthquake magnitude of 7.3. The nearest active fault is the Honey Lake right lateral strike slip fault, approximately 20 miles northwest of the project area. This fault is a “B-Zone Fault” with a maximum earthquake magnitude of 6.9.

Most of the project area is underlain by unconsolidated colluvial sands derived from granitic and volcanic bedrock. In the meadow area northeast of the Ceresola Ranch, soils consist of a soft sandy clay material with high moisture content. Potential geologic hazards that could be associated with the area include swelling soils, weak subgrade soils, corrosive soils, slope instability, rockfall, flooding, and earthquakes (Henwood 2012).

Materials prone to liquefaction or amplified ground motions are not expected to be encountered in the project area. Due to the steep topography along portions of FH 177, rockfall may be generated by earthquakes where bedrock outcrops are present or from boulders in the hillside colluvium. Potential embankment settlement, lateral spreading, or instability during construction in the soft sandy clay material of the meadow is also a design consideration (Henwood 2012).

Discussion of Impacts

- a)
 - i) **No Impact.** No Alquist-Priolo Earthquake Fault Zones have been mapped in Plumas County, and no active faults are known to cross through the project area.
 - ii) **Less than Significant Impact.** In the event of a major earthquake from nearby faults, the improved roadway may be subject to strong ground shaking, but would not be expected to sustain substantial damage. The project will be designed in accordance with California Building Code standards for the appropriate seismic zone to minimize the potential for damage from earthquake activity. Impacts relating to ground shaking would be less than significant.
 - iii) **No Impact.** No active faults cross through the project area, and ground failure from seismic activity is not expected in the project area.
 - iv) **Less than Significant Impact.** Due to the steep topography along portions of FH 177, rockfalls could cause damage to structures or injure travelers as a result of earthquake activity. However, landslides are not expected along the highway. Signs would alert travelers to the potential for rockfalls, and impacts would be expected to be less than significant.
- b) **Less than Significant with Mitigation Incorporated.** Construction activities would disturb soil and increase the potential for soil erosion from wind and water until the new road is paved and vegetation is reestablished in adjacent disturbed areas. The majority of construction would occur along the existing alignment of FH 177, with a smaller amount of construction occurring

in the previously undisturbed area of the meadow to the east of the Ceresola Ranch complex. Although soil erosion resulting from project implementation is generally not of concern along the existing alignment of FH 177, soil erosion would be an issue in the road realignment through the meadow. Soil erosion resulting from construction of the road realignment could negatively affect the sensitive meadow, resulting in a potentially significant impact.

The dust control measures found in Section 2.5 could help to reduce some impacts associated with soil erosion; however, further mitigation is needed to reduce impacts to a less-than-significant level. The implementation of Mitigation Measure HWQ-1, which requires the FHWA to prepare a Stormwater Pollution Prevention Plan (SWPPP) and include Best Management Practices (BMPs) in project design, would reduce impacts associated with soil erosion to a level considered less than significant.

- c, d) ***Less than Significant with Mitigation Incorporated.*** Materials prone to liquefaction or amplified ground motions are not expected to be encountered in the project area. However, potential embankment settlement, lateral spreading, instability during construction, swelling soils, weak subgrade soils, corrosive soils, slope instability, rockfall, flooding, and earthquakes are a concern in the soft sandy clay material of the meadow. This could result in a significant impact if the road is not designed properly through the meadow. The implementation of Mitigation Measure GS-1 would reduce impacts to a less-than-significant level.

Mitigation Measure GS-1: Implement geotechnical design recommendations.

The project will be engineered to account for potential unstable conditions. The FHWA or its contractor will implement applicable recommendations regarding site preparation found in the hydraulic recommendations and geotechnical reports prepared for this project (Blackler 2010 and Henwood 2012). These recommendations relate to grading requirements, embankments on soft ground, slope recommendations, shrink/swell factor recommendations, bridge foundation recommendations, wingwall design, abutment settlement, and global stability.

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

VII. GREENHOUSE GAS EMISSIONS — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
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 any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

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

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

Discussion of Impacts

- a) ***Less than Significant Impact.*** Short-term GHG emissions would be generated during construction activities from the use of heavy equipment, which results in emission of diesel exhaust, and from traffic control measures that require stop-and-go traffic, such as when flaggers are used. Emissions from heavy equipment and stop-and-go traffic would contain GHGs; however, the total yield would be relatively minor compared to regional, state, and global emissions. Removal of forested areas can also alter CO₂ levels, but the limited amount of vegetation removed for this project would not have a noticeable impact.

The project would not result in increased traffic along FH 177. Therefore, emissions associated with vehicles after project completion would be similar to current conditions. Emissions of GHGs resulting from construction activities would be short term and minor. While the project would have an incremental contribution within the context of the county and region, the individual impact is considered less than significant.

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

VIII. HAZARDS AND HAZARDOUS MATERIALS —

Would the project:

	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Create a significant 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 significant 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) Emit 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 checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use compatibility plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<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 a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Hazardous Materials and Hazardous Sites

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

Board maintains files on hazardous material sites. The Plumas County Environmental Health Department is responsible for management of hazardous materials and preserving the environment and public health.

No known hazardous waste sites, such as underground storage tanks, 55-gallon drums with unidentified contents, or abandoned buildings, have been reported in the project area (FHWA 2012, California Department of Toxic Substances Control 2013). FH 177 has been used historically for timber and railroading activities, which increases the potential for hazardous materials; however, no spills or refueling stations are known to exist in the project area (FHWA 2012).

Wildfire Hazard and Risk

The Plumas County Communities Wildfire Mitigation Plan provides an overview of wildfire hazards in the county and identifies measures to reduce risks and hazards (Plumas County Fire Safe Council 2010 as cited in FWHA 2012). Beckwourth is listed as a Community at Risk within a Wildland Urban Interface (WUI) by the Plumas County Fire Safe Council (2005 as cited in FWHA 2012). The WUI is defined as the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuel. Fire protection in the project area is the responsibility of the Forest Service (on federal lands within the PNF) and the State (on private and state lands).

Fire risk is defined as the potential for damage resulting from a fire to occur (Cal Fire 2007 as cited in FWHA 2012). Fire risk in the project area currently varies from low to high (SAIC 2007k). Fire hazard is a measure of the likelihood of an area burning as a result of a wildfire. The primary factors that determine the fire hazard rating include vegetation, topography, weather, crown fire potential, and ember production and movement (Cal Fire 2007 as cited in FWHA 2012). The Fire hazard rating within the project area ranges from high to extreme in the Federal Responsibility Area and from high to very high in the State Responsibility Area (Cal Fire 2007).

Discussion of Impacts

- a, b) ***Less than Significant Impact.*** Small amounts of hazardous materials (e.g., fuel and solvents) would be used during construction activities for equipment maintenance and repaving the road. Use of hazardous materials would be limited to the construction phase and would comply with applicable local, state, and federal standards associated with the handling and storage of hazardous materials. Any hazardous construction debris would be removed and properly disposed at a landfill that can receive hazardous waste. Impacts associated with the use of hazardous materials would be less than significant.

- c) ***Less than Significant Impact.*** A school is located in Beckwourth approximately 0.25 mile west of the project area near its southern extent. The school is not along SR 70, which would be used to transport materials to the project area. The use of hazardous materials during construction activities would comply with applicable local, state, and federal standards associated with the handling and storage of hazardous materials, and any spills would be properly contained and cleaned up to minimize impacts on the environment. Construction activities would not expose people at the school to substantial impacts from the use or transport of hazardous materials.

- d) **No Impact.** No hazardous materials sites have been reported in the project area (FHWA 2012, California Department of Toxic Substances Control 2013).
- e) **Less than Significant Impact.** The Nervino airport (a public airport) is located approximately 0.75 mile east of the project area in Beckwourth. The proposed road improvements would not expose people in the project area to increased hazards associated with the airport. The project would also not involve new structures that may conflict with airport uses.
- f) **No Impact.** The project is not in the vicinity of a private airstrip.
- g) **Less than Significant Impact.** Short-term closures of the road may occur at specific construction milestones, such as replacement of the Crocker Creek crossing. Emergency access would be maintained throughout construction. Impacts associated with emergency evacuation or access would be less than significant.
- h) **Less than Significant Impact.** Neither construction nor operation of the roadway is expected to substantially increase the potential for fire (SAIC 2007k). People and/or structures would most likely not be exposed to a significant risk of loss, injury, or death involving wildland fires during project construction. A fire safety plan would be in place during construction, and precautionary measures would be implemented during equipment use and activities that could cause a fire (e.g., use of spark arrestors). Water used for dust control would help maintain soil moisture and provide a source of water for extinguishing a fire.

The project would not alter the potential for wildfire ignitions in the long term. The project would not increase the design capacity of the roadway, and projected increases in traffic would be minimal and would not substantially increase the likelihood of a fire occurring or causing significant risk (SAIC 2007k). Furthermore, fire risk would be more easily controlled with project implementation. FH 177 is currently used as a fire emergency response route. Roadway improvements would aid in fire suppression activities on the PNF by providing a safer access route with faster response times. Additionally, a pond located at MP 6.88 is currently used as a water source for fire suppression. Access to this pond would be maintained during and after project construction (FHWA 2004 as cited by FHWA 2012) in order to provide continuous fire suppression resources. Project improvements would not result in the removal or relocation of any fire hydrants or other fire suppression resources within the town of Beckwourth.

The project would not increase the fire risk or fire hazard rating and would not expose people and/or structures to a significant risk of loss, injury, or death involving wildland fires (SAIC 2007k). Therefore, project impacts regarding wildland fires would be considered less than significant.

XI. HYDROLOGY AND WATER QUALITY — Would the project:

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

Environmental Setting

The largest tributary in the project area, Crocker Creek, flows north to Red Clover Creek, which currently supports its beneficial uses of drinking water supply and aquatic life support. This water body is not listed on the state’s 303(d) List of Impaired Waters (California State Water Resources Control Board 2010 as cited in FWHA 2012). Crocker Creek, along with the rest of the drainage within the project area north of Mapes Canyon, eventually flows to the North Fork Feather River.

Beneficial uses and water quality objectives for the river also apply to Crocker Creek and include water supply, power, recreation, warm and cold freshwater habitat, warm and cold spawning habitat, and wildlife habitat.

Water in the southern portion of the project area, from Mapes Canyon and south, drains to the Middle Fork of the Feather River. The designated beneficial use for this stretch of river (from Sierra Valley to Lake Oroville) is warm freshwater habitat. This river stretch is listed on the state's 303(d) List of Impaired Waters due to toxicity from unknown causes (FHWA 2012).

Discussion of Impacts

- a, f) ***Less than Significant with Mitigation Incorporated.*** Sedimentation and fill could potentially occur at Crocker Creek during the construction of the new bridge and during grading activities occurring within 50 feet of the edge of the creek. In addition, other areas near drainages could be of concern if construction occurs during wet weather and sediment or pollutants travel downstream. These disturbances would be temporary, but could have significant impacts on water quality in the creek and other drainages. Hazardous materials (e.g., fuels, solvents) may also incidentally enter waterbodies during construction, but standard construction practices and the spill prevention and clean-up measures in Section 2.5 would minimize the water quality effects. Implementation of Mitigation Measure HWQ-1 would reduce impacts associated with sedimentation to a level considered less than significant.

Mitigation Measure HWQ-1: Prepare and implement a Stormwater Pollution Prevention Plan.

The project will comply with the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity, Order No. 2009-0009 DWQ and FHWA Federal-Aid Policy Guidelines, Subchapter G, Part 650, Subpart B. The FHWA will prepare a SWPPP for the project and identify BMPs to reduce erosion during project construction and minimize sedimentation down gradient from the project. These measures may include, but are not limited to, the following:

- Exercise every reasonable precaution to protect Crocker Creek from pollution due to fuels, oils, bitumen, calcium chloride, and other harmful materials and conduct and schedule operations so as to avoid or minimize muddying and silting of the creek.
- Limit vegetation removal to areas necessary for bridge construction and associated activities;
- Use temporary devices, such as dikes, basins, ditches, straw, and seed, to prevent pollutants from entering the creek and to stabilize slopes.
- Install facilities and devices used for water pollution control practices before performing work activities.
- Install soil stabilization materials for water pollution control practices in all work areas that are inactive or before storm events.

- Repair or replace water pollution control practices within 24 hours of discovering any damage.
 - Implement effective handling, storage, usage, and disposal practices to control hazardous materials and manage waste and non-stormwater runoff in the work area before they come in contact with receiving waters.
 - Keep material or waste storage areas clean, well-organized, and equipped with enough cleanup supplies for the material being stored.
 - Implement spill and leak prevention procedures for chemicals and hazardous substances stored in the work area.
 - Contain and clean up spills of petroleum materials and other hazardous substances listed under 40 CFR, parts 110 and 302 as soon as it is safe.
 - Cover active and inactive soil stockpiles with soil stabilization material or a temporary cover and surround stockpiles with a linear sediment barrier.
 - If fueling or maintenance must be done on-site, designate a location away from the creek, preferably at the staging area along FR 177.
 - Use containment berms or dikes around fueling and maintenance areas.
 - Prevent demolished material from entering the creek, such as through use of authorized covers and platforms to collect debris.
 - Do not operate mechanized equipment in the active stream channel.
 - Do not deposit material derived from roadway work in the creek channel, including along the banks, where it could be washed away by high stream flows.
- b) **No Impact.** The proposed project would not involve the use of groundwater supplies and would not affect groundwater recharge in the project area.
- c, d) **Less than Significant Impact.** The project could alter drainage patterns in several locations, including where minor drainage improvements take place in the roadway shoulder, where culverts are replaced, and at the proposed realignment of the roadway (MP 1.7 to 2.5) to the east away from the built ranch structures. The new culverts would allow runoff/flow to be maintained under the roadway to prevent flooding. In the new road alignment, the new culverts could increase erosion at the outlets, but rock stabilization would help minimize this potential. The drainage patterns in the upslope areas surrounding the project area would remain unchanged. Because potential changes in drainage patterns would not result in on- or off-site flooding or erosion, these impacts would be less than significant.
- e) **Less than Significant Impact.** The project would increase the amount of impervious surface in the project area, with most of the increase associated with the proposed realignment of the

roadway (MP 1.7 to 2.5) to the east away from the built ranch structures. The additional surface area could result in an increase in stormwater runoff. However, the project would not contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. In addition, runoff from the new road surface would likely infiltrate into the surrounding soil (natural areas) before reaching nearby surface waters. The culverts would also help maintain flow under the road, resulting in a less-than-significant impact. The potential for polluted runoff (e.g., containing lubricants) to enter water bodies during operation would be similar to current conditions because the new roadway would have the same function and use as the existing roadway.

- g) **No Impact.** The proposed project would not involve construction of housing.
- h, i) **Less than Significant Impact.** The new bridge at Crocker Creek would be designed to be above the 100-year flood elevation and would allow flow to pass under the bridge. Culverts and the new bridge would be sized to convey adequate flows to reduce the potential for the road to flood and pose a risk to travelers. These changes would not substantially increase channel instability in the vicinity of the new bridge and would not impede or redirect flood flows. With construction taking place during the low-flow period, the potential for a flood to affect temporary structures or expose workers to hazards is minimal. Flood hazard-related impacts would be less than significant.
- j) **No Impact.** The project area is not in an area subject to seiche, tsunami, or mudflow.

X. LAND USE AND PLANNING — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>

Environmental Setting

The project area includes federally and state-managed lands within the PNF and the CMWA and private lands subject to the Plumas County General Plan. Guidance for management of the lands is found in the PNF LRMP (USFS 1988), as amended; the Plumas County General Plan (Plumas County 2013); the Regional Transportation Plan (Plumas County 2010); the PNF Motorized Travel Management Plan; and the CMWA Management Plan.

Plumas County General Plan–designated land uses in and around the town of Beckwourth include Suburban Residential, Rural Residential, Commercial, Secondary Suburban Residential, Industrial,

and Resort and Recreation. Ceresola Ranch and another ranchland in the northern portion of the project area are designated as Agricultural Preserve. The County designates much of the PNF lands in the project area as Timber Resource Land. PNF LRMP-designated land uses in the area include Minimal Management, Riparian, Visual Retention, Visual Partial Retention, and Timber Emphasis. FH 177 currently traverses the CMWA property through a prescriptive use easement. The existing roadway through the CWMA totals 3.06 acres. The CMWA is generally used as a wildlife preserve and for hiking, photography, and bird watching.

Discussion of Impacts

- a) **No Impact.** The project area is not in an established community. The proposed project is designed to improve safety for travelers on FH 177 and would not divide any communities. In addition, the realignment of the road east of Ceresola Ranch would likely improve operations of the ranch and benefit residences there as regular traffic would no longer go through the ranch.
- b) **Less than Significant with Mitigation Incorporated.** The proposed project would improve segments of FH 177 that have design and operational deficiencies, including sharp curves, areas of limited visibility, unpaved sections, lack of signage, and eroded roadways and culverts. The project would be consistent with Regional Transportation Plan and Plumas County General Plan planning policies and guidelines and is compatible with existing land uses designated in the General Plan. The majority of the road improvements would be limited to the existing roadway and right-of-way and would not introduce incompatible land uses or modify land uses along the existing roadway. Plumas County would need to update Ordinance No. 10-1077, which designates unpaved county roads where unlicensed off-highway vehicles are allowed, to reflect the revised milepost listing for the unpaved portion of the highway.

The proposed project would improve accessibility to recreational destinations throughout the Beckwourth and Mt. Hough Ranger Districts of the PNF and could improve operational efficiency for timber production north of Beckwourth. Implementation of the project is not expected to conflict with the PNF LRMP.

Approximately 15.23 acres of land would be converted from the CMWA to roadway, maintenance areas, culverts, and ditches (FHWA 2012). This conversion of land could constitute a significant impact because of the potential for conflicts between the use of the road by travelers and adjacent wildlife uses. As discussed above under Biological Resources, the new road alignment could affect deer movement across the highway. Recreational uses on the CMWA could also be affected by the new road alignment because of the loss of land available for recreation and the presence of vehicles in a relatively undisturbed area. Implementation of Mitigation Measures LUP-1 and LUP-2 would ensure that impacts associated with the conversion of CMWA land would be less than significant.

Mitigation Measure LUP-1: Install deer fencing and signs on the CMWA.

FHWA will ensure that all fencing that is damaged or otherwise affected on CDFW property during construction will be replaced in-kind. All new fencing installed on CDFW property will have a deer-friendly design. Deer advisory signs will be placed along the road in or near the CDFW property to warn drivers of the deer population.

Mitigation Measure LUP-2: Compensate for land conversions on the CMWA.

FHWA and the County will continue to coordinate with CDFW and California State Parks, when applicable, to ensure that the recreation attributes of the CMWA are maintained during and after construction. If compensation is deemed necessary per Section 6(f) of the Land and Water Conservation Fund Act (16 USC Sec. 4601 et seq.) conversion requirements, replacement land of at least the same fair market value and reasonably equivalent usefulness and location will be acquired as mitigation. Once final design is accomplished and the precise impacts to the CWMA are known, FHWA in consultation with CDFW will determine the appropriate location and amount of mitigation for such impacts. All acquisitions will conform to the applicable provisions of Public Law 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

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

XI. MINERAL RESOURCES — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the state?	<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"/>

Environmental Setting

No mineral resources have been mapped by the state under the Surface Mining and Reclamation Act of 1975 (California Department of Conservation 2013b). The project area is not in a known mineral resource zone or locally important mineral resource recovery site per the Plumas County General Plan (Plumas County 2013). Furthermore, the PNF LRMP does not identify this area as containing important mineral resources (Forest Service 1988).

Discussion of Impacts

- a, b) **No Impact.** No known important mineral resources of state-wide or local importance would be affected by the proposed project.

XII. NOISE — Would the project result in:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial 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 substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use compatibility plan or, where such a plan has not been adopted, within two miles of a public airport of public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The area surrounding FH 177 is entirely rural with generally low existing noise levels. The predominant existing noise source in the project area is traffic noise along FH 177. Forest Service operations on the PNF and ranch operations at the Ceresola Ranch also produce occasional noise in and near the project area. Some land uses are considered more sensitive to ambient noise levels than others due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, convalescent and nursing homes, auditoriums, parks, and outdoor recreation areas are generally more sensitive to noise than are commercial and industrial land uses. Sensitive receptors in and near the project area include residences adjacent to FH 177 in Beckwourth and at Ceresola Ranch. Sensitive receptors could also be present in recreation areas adjacent to the project area and in the CMWA.

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

to 7 a.m.). In commercial and public facilities areas, maximum noise levels are 90 dBA during daytime hours (7 a.m. to 7 p.m.) and 75 dBA during evening and nighttime hours (7 p.m. to 7 a.m.). In industrial areas, maximum noise levels are 90 dBA at any time of day.

Table 5 provides a list of typical construction equipment and their corresponding noise levels recommended for noise-impact assessments by the Plumas County General Plan (2013), based on a distance of 50 feet between the equipment and a noise receptor.

Table 5: Construction Equipment Noise Levels

Type of Equipment	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers	92
Rock Drills	96
Jackhammers	82
Pneumatic Tools	85
Pumps	77
Scrapers	87
Haul Trucks	88
Electric Saws	70
Portable Generators	80
Rollers	80
Dozers	88
Tractors	80
Front-End Loaders	88
Hydraulic Backhoe	86
Hydraulic Excavators	86
Graders	85
Air Compressors	85
Trucks	85

Source: Bolt, Beranek, and Newman 1987 as cited by Plumas County 2013

Discussion of Impacts

a, d) *Less than Significant with Mitigation Incorporated.* Construction activities would generate temporary noise above existing noise levels and could expose nearby sensitive receptors to increased noise. Construction activities would be limited to daytime hours when higher noise levels are acceptable. The project area would be classified as a residential community near the town of Beckwourth, with the rest of the project area north of Beckwourth classified as a public facility, where higher noise levels are acceptable during daytime hours. In addition, noise generated in the middle and northern portions of the project area would be primarily masked by intervening vegetation and topography and would temporarily affect recreation areas, resulting in a less-than-significant impact.

Noise generated in the southern portion of the project area near Beckwourth could travel further in the open grasslands. Residences in Beckwourth and at the Ceresola Ranch are approximately 50 feet from the project area. Some types of construction equipment to be used during project construction include rollers, loaders, excavators, graders, dump trucks, and pickup trucks. The use of these types of equipment would expose residences in Beckwourth and Ceresola Ranch to noise level in excess of the county standards, creating a significant impact. The implementation of Mitigation Measure N-1 and N-2 would reduce the level of noise from project construction to a level considered less than significant.

Mitigation Measure N-1: Maintain and equip construction equipment with noise control devices.

FHWA will ensure that the construction contractor implements the following noise control measures during construction activities:

- Construction activities will be limited to 1/2 hour after sunrise to 1/2 hour before sunset when activities occur within 500 feet of a residential or other noise-sensitive land use, unless another schedule is approved by FHWA in advance.
- All construction equipment will be properly maintained and equipped with noise control, such as mufflers, in accordance with manufacturers' specifications.

Mitigation Measure N-2: Coordinate with residences to minimize noise disturbance.

FHWA and the County will work with the construction contractor and nearby residents to minimize disturbance to occupied residences. Before construction near noise-sensitive receptors, FHWA or the County will provide written notification to potentially affected receptors, identifying the type, duration, and frequency of construction operations. Notification materials will also identify a mechanism for residents to register noise-related complaints with FHWA or the County. FHWA and the County will consider any noise-related concerns on a case-by-case basis (in addition to the requirements of Mitigation Measure N-1).

- b) ***No Impact.*** The proposed project would not generate groundborne vibrations or noise that could affect sensitive receptors.
- c) ***No Impact.*** The proposed project would result in a minimal increase in traffic on FH 177, and traffic noise along the highway would be similar to current conditions.
- e) ***Less than Significant Impact.*** Noise from the Nervino airport would not expose people working in the project area to excessive noise levels because it is a small, one runway airport that does not generate a substantial amount of noise. Impacts associated with airport noise would be less than significant.
- f) ***No Impact.*** The project is not in the vicinity of a private airstrip.

XIII. POPULATION AND HOUSING — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
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"/>

Environmental Setting

The community of Beckwourth is situated at the southern portion of the project area, where FH 177 meets SR 70. Residences in the area are to the west of FH 177 and both north and south of SR 70. In addition, Ceresola Ranch supports several residences on the western side of FH 177.

Discussion of Impacts

- a) **No Impact.** The improved highway would not stimulate significant economic or population growth, remove obstacles to population growth, or necessitate the construction of new community facilities that would lead to additional growth in the surrounding area. The improved road would serve the same function as it does now and would not encourage the development of adjacent lands, some of which are PNF and state-managed lands that are not available for development. Overall, the proposed project would not generate significant growth-inducing impacts.
- b, c) **No Impact.** No existing housing or substantial numbers of people would be displaced as a result of the project. No new construction of replacement housing elsewhere would be necessary.

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

XIV. PUBLIC SERVICES — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Local volunteer and private fire districts provide fire protection and related services throughout the county. The Beckwourth Fire District is the nearest fire protection service provider to the project area and has a fire station adjacent to the project area in Beckwourth. The Plumas County Sheriff's Office provides law enforcement services in the county and operates out of Quincy. The Forest Service is responsible for law enforcement and fire protection services on federal lands within the PNF. No neighborhood or regional parks or other public facilities not previously mentioned are located in the project area.

Discussion of Impacts

- a) **No Impact.** The proposed project would not affect public services in Beckwourth or Plumas County, increase the demand for public services, or require construction of new governmental facilities. It would not have growth-inducing effects and thus would not increase the demand for public services that would require the expansion or construction of new governmental facilities.

XV. RECREATION — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
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 which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

FH 177 is a key recreation corridor, providing access to numerous recreational resources. The FH 177 road corridor and adjacent lands are regularly used for both developed (e.g., campgrounds) and dispersed (e.g., hiking and hunting) recreational purposes. The numerous recreation activities in the area served by FH 177 include, but are not limited to, camping, picnicking, hiking, bicycling, hunting, fishing, viewing scenery and wildlife, snowmobiling, off-highway vehicle touring, and cross-country skiing. The CMWA managed by CDFW provides wildlife viewing opportunities east of the project area. The PNF provides recreational opportunities in the northern portion of the project area. FH 177 provides access to the Beckwourth Ranger District. The Beckwourth Ranger District contains numerous lakes that offer boating, waterskiing, and fishing, and features three recreation areas: Frenchman Lake; Lake Davis; and Lakes Basin. Additionally, FH 177 provides access to the Antelope Lake Recreation Area in the Mt. Hough Ranger District. No neighborhood or regional parks are located in the project area.

Discussion of Impacts

- a, b) **No Impact.** The proposed project would improve accessibility to recreational destinations throughout the Beckwourth and Mt. Hough Ranger Districts on the PNF and to the CMWA. The highway would serve the same function it currently serves and would not induce growth or create a need for new or expanded recreational facilities.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC — Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
XVI. TRANSPORTATION/TRAFFIC — Would the project:				
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

FH 177 is a two-lane road that provides access for recreation, emergency response, school bus traffic, ranching, and Forest Service administration of activities occurring on the PNF, such as fire suppression, mining, grazing, logging, recreation site maintenance, and watershed projects. The highway also provides access to the state-managed CMWA. It is paved with an asphalt surface from Beckwourth to MP 5.1 and from MP 9.6 to 21.45. From MP 5.1 to 9.6, the road has an unpaved gravel surface.

FH 177 furnishes access to public and private lands, connects with several other highways and local roads, and is an important component of the transportation system serving the county and PNF. Plumas County has obtained traffic counts along FH 177 since 2005. The data indicate that traffic has been increasing at an average annual rate of about 4 percent, a rate of increase that typically occurs for low-volume rural highways in mountainous locations in California. The 2011 SADT, derived from 2005 Plumas County traffic count data, was 152 vehicles. The projected 2031 SADT, which is based on a 4 percent annual traffic growth rate, is 344 vehicles. Most vehicles on the road are passenger vehicles (about 77.9 percent), with some recreational vehicles (16 percent), trucks (5.9 percent), and school buses (0.2 percent).

Discussion of Impacts

- a) ***Less than Significant Impact.*** The proposed project is identified as a planned improvement in the 2010 Regional Transportation Plan for Plumas County (Plumas County 2010). It would be consistent with the plan and would improve safety for travelers on FH 177. Short-term closures of the road may occur at specific construction milestones, such as replacement of the Crocker Creek crossing. Advanced notification would be provided to the traveling public prior to any temporary closures. Traffic control measures would be used throughout construction. Impacts on the circulation system in and near the project area would be less than significant.
- b) ***Less than Significant Impact.*** Construction traffic would temporarily increase traffic on FH 177, which could increase delays in the vicinity of the project area. Traffic control measures would be in place to alert travelers to the construction activities, and the slight delays in traffic would be temporary. The project is not designed to substantially increase traffic on FH 177, and long-term traffic along the road would be similar to current conditions. The proposed project would have a temporary effect on traffic in the vicinity of the project area and would not increase congestion over the long term, resulting in a less-than-significant impact.
- c) ***No Impact.*** The project would not interfere with air traffic patterns.

- d) **No Impact.** The project would serve the same function as the existing road and would improve safety for travelers on FH 177.
- e) **Less than Significant Impact.** Short-term closures of the road may occur at specific construction milestones, such as replacement of the Crocker Creek crossing. Emergency access would be maintained throughout construction, resulting in a less-than-significant impact.
- f) **No Impact.** The proposed project would not prevent the use of FH 177 for public transit or alternative forms of transportation.

XVII. UTILITIES AND SERVICE SYSTEMS — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
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 water or wastewater treatment 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"/>
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 checked="" type="checkbox"/>	<input 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 which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<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 checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Utility lines cross through the project area along FH 177. A buried telephone line follows FH 177 in Segment 1. A telephone line owned by AT&T follows FH 177 in Segment 2. An overhead power utility owned by Plumas Sierra Rural Electric Cooperative is located where the grade will be raised so height clearance may be an issue. Crocker Creek, as a tributary to the Feather River, contributes surface water for downstream urban, industrial, and agricultural uses. No water or wastewater facilities exist in the project area.

Plumas County has six solid waste transfer stations and recycling centers. The county has one active sanitary landfill in Chester that receives construction and demolition waste, mixed municipal waste, and tires. The Chester landfill has a remaining capacity of about 388,000 cubic yards and is projected to reach capacity by 2024 (Cal Recycle 2012).

Discussion of Impacts

- a, b, d, e) **No Impact.** The proposed project would not generate wastewater or require a new water supply. No wastewater or water facilities would be constructed or needed as part of the project.
- c) **Less than Significant Impact.** The project would slightly alter stormwater drainage in the project area. More than 50 culverts would be replaced along the highway as part of the project. However, drainage alterations would be minimal and impacts would be less than significant.
- f, g) **Less than Significant Impact.** The proposed project would generate a small quantity of solid waste from removal of pavement and other construction debris. Any materials used during or generated from construction would be properly disposed in accordance with federal, state, and local regulations. Impacts relating to solid waste disposal would be less than significant.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
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 probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which 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"/>

Discussion of Impacts

- a) **Less than Significant with Mitigation Incorporated.** As discussed in the preceding sections, the proposed project has a potential to result in adverse effects on biological resources, cultural resources, geology and soils, hydrological resources, and land use planning. Mitigation

measures are identified for the proposed project to avoid or minimize potential adverse effects on these resources.

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

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

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4 Determination

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

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

On the basis of this initial evaluation:

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

Name and Title:

Date

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5 Report Preparation and References

5.1 Report Preparation

Plumas County Department of Public Works

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John Mannle Associate Engineer/Transportation Planner

North State Resources, Inc. – Environmental Compliance

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Leslie Perry Project Manager

Andrew Minks Environmental Analyst

Kathryn McDonald Technical Editor

5.2 References

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APPENDIX A.

Mitigation Monitoring and Reporting Plan

Mitigation Monitoring and Reporting Plan
for the
Beckwourth-Genesee Road Project

**CEQA Lead Agency:
Plumas County**

**NEPA Lead Agency:
Federal Highway Administration**

Prepared: February 2014

Introduction

Purpose

Plumas County Planning Department (County) has prepared an Initial Study and Mitigated Negative Declaration (IS/MND) for the proposed Beckwourth-Genesee Road Project. The proposed project consists of improvements to the southern 9.6 miles of Forest Highway (FH) 177 (Beckwourth-Genesee Road) from State Route 70 in Beckwourth to County Road 111 in Clover Valley to correct operational and design deficiencies of the roadway and be consistent with current design standards. The proposed project is described in more detail in the IS/MND.

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

The County, as the lead agency under the California Environmental Quality Act (CEQA), is responsible for overseeing the implementation and administration of this MMRP. The County will designate a staff member to manage the MMRP. Duties of the staff member responsible for plan coordination will include conducting routine inspections and reporting activities, coordinating with the project construction contractor, coordinating with regulatory agencies, and ensuring enforcement measures are taken. The Federal Highway Administration (FHWA), as the lead agency under the National Environmental Policy Act (NEPA) and entity responsible for project implementation, will be responsible for implementing the measures described herein and coordinating with the County to ensure compliance with the MMRP.

Regulatory Framework

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

Format of This Plan

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

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

Measures Included in the Proposed Project

FHWA would retain a construction contractor for construction of the proposed project. The contractor would be responsible for compliance with all applicable rules, regulations, and ordinances associated with proposed project activities and for implementing construction-related mitigation measures. Construction specifications would be in accordance with FHWA Standard Specifications in force at the time the construction contract is awarded. The standard construction practices that would be implemented are described below.

Hazardous Materials Control

The construction contractor will be required to comply with all federal, state, and local laws and regulations controlling the introduction of pollution into the environment. Precautions will be taken to prevent pollution of streams and nearby waterways with silt, oils, fuels, bitumens, or other harmful materials. The contractor will be required to prevent pollution of the atmosphere from particulate and gaseous matter by implementing appropriate surface watering and proper maintenance of construction equipment.

In the event of an accidental spill by the construction contractor, containment measures will be implemented immediately. For an accidental spill of petroleum products in reportable quantities, or if hazardous materials are encountered during construction, FHWA or the County will report the spill to the appropriate federal, state, and local authorities and respond in accordance with all applicable regulations. If any staining within the construction limits, odoriferous scents, or other indication of hazardous material is encountered by the construction contractor, operations at the discovery site will be suspended and FHWA and the County will be immediately notified. Any such discovery will be investigated by qualified personnel and treated in accordance with federal, state, and local regulations.

Safety and Health Requirements

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

Impacts and Associated Mitigation Measures

Impact AQ-1: Construction emissions

Mitigation Measure AQ-1: Implement air pollution and dust control measures.

Air pollution and dust control will conform to FHWA Standard Specification Section 158 Guidelines for dust control during construction operations and Northern Sierra Air Quality Management District rules for visible emissions (Rule 202), nuisance (Rule 205), dust control (Rule 226), and cutback and emulsified asphalt paving materials (Rule 227). The contractor will be required to implement a dust control program to limit fugitive dust emissions and submit a dust control plan to the air district.

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

- Cover trucks hauling soil and other loose material or maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer) pursuant to California Vehicle Code (Section 23114) and air district Rule 226.
- When the highway is not open to public traffic, control dust near inhabited residences or places of business.
- Use water or other dust suppressants to control dust within the construction limits at all hours when the highway is open to public traffic.
- Use water or other dust suppressants on active haul roads, material stockpiles, pits, staging areas, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.
- Clean (sweep or wash with water) equipment used on unpaved surfaces prior to entering SR 70 or other paved roads to prevent tracking materials onto the highway.
- Minimize idling time of vehicles and equipment and shut off equipment when not in use pursuant to California Code of Regulations (Title 13, sections 2449(d)(3) and 2485).
- Maintain construction equipment in proper working condition according to manufacturer's specifications, and check it daily to ensure it is in proper running condition before it is operated.

Implementation: The construction contractor, under oversight from FHWA, will prepare and implement a dust control plan.

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

Timing: Prior to and during construction

Verified By: _____ Date: _____
County Project Manager

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

Mitigation Measure BR-1: Conduct worker awareness training.

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

Implementation: FHWA will retain the services of a qualified biologist to conduct a WEAT.

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

Timing: At the onset of construction

Verified By: _____ Date: _____
County Project Manager

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

Mitigation Measure BR-2: Schedule construction to avoid disturbance to special-status species.

If practicable, construction activities, vegetation removal, and removal of the existing creek crossing will be scheduled to avoid the breeding season (March through August) for special-status birds, bats, migratory birds, and raptors. Due to weather constraints in Plumas County, all construction activities may not be able to avoid the breeding season for these species, and pre-construction surveys will be implemented if construction is necessary between March and August (see Mitigation Measure BR-3). If practicable, vegetation removal will be scheduled between September and February to prevent the removal of active nests, roosts, or dens.

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

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

Timing: Prior to construction

Verified By: _____ Date: _____
County Project Manager

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

Mitigation Measure BR-3: Conduct pre-construction surveys.

If construction activities must be scheduled between March and August, a qualified biologist will conduct a pre-construction survey within 500 feet of the work area to locate active nest, den, or roost sites of special-status birds, migratory birds, raptors, and bats. The survey should be conducted no more than 15 days prior to the initiation of construction and should be repeated if work stops for more than one week during the breeding period for these species.

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

For bats, if a maternity roost or hibernacula is present, in consultation with CDFW, a qualified biologist will determine the extent of construction-free zones around active nurseries until the mother and young have dispersed. If a non-breeding bat hibernacula is found in a tree or snag scheduled for removal, the individuals will be safely evicted, under the direction of a qualified bat biologist (as determined by a memorandum of understanding with CDFW), by opening the roosting area to allow air flow through the cavity. Removal of the tree or snag will follow no earlier than the following day (i.e., at least one night should be provided between initial disturbance for air flow and the demolition). This action will allow bats to leave the roost during dark hours, which increases their chance of finding new roosts. Trees with roosts that require removal should first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape at night.

Before the start of project construction, a qualified biologist will conduct a pre-construction survey within potential habitat in the project area to locate the following special-status plant species: alkali hymenoxys, Lemmon's milkvetch, Pulsifer's milkvetch, Sierra Valley ivesia, Plumas ivesia, sticky goldenweed, Hillman's silverscale, Modoc County knotweed, Santa Lucia dwarf rush, Sheldon's sedge, green-flowered prince's plume, and Lens-pod milkvetch. The survey will be conducted during the appropriate blooming period of the species (generally late spring to early summer; refer to Table 3), and two visits may be needed to cover the range of blooming periods. If any special-status plant species are located within the project area, those plants would be avoided, to the extent practicable, or relocated to a suitable location outside the area of disturbance at the discretion of the Forest Service if on National Forest System lands or of CDFW if on other lands.

Implementation: FHWA will retain the services of qualified biologists to conduct pre-construction surveys, and FHWA or its contractor will implement the measures described above.

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

Timing: Prior to construction

Verified By: _____ Date: _____
County Project Manager

Impact BR-4: Potential impacts to American badger

Mitigation Measure BR-4: Implement avoidance measures for special-status species during construction.

If American badger is encountered during construction, activities in the vicinity will cease until one or more of the following occur:

- The animal leaves the work area.
- Appropriate corrective measures have been implemented (e.g., relocation of the animal to appropriate habitat identified by a qualified biologist, outside of the area of disturbance).
- It has been determined that the animal will not be harmed.

Implementation: The construction contractor will be responsible for complying with the avoidance measures. FHWA will retain a qualified biologist if needed.

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

Timing: During construction

Verified By: _____ Date: _____
County Project Manager

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

Mitigation Measure BR-5: Minimize and compensate for riparian vegetation impacts.

The FHWA will design the road improvements to minimize impacts to riparian areas and will identify methods to restore or revegetate riparian areas following construction. Methods for protecting topsoil, salvaging vegetation, replanting riparian vegetation, and monitoring restored areas will be identified in the wetland mitigation plan (see Mitigation Measure BR-6). Implementation of the wetland mitigation plan will be the responsibility of FHWA. In addition, if determined necessary by CDFW, FHWA or its contractor will enter into a Streambed Alteration Agreement pursuant to Section 1602 of the Fish and Game Code for impacts to streams and their associated riparian areas.

The wetland mitigation plan will be submitted to CDFW as part of the notification process for its review and approval.

Implementation: FHWA or its contractor will obtain the necessary authorizations to remove riparian vegetation from CDFW prior to construction. The construction contractor will minimize riparian vegetation removal during construction. A qualified restoration biologist will be retained to implement the restoration and monitor the plantings after construction.

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

Timing: Prior to, during, and following construction

Verified By: _____ Date: _____
County Project Manager

Impact BR-6: Discharge of fill into waters of the United States

Mitigation Measure BR-6: Comply with terms of a Section 404 permit.

The FHWA will apply for a Section 404 permit from the U.S. Army Corps of Engineers for project components that would result in the discharge of fill material into waters of the United States, such as road fill, culverts, and bridge abutments. FHWA will comply with all terms and conditions of the 404 permit. A wetland mitigation plan will be developed and, as noted in the EA (FHWA 2012), permanent losses of wetlands will be mitigated in coordination with the Corps. Mitigation for the loss of wetlands and other waters may be achieved through purchasing credits (1:1 acreage ratio) at a Corps-approved mitigation bank or by payment of in-lieu fees to a Corps-approved in-lieu fee program (according to current fee schedule). Documentation of payment shall be submitted to the Corps.

Implementation: FHWA or its contractor will obtain the necessary authorizations to discharge fill into waters of the United States from the Army Corps prior to construction. The construction contractor will comply with terms of the permit during construction. A qualified restoration biologist will be retained to implement the wetland mitigation plan.

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

Timing: Prior to, during, and following construction

Verified By: _____ Date: _____
County Project Manager

Impact BR-7: Potential work in waterways

Mitigation Measure BR-7: Schedule work in waterways outside the wet season.

The FHWA or its contractor will schedule all work in waterways during periods of low-flow or no-flow (about June through October), as practicable, as noted in the EA (FHWA 2012).

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

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

Timing: Prior to construction

Verified By: _____ Date: _____
County Project Manager

Impact BR-8: Water quality impacts in streams and wetlands

Mitigation Measure BR-8: Minimize impacts to waters of the United States.

To minimize impacts to waters of the United States adjacent to the roadway during construction, the contractor will be required to implement the following measures, as noted in the EA (FHWA 2012):

- Erosion control measures, such as silt fencing or sediment logs, will be erected and maintained during construction in all locations where wetlands are found within 16 feet of the toe of slope.
- Appropriate erosion and sedimentation control will be applied on cut or fill slopes disturbed by construction. An erosion control seed mix must be approved by the Forest Service prior to use.
- Construction equipment, employee parking, and materials staging areas will be restricted to the existing roadway or specially designated areas away from wetland areas. Machinery servicing and refueling areas will be located away from streambeds and wetlands to reduce the possibility and minimize the impacts of accidental spills or discharges.

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

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

Timing: Prior to and during construction

Verified By: _____ Date: _____
County Project Manager

Impact BR-9: Impacts to banks of streams

Mitigation Measure BR-9: Implement stream bank stabilization measures.

The contractor will ensure that banks of stream channels do not have the potential to become destabilized and slough off into streams, as noted in the EA (FHWA 2012). Most of the streams and drainages in the project area do not have steep banks, but in areas with steeper slopes, this measure may include the installation of retaining walls or other permanent mechanical erosion control methods since temporary structures, such as silt fencing, require periodic replacement. Temporary structures would be appropriate during construction and in seeded or revegetated areas until vegetation can become established.

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

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

Timing: Prior to and during construction

Verified By: _____ Date: _____
County Project Manager

Impact CR-1: Potential disturbance to documented cultural resources

Mitigation Measure CR-1: Implement a Historic Properties Treatment Plan.

In accordance with the Memorandum of Agreement (MOA) between the Federal Highway Administration Central Federal Lands Highway Division, the USDA Forest Service, Plumas National Forest, and the California State Historic Preservation Officer, FHWA will implement the Historic Properties Treatment Plan, California Forest Highway 17–Beckwourth to Clover Valley, CA-PLU-1997, CA-PLU-1998, CA-PLU-2763, Plumas County, California, February 2012 for the proposed project. Avoidance measures have and will continue to be incorporated into the design of the project. Mitigation will include historical research and interpretative signs for historic sites and data recovery at archaeological sites. FHWA will implement the measures as outlined in the signed MOA for the project.

Implementation: FHWA will implement the plan. The construction contractor, under oversight from FHWA, will implement any avoidance or protection measures during construction.

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

Timing: Prior to and during construction

Verified By: _____ Date: _____
County Project Manager

Impact CR-2: Potential impacts to Beckwourth Emigrant Trail

Mitigation Measure CR-2: Avoid impacts to the Beckwourth Emigrant Trail.

To ensure no impacts occur to the adjacent Beckwourth Emigrant Trail, all work in the vicinity of the trail will be restricted to the existing roadway prism. If any new ground disturbance is necessary along the trail, a historical archaeological monitor meeting the Secretary of the Interior's Standards for Historic Archeology will be present during ground-disturbing activities. If resources associated with the trail are exposed, all work in the vicinity will stop and the archaeological monitor will assess the resources and consult with FHWA and the Forest Service (if on National Forest System land) to determine the need for measures to protect or recover the resources in accordance with the Historic Properties Treatment Plan for the project. Appropriate measures will be implemented prior to resuming ground-disturbing activities in the area.

Implementation: The construction contractor, under oversight from FHWA, will implement measures to avoid impacts to the trail. FHWA will retain a historical archaeological monitor if needed.

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

Timing: During construction

Verified By: _____ Date: _____
County Project Manager

Impact CR-3: Potential disturbance of undocumented cultural resources

Mitigation Measure CR-3: Implement measures to avoid disturbance to undocumented cultural resources.

If FHWA determines during implementation of the Historical Property Treatment Plan or after construction of the project has commenced that either the implementation of the plan or the project will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, FHWA will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3). FHWA at its discretion may, hereunder and pursuant to 36 CFR § 800.13(c), assume any discovered property to be eligible for inclusion in the National Register.

Implementation: FHWA will implement the plan. The construction contractor, under oversight from FHWA, will implement any avoidance or protection measures during construction.

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

Timing: During construction

Verified By: _____
County Project Manager

Date: _____

Impact CR-4: Potential disturbance to human remains

Mitigation Measure CR-4: Implement measures to avoid disturbance of human remains.

In the event that human remains are encountered during the archaeological fieldwork stipulated in the Historic Properties Treatment Plan, fieldwork will proceed according to the following protocol:

- The unit bearing the remains will be secured and the discovery will remain unexcavated until consultation occurs with the FHWA, the State Historic Preservation Officer, PNF, and consulting Tribes.
- Human remains and associated funerary items will be removed according to the provisions agreed upon during consultation. Because of logistical issues, any excavated remains will be temporarily housed with the PNF until outside analyses occur, if any, and during the period following analysis and before reburial.
- Consultation will determine the nature and extent of any analysis to be performed on human remains prior to internment under the Native American Graves Protection and Repatriation Act. Minimum analysis includes the determination of age and gender. Additional analyses may include various methods that determine general health conditions at the time of death.

Implementation: The construction contractor, under oversight from FHWA, will implement the measures described above.

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

Timing: During construction

Verified By: _____
County Project Manager

Date: _____

Impact GS-1: Potential concern with geologic and soil hazards

Mitigation Measure GS-1: Implement geotechnical design recommendations.

The project will be engineered to account for potential unstable conditions. The FHWA or its contractor will implement applicable recommendations regarding site preparation found in the hydraulic recommendations and geotechnical reports prepared for this project (Blackler 2010 and Henwood 2012). These recommendations relate to grading requirements, embankments on soft ground, slope recommendations, shrink/swell factor recommendations, bridge foundation recommendations, wingwall design, abutment settlement, and global stability.

Implementation: FHWA will incorporate appropriate measures into the design.

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

Timing: Prior to construction

Verified By: _____ Date: _____
County Project Manager

Impact HWQ-1: Erosion and sedimentation impacts

Mitigation Measure HWQ-1: Prepare and implement a Stormwater Pollution Prevention Plan.

The project will comply with the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity, Order No. 2009-0009 DWQ and FHWA Federal-Aid Policy Guidelines, Subchapter G, Part 650, Subpart B. The FHWA will prepare a SWPPP for the project and identify BMPs to reduce erosion during project construction and minimize sedimentation down gradient from the project. These measures may include, but are not limited to, the following:

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

- Cover active and inactive soil stockpiles with soil stabilization material or a temporary cover and surround stockpiles with a linear sediment barrier.
- If fueling or maintenance must be done on-site, designate a location away from the creek, preferably at the staging area along FR 177.
- Use containment berms or dikes around fueling and maintenance areas.
- Prevent demolished material from entering the creek, such as through use of authorized covers and platforms to collect debris.
- Do not operate mechanized equipment in the active stream channel.
- Do not deposit material derived from roadway work in the creek channel, including along the banks, where it could be washed away by high stream flows.

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

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

Timing: Prior to and during construction

Verified By: _____ Date: _____
County Project Manager

Impact LUP-1: Fence removal impacts on deer populations

Mitigation Measure LUP-1: Install deer fencing and signs on the CMWA.

FHWA will ensure that all fencing that is damaged or otherwise affected on CDFW property during construction will be replaced in-kind. All new fencing installed on CDFW property will have a deer-friendly design. Deer advisory signs will be placed along the road in or near the CDFW property to warn drivers of the deer population.

Implementation: The construction contractor, under oversight from FHWA, will implement the measures described above.

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

Timing: During construction

Verified By: _____ Date: _____
County Project Manager

Impact LUP-2: Loss of land in Crocker Meadows Wildlife Area

Mitigation Measure LUP-2: Compensate for land conversions on the CMWA.

FHWA and the County will continue to coordinate with CDFW and California State Parks, when applicable, to ensure that the recreation attributes of the CMWA are maintained during and after construction. If compensation is deemed necessary per Section 6(f) of the Land and Water Conservation Fund Act (16 USC Sec. 4601 et seq.) conversion requirements, replacement land of at least the same fair market value and reasonably equivalent usefulness and location will be acquired as mitigation. Once final design is accomplished and the precise impacts to the CWMA are known, FHWA in consultation with CDFW will determine the appropriate location and amount of mitigation for such impacts. All acquisitions will conform to the applicable provisions of Public Law 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Implementation: FHWA and the County will coordinate with CDFW.

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

Timing: Prior to construction

Verified By: _____ Date: _____
County Project Manager

Impact N-1: Construction noise

Mitigation Measure N-1: Maintain and equip construction equipment with noise control devices.

FHWA will ensure that the construction contractor implements the following noise control measures during construction activities:

- Construction activities will be limited to 1/2 hour after sunrise to 1/2 hour before sunset when activities occur within 500 feet of a residential or other noise-sensitive land use, unless another schedule is approved by FHWA in advance.
- All construction equipment will be properly maintained and equipped with noise control, such as mufflers, in accordance with manufacturers' specifications.

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

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

Timing: During construction

Verified By: _____ Date: _____
County Project Manager

Impact N-2: Noise disturbance near residences

Mitigation Measure N-2: Coordinate with residences to minimize noise disturbance.

FHWA and the County will work with the construction contractor and nearby residents to minimize disturbance to occupied residences. Before construction near noise-sensitive receptors, FHWA or the County will provide written notification to potentially affected receptors, identifying the type, duration, and frequency of construction operations. Notification materials will also identify a mechanism for residents to register noise-related complaints with FHWA or the County. FHWA and the County will consider any noise-related concerns on a case-by-case basis (in addition to the requirements of Mitigation Measure N-1).

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

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

Timing: During construction

Verified By: _____ Date: _____
County Project Manager