Dixon Mine Road Bridge (No. 31C-0002) Replacement Project

Proposed Mitigated Negative Declaration and Initial Study

DRAFT

April 2015

Prepared for:
Alpine County
Community Development Department
50 Diamond Valley Road
Markleeville, California 96120
(530) 694-2140

Prepared by:

North State Resources, Inc.
2020 L Street, Suite 340
Sacramento, California 95811
(916) 446-2566

NSR 51316

Project Information

1. Project Title:	Dixon Mine Road Bridge (No. 31C-0002) Replacement Project
2. Lead Agency Name and Address	Alpine County Community Development Department 50 Diamond Valley Road Markleeville, California 96120
3. Contact Person and Phone Number	Brian Peters, Community Development Director (530) 694-2140 ext. 425
4. Project Location	Dixon Mine Road Bridge at Wolf Creek is approximately 8 miles southeast of Markleeville, Alpine County, California; T 9N, R 21E, Sec. 29 (MDBM) *Wolf Creek, California* Quadrangle; project area includes County Road Right of Way, Humboldt-Toiyabe National Forest, and private parcels: APNs 003-120-011-0 and 003-120-012-0
5. General Plan Designation	Open Space (OS)
6. Zoning	Agriculture (AG)
7. Description of Project	Alpine County is proposing to replace the existing Dixon Mine Road Bridge (No. 31C-0002) over Wolf Creek with a new cast-in-place concrete slab bridge. The existing bridge is functionally obsolete and structurally damaged and poses a safety hazard to vehicle travel. The project includes modification of the approaches on Dixon Mine Road.
8. Surrounding Land Uses and Setting	National Forest System lands, privately owned grazing land, and rural residential housing.

9. Other Public Agencies Whose Approval May Be Required:

- California Department of Transportation (funding authorization)
- California Department of Fish and Wildlife (Streambed Alteration Agreement)
- U.S. Army Corps of Engineers (Clean Water Act Section 404 Nationwide Permit)
- Lahontan Regional Water Quality Control Board (Clean Water Act Section 401 Water Quality Certification and Section 402 General Construction Activity Storm Water Permit)
- U.S. Forest Service (Special Use Permit)
- U.S. Fish and Wildlife Service (Section 7 of the Endangered Species Act)
- Great Basin Unified Air Pollution Control District (Authority to Construct)

Table of Contents

1 Introduction 1

1.1 Purpose of this Document 1
1.2 Supporting Technical Studies 1
1.3 Document Organization 2

2 Project Description 3

2.1 Location 3
2.2 Existing Facility Conditions 3
2.3 Project Purpose and Need 3
2.4 Proposed Project Description 4
2.5 Conservation Measures 5
2.6 Required Permits and Approvals 8

3 Initial Study Checklist 11

3.1 Regional Environmental Setting 12
3.2 Environmental Impacts and Mitigation Measures 14

4 Determination 47

5 Report Preparation and References 49

5.1 List of Preparers 49
5.2 References 49

Tables

Table 1. Anticipated Permit Approvals 8

Figures

Figure 1. Project Location and Vicinity Map 9
Figure 2. Area of Potential Effects 10

Appendices

Appendix A. Mitigation Monitoring and Reporting Plan

1 Introduction

1.1 Purpose of this Document

The Alpine County Community Development Department (County) is proposing to replace Dixon Mine Road Bridge (No. 31C-0002) over Wolf Creek south of the unincorporated community of Markleeville, Alpine County, California. The existing single-lane bridge is functionally obsolete as well as structurally damaged and is in need of replacement. The Dixon Mine Road Bridge (No. 31C-0002) Replacement Project (proposed project) consists of removal and disposal of the existing bridge, installation of a temporary path/diversion structure across Wolf Creek, installation of the new bridge, modification of the approaches along Dixon Mine Road to match the new bridge alignment and grade, and removal of the temporary structures. 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 potentially 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. Alpine County is a public agency with discretionary authority over the project and is the Lead Agency under CEQA. The proposed project would receive funding under the Federal Aid Highway Bridge Program and Off System Bridge Toll Credit Funding and would require approvals from the California Department of Transportation (Caltrans), which acts on behalf of the Federal Highway Administration (FHWA). FHWA has designated Caltrans to act as a federal agency on its behalf. Caltrans will need to document compliance with the National Environmental Policy Act, which is anticipated to be in the form of a Categorical Exclusion supported by technical studies.

1.2 Supporting Technical Studies

The technical studies listed below are available for review at the County office in Markleeville (see contact information on the Project Information sheet):

- Archeological Survey Report (ASR)/Historical Property Survey Report (HPSR) (confidential; available to qualified readers only)
- Natural Environment Study (NES) Report and Biological Assessment
- Water Quality Assessment Report
- Wetland Delineation Report
- Initial Site Assessment
- Visual Impact Assessment Technical Memorandum
- Noise Technical Memorandum
- Land Use Technical Memorandum
- Section 4(f) Technical Memorandum
- Bridge Design Hydraulic Study and Location Hydraulic Study Report

1.3 Document Organization

The 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 of the proposed project using the CEQA Environmental Checklist. Where appropriate, mitigation measures are provided to reduce potentially significant impacts to a less-than-significant level.
- **Chapter 4 – Determination:** Presents Alpine County's environmental determination for the proposed project.
- **Chapter 5 – Report Preparation and References:** Identifies the individuals responsible for preparation of this document and lists references used to support the analysis.

2 Project Description

2.1 Location

Bridge No. 31C-0002 over Wolf Creek is located on Dixon Mine Road approximately 8 miles southeast of Markleeville, Alpine County, California, and 2.7 miles southeast of State Route 4. The bridge is in Section 29 of Township 9 North, Range 21 East on the *Wolf Creek, California* 7.5-minute U.S. Geological Survey quadrangle (see Figure 1 at the end of this section). Dixon Mine Road crosses Wolf Creek at the north end of Wolf Creek Meadows approximately 0.4 mile northeast of its intersection with Wolf Creek Road. The project area encompasses approximately 3.32 acres along Dixon Mine Road from just south of a residential property approximately 165 feet west of the existing bridge to just north of a privately owned livestock corral approximately 215 feet northeast of the bridge (Figure 2 at the end of this section). A staging area may be located in the pullout northeast of the bridge.

2.2 Existing Facility Conditions

The existing bridge is a single-span timber bridge built in 1975. The structure is 16 feet wide and 33 feet long. The existing bridge consists of a laminated timber deck on simple timber stringers, all of which are connected to timber bulkhead abutments founded on spread footings. The roadway approaches to the existing bridge have narrow curves, resulting in a "broken-back" alignment. These curves make truck and large vehicle travel across the bridge difficult and have resulted in significant damage to the northeast corner of the wheel guards on the bridge by the offtracking of large trucks and trailers. The bridge does not currently have any rails.

Dixon Mine Road is used by private landholders to access their homes and properties southwest of the bridge; by the public to access National Forest System (NFS) lands, including the Wolf Creek Pack Trail system that leads into the Carson-Iceberg Wilderness; by the public for dispersed camping and equestrian activities; by a livestock operator that owns grazing land and a corral on the east side of the bridge; and by emergency responders, mainly for wilderness fire suppression.

2.3 Project Purpose and Need

The purpose of the project is to replace the functionally obsolete and structurally damaged bridge. A new bridge is needed to maintain safe and reasonable access for all classes of private and official vehicles—ranging from passenger vehicles to fully loaded semi-trucks and trailers—to areas east of the bridge.

The bridge has a Caltrans sufficiency rating of 60.5. The bridge also has a National Bridge Inventory Item Code 68 value of 2, indicating that the bridge is functionally obsolete. The single lane width of the bridge coupled with a poor alignment, no bridge rail, and structural damage (e.g., damaged wheel guards at the northeast corner) contribute to this determination.

In addition, the top of the sill-plate at abutment 2 is exposed along its entire length, and the side of the sill-plate is exposed up to 5 inches deep over a distance of 5 feet on the downstream side of the bridge. Current measurements show that the streambed has aggregated up to 12 inches along abutment 2. The angle at which flow strikes abutment 2 indicates a likelihood of continued scour over time. A Scour Plan of Action developed in October 2010 recommended changing the National Bridge Inspection Item Code 113 from a "U" to a "3," indicating that the bridge foundations are determined to be unstable for assessed scour conditions.

2.4 Proposed Project Description

The proposed project consists of replacing the existing Dixon Mine Road bridge over Wolf Creek with a new cast-in-place concrete slab bridge. This new bridge would be located on the existing alignment with geometric enhancements that meet County roadway standards. It would also be designed to comply with Caltrans Seismic Design Criteria and California Building Code requirements for seismic activity in the region, pursuant to the geotechnical report (Holdrege & Kull 2014). The new bridge would be 25 feet wide by 45 feet long with two travel lanes and a roadway width of 18 feet. The bridge would be a single-span structure on two 15-foot-tall concrete abutments founded on driven steel piles. The abutments would be installed near the top of each bank of Wolf Creek, above the main creek channel. The foundations would be configured so that future scour would not threaten the bridge. The piles would be driven about 30 feet below the existing ground surface, which represents the maximum depth of ground disturbance during construction. Bridge construction would require an estimated 400 cubic yards of imported material and excavation of an estimated 190 cubic yards of material. Temporary falsework would be installed across the creek at the location of the new bridge to help support the structure as it is being constructed. The falsework would be removed once the bridge is complete. The existing bridge would be demolished, removed from the project area as construction progresses, and properly disposed of.

Rock slope protection would be placed along the creek banks at the locations of the new abutments to stabilize the banks of Wolf Creek under the new bridge. An estimated 560 cubic yards of 2-ton rock slope protection and 190 cubic yards of rock slope protection backing are expected to be needed around the abutments.

During construction, Dixon Mine Road would be closed to public highway vehicles except those operated by landowners requiring access to their property east of the bridge. The temporary closure would begin about 1,100 feet northeast of the intersection of Wolf Creek Road and Dixon Mine Road, and signs would be placed along both roads notifying travelers of the closure. Signs would also be installed on both sides of the project area along Dixon Mine Road to notify travelers of a pedestrian detour. A 6-foot wide temporary path would be installed across the creek to provide limited public and construction access to the northeast side of the creek. It would be about 340 feet long and provide a detour around the work area. The path would be built along the upstream side (i.e., southeast) of Dixon Mine Road by contouring portions of the existing road embankment and importing fill material to create a relatively level bench. The path would require an estimated 160 cubic yards of imported material and excavation of an estimated 15 cubic yards of material from the embankment. The surface would be covered with Class 2 Aggregate Base. The path would allow construction workers and their equipment to cross Wolf Creek for construction purposes. The path would also allow the public and Forest Service personnel to cross the creek by foot, horseback,

bicycle, and small state-registered or federally owned off-highway vehicles (e.g., quads, dirt bikes). After the new bridge is operational, the path would be dismantled by removing the temporary fill material and recontouring the road embankment.

Some construction activities would need to occur within the active channel of the creek, such as construction of temporary falsework and placement of rock slope protection. Because Wolf Creek is a perennial stream, flows would need to be diverted around the in-stream work areas. The temporary path across the creek would serve as a diversion structure. Three or four plastic pipes would convey flow under the path, which would serve as a headwall, and through the dewatered work area. The pipes would be about 45 feet long and would be partially covered where they intersect the path with material from the path to weigh them down. The upstream face of the path may also be lined with plastic to keep water out, and geofabric may be used in the temporary fill of the path for stability. The pipes would be removed when the temporary path is removed at the end of construction.

Staging would occur on Dixon Mine Road on the southwest side of the bridge, and material or equipment storage may also occur on NFS lands in the northeast portion of the project area. The main contractor staging area in the southwest portion of the project area would be about 0.5 acre and would primarily be located within the existing County ROW. Some of the staging area may extend onto adjacent private land, and a construction easement would be acquired from the landowner to accommodate the portion of the contractor staging area that lies outside the County ROW. A Special Use Permit from the Forest Service would be needed to allow staging on NFS land in the northeast portion of the project area. The staging area would be about 0.2 acre. The project would not require the relocation of any public utilities. Driveway access to all privately owned parcels along Dixon Mine Road on the southwest side of the bridge would remain open during construction.

The type of equipment and number of construction workers would vary based on the specific activity being conducted. Construction equipment is expected to include an excavator, a loader, a grader, a vibratory compactor, a crane, a grade-all, a pile driver, and several trucks. Approximately 6 to 10 construction workers would likely work on the project on any given day.

Construction activities would take up to 6 months to complete. In-stream work would take about 3-4 months, and the diversion structure would likely be in place for about 4 months. Construction is planned from May to October, once all environmental approvals have been obtained. The new bridge would be operable by mid-September for Forest Service personnel and other restricted uses, but might not be open to public vehicle use until October. The public would be allowed to cross the creek by foot, horseback, bicycle, and small off-highway vehicle using the temporary crossing until the new bridge is open.

2.5 Conservation Measures

Conservation measures have been incorporated into the project to minimize the potential for adverse effects related to water quality, air quality, and invasive plants. These conservation measures are identified below.

Conservation Measure #1 - Erosion and Sedimentation Control

Erosion control measures will be implemented during construction activities. The County or its contractor will prepare a Storm Water Pollution Prevention Plan that describes and illustrates placement of Best Management Practices (BMPs) within the work area. BMPs include, but are not limited to, the following:

- To the extent practicable, activities that increase erosion potential will be restricted to the relatively dry summer and early fall periods to minimize the potential for rainfall events to transport sediment to surface water features. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures will be in place and operational at the end of each construction day and will be maintained until permanent erosion control structures are in place.

- Vegetation clearing and ground-disturbing activities will be limited to the minimum area necessary for project implementation.

- Areas where woody vegetation needs to be removed will be identified in advance of ground disturbance and will be limited to only those areas that have been approved by the County. Within 10 days of completion of construction in those areas, weed-free mulch will be applied to disturbed areas to reduce the potential for short-term erosion. Prior to a rain event, or when weather forecasts by the National Weather Service indicate a greater than 50 percent possibility of rain within the next 24 hours, weed-free mulch will be applied to all exposed areas at the completion of activities that day. Soils will not be left exposed during the rainy season.

- Suitable BMPs, such as silt fences, straw wattles, or catch basins, will be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures will be installed prior to any clearing or grading activities. Erosion control measures that employ monofilament netting will be prohibited within the work area.

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

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

- All disturbed areas will be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native or approved non-invasive exotic species.

Conservation Measure #2 - Prevention of Accidental Spills

Construction specifications will include the following measures to minimize the potential for adverse effects resulting from accidental spills of pollutants (e.g., fuel, oil, grease):

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

- Equipment and hazardous materials will be stored a minimum of 50 feet away from surface water features.

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

Conservation Measure #3 - Air Quality/Dust Control

Construction specifications will include a requirement to implement a dust control program to limit fugitive dust emissions. The dust control program will include, but not be limited to, the following elements:

- Water inactive work areas and exposed stockpile sites at least twice daily or until soils are stable.

- Pursuant to California Vehicle Code, all trucks hauling soil and other loose material to and from the work area will either be covered or maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer).

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

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

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

Conservation Measure #4 - Prevention of Spread of Invasive Species

- All equipment used for off-road construction activities will be weed-free prior to entering the project area.

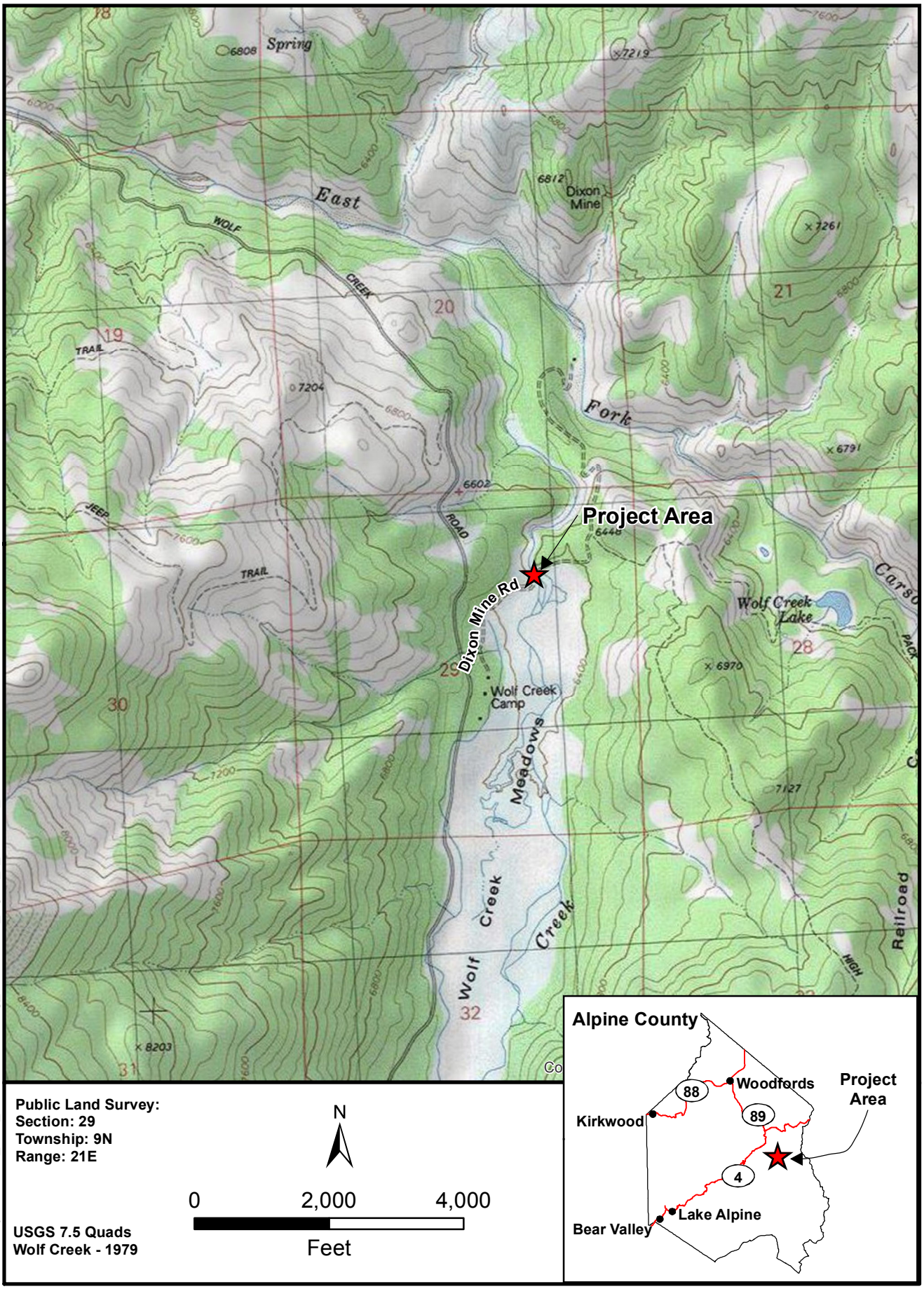
- If project implementation calls for mulch or fill, it will be weed free.
- Any seed mixes or other vegetative material used for revegetation of disturbed areas will consist of locally adapted native plant materials to the extent practicable.

2.6 Required Permits and Approvals

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

Table 1. Anticipated Permit Approvals

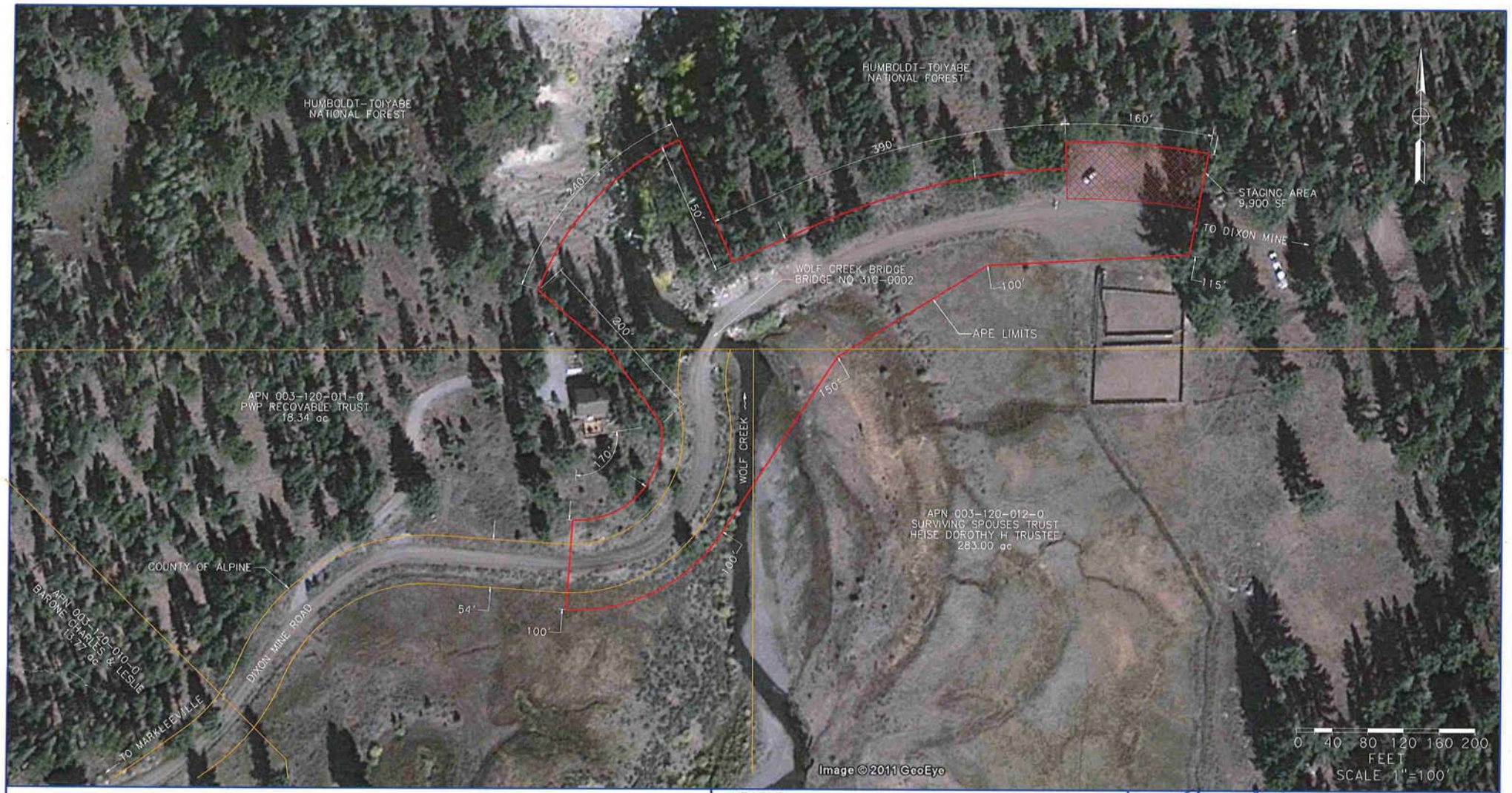
Approving Agency	Permit/Approval	Required for
Federal Agencies		
U.S. Army Corps of Engineers	Section 404 Clean Water Act permit	Discharge of fill material into Wolf Creek
U.S. Forest Service	Special Use Permit	Staging activities on NFS lands
U.S. Fish and Wildlife Service	Section 7 Endangered Species Act consultation (anticipated to be informal)	Potential impacts on Yosemite toad and Sierra Nevada yellow-legged frog
State Agencies		
California Department of Transportation	Funding authorization; NEPA compliance; Endangered Species Act consultation	Federal Aid Highway Bridge Program; NEPA; lead federal agency
California Department of Fish and Wildlife	Streambed Alteration Agreement (Section 1602 of Fish and Game Code)	Temporary dewatering of Wolf Creek; placement of RSP in Wolf Creek; and placement of a temporary path across Wolf Creek
Lahontan 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)	Storm water discharges associated with construction activity for greater than 1 acre of land disturbance
	Water Quality Certification (Section 401 of the Clean Water Act)	Water quality impacts on Wolf Creek and need for federal permit (Corps Section 404 permit)
Local Agencies/Others		
Alpine County	Project approval; CEQA compliance	
Great Basin Unified Air Pollution Control District	Authority to Construct	Construction activities that would emit air pollutants
Private Landowners	Construction easement	Staging activities on private land
Alpine County Building Department	Grading permit	May be needed if fill material is deposited on private land



T:\Projects\51316_Wolf_Creek\GIS\Working_Mxds\51316_Figure_1_Location_New.mxd Created: 2011-10-25 pkirk revised 2013-11-05 aminks

Dixon Mine Road Bridge Replacement Project

Figure 1
Location and Vicinity Map



DIXON MINE ROAD BRIDGE IMPROVEMENT PROJECT AT WOLF CREEK BRIDGE

RECEIVED
JUL 24 2012

ALPINE COUNTY, CA

FEDERAL BRIDGE REPLACEMENT PROJECT No. BRLO-5931(027)

BRIDGE No. 31C-0002

LEGEND

- PROPOSED STAGING AREA
- AREA OF POTENTIAL EFFECTS (APE) LIMITS
- PARCEL LINE

AREA OF POTENTIAL EFFECTS MAP

ALPINE COUNTY — DATE 7-17-12

CALTRANS D10 PDS — DATE 7/24/12

LOCAL ASSISTANCE PROJECT ENGINEER
OFFICE OF LOCAL ASSISTANCE, CALTRANS D10 — DATE 7/24/12

Figure 2.
Area of Potential Effects

3 Initial Study Checklist

This chapter incorporates the Environmental Checklist contained in Appendix G of the CEQA Guidelines, including the CEQA Mandatory Findings of Significance. Each resource section discusses anticipated project-related impacts and presents the level of significance 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. These measures are also listed in the mitigation monitoring and reporting plan, included as Appendix A to this document. 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).

3.1 Regional Environmental Setting

Alpine County is the smallest county in California based on its population (about 1,200 people). Located on the crest of the Sierra Nevada between Lake Tahoe and Yosemite National Park, the county is entirely rural with no incorporated cities. Approximately 95 percent of the land in Alpine County is administered by federal agencies, including the Forest Service and the Bureau of Land Management. Markleeville—a census-designated place and the county seat—had an estimated population of 210 in 2010 (U.S. Census Bureau 2012).

Topography and Climate

The project area is in the eastern portion of Alpine County on the east side of the Sierra Nevada at its interface with the extreme western edge of the Great Basin. The Great Basin is the largest desert in the United States, occupying an arid expanse of about 190,000 square miles and is bordered by the Sierra Nevada on the west, the Rocky Mountains on the east, the Columbia Plateau on the north, and the Mojave and Sonoran deserts to the south. Elevations within the Great Basin range from about 3,000 to 6,500 feet above mean sea level (msl) making for a cool or cold desert environment. Precipitation averages 7 to 12 inches annually with winter precipitation falling mostly as snow (Desert USA and Digital West Media Inc. 2012). In an average year, about 80 percent of all precipitation falls from November through April (Western Regional Climate Center 2012).

Hydrology

The project area is located in the Upper Carson U.S. Geological Survey Hydrologic Map Unit No. 16050201 (U.S. Environmental Protection Agency 2013a). The Carson River watershed encompasses some 3,966 square miles, of which 606 square miles are located in Alpine County (Mactec Engineering and Consulting et al. 2004). The Upper Carson River watershed consists of two major subwatersheds: the East Fork Carson River and the West Fork Carson River, both of which originate high in the Sierra Nevada.

Wolf Creek is a perennial stream and is a direct tributary to the East Fork Carson River, which flows north/northeast into Nevada after joining the West Fork Carson River, passing through Carson City and into Lahontan Reservoir. Water held in Lahontan Reservoir is used for irrigation and hydroelectric power generation. Outflow from the Lahontan Dam flows east past Fallon, Nevada, and terminates at the Carson Sink and Stillwater National Wildlife Refuge in Churchill County, Nevada (Timmer et al. 2006).

Geology

Cretaceous plutonic formations, quaternary formations, and tertiary volcanic geologic formations underlie the Wolf Creek subwatershed (Mactec Engineering and Consulting et al. 2004). The *Geologic Map of California* indicates that the geology of the project area is comprised of tertiary volcanic rocks (California Department of Conservation 2010). These volcanic rocks include lava flows, ash, mudflows, and volcanic breccias produced by the volcanic activity that formed the Sierra Nevada during the Miocene period.

Over the past 2 million years, a series of glaciations have influenced the morphology of the Wolf Creek stream channel. Evidence of these events can be seen in the terminal moraine located at the north end of Wolf Creek Meadow. Glacial deposits left at the terminus of each glacial advance impeded sediment transport, resulting in the establishment of glacial outwash valleys, which eventually transitioned to meadows. The relatively flat topography of Wolf Creek Meadow allows the Wolf Creek stream channel to be relatively sinuous and migratory.

Land Use

The project area is situated in the Humboldt-Toiyabe National Forest, the largest National Forest in the conterminous United States. It is composed of large non-contiguous sections of land scattered across western Nevada and eastern California. The dramatic variation in elevation (approximately 4,100 feet msl to over 12,000 feet msl) and topography within the Humboldt-Toiyabe National Forest on the east side of the Sierra Nevada results in highly variable vegetation communities. Interrange valleys supporting pinyon pine, juniper, and sagebrush transition to rugged mountainous terrain covered by pine or subalpine forests.

Circulation in Alpine County is provided mainly by three state routes (SRs): SR 4, SR 88, and SR 89. Predicted average daily traffic (ADT) for 2015 for each SR varies within Alpine County. SR 4 has a predicted ADT of 1,800–2,700; SR 88 has a predicted ADT of 3,600–3,800; and SR 89 has a predicted ADT of 1,300–3,800 (Alpine County 2009). Wolf Creek Road, the only crossroad to Dixon Mine Road, connects to SR 4 approximately 2.75 miles to the northwest of the project area, or 2 miles south of the intersection of SR 4 and SR 89.

Alpine County is located in the ancestral home of the Washoe people. Prior to the arrival of Euro-Americans, the Washoe lived a seasonal subsistence lifestyle, moving as the seasons changed. As more Euro-Americans occupied the Alpine County region, resources became more and more scarce and the Washoe were relocated in large part to western Nevada. Historically, Alpine County has a rich mining history, and it was established as a result of the silver boom of the 1860s. Although the silver rush has long since ceased, several small mines continue to be worked throughout the county. Tourism and recreation, occupations with the Forest Service, and to a lesser extent timber harvesting form the basis of the current local economy.

3.2 Environmental Impacts and Mitigation Measures

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
I. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

Discussion of Impacts

a, b) ***No Impact.*** The project would not be visible from scenic highways (SR 4 and 89) in Alpine County (Caltrans 2011, Alpine County 2009). No designated scenic vistas occur in the project area or immediate vicinity.

c) ***Less than Significant with Mitigation Incorporated.*** Dixon Mine Road is a graveled County road aligned along the hillslope at the north end of Wolf Creek Meadow and crosses Wolf Creek at the point where the creek leaves the meadow and continues flowing north into a narrow ravine. Views from the project area are expansive when looking south which includes the meadow and riparian vegetation along Wolf Creek. Other views from the project area include several recreational residences to the west, Dixon Mine Road, Jeffery pine forest, a livestock corral to the east, and a narrow ravine to the north. Travelers along Dixon Mine Road, which are limited to private landowners and recreationists, constitute the primary viewer group in the project area. The Forest Service has identified a Visual Quality Objective of Partial Retention for Wolf Creek Meadow, which means that management practices need to be visually subordinate (U.S. Forest Service 1986).

Temporary visual impacts would occur during construction as the new bridge is built and the existing bridge is removed. Vegetation removal would be required for construction, which would leave areas exposed and temporarily degrade the visual quality of the project area. In addition, slopes south of Dixon Mine Road near the existing bridge would be temporarily altered to allow for the placement of the temporary path, which would change the visual character of the project area. Neighbors would have extensive views of these temporary visual alterations. Disturbed areas would be revegetated and slopes would be recontoured to their original form once construction is complete, which would maintain the visual character of the project area after construction is complete and ensure visual changes are temporary. No vegetation removal or slope contouring would

occur on NFS lands, which would ensure consistency with the Visual Quality Objective for the lands.

The project would result in permanent physical changes to the visual character of Dixon Mine Road, Wolf Creek bridge, and the adjacent areas (North State Resources 2014a). The new bridge structure and roadway would be wider with more paved surface. The existing low profile wooden bridge structure and wooden abutments would be replaced with a single-span concrete slab with steel railings and concrete abutments. Rock slope protection would be placed along the creek banks around the abutments. In addition, project components could damage the roots of trees, which could result in dead standing trees. These physical alterations could result in a substantial change to the visual character or quality of the project area. These visual changes would largely be seen by neighboring residents, recreationists, and travelers along Dixon Mine Road and could result in a significant impact. Implementation of Mitigation Measures A-1 and A-2 would minimize changes to the existing visual character of the project area by including pattern elements in the project design and avoiding damage to tree roots where possible, resulting in a less-than-significant impact.

d) ***Less than Significant with Mitigation Incorporated.*** The project would not involve a permanent source of nighttime lighting. Because the proposed project would be aligned within the footprint of the existing facilities, lighting associated with vehicles traveling along Dixon Mine Road at night would be unchanged from existing conditions. However, glare from new signs and metallic bridge components (e.g., the metal railing) could affect travelers along Dixon Mine Road, resulting in a potentially significant impact. Implementation of Mitigation Measures A-3 and A-5 would minimize glare by ensuring the use of non-glare and retroreflective materials on metal and signs. This would reduce any impacts associated with glare to a less-than-significant level.

Mitigation Measures

The County will implement the following mitigation measures to ensure impacts to aesthetic resources are less than significant.

Mitigation Measure A-1: Include pattern elements in project design

Project designs will include pattern elements (e.g., line, texture) found in the surrounding environment on the exposed concrete abutments and bridge surfaces. Before implementation, this measure would require Caltrans Local Assistance Division approval of the additional construction cost required for this measure. If the additional construction cost is not approved, the concrete abutments and bridge surface will be designed to match the surrounding visual environment, to the extent practicable.

Mitigation Measure A-2: Avoid damaging the roots of retained trees

The contractor will avoid damaging the roots of retained trees adjacent to the construction area to the extent possible.

Mitigation Measure A-3: Treat the metal guardrail with acid

The contractor shall treat the metal guardrail with acid etching to provide a weathered look to the metal.

Mitigation Measure A-4: Use non-glare construction materials

The contractor will be required to use non-glare construction materials (i.e., metal guardrail).

Mitigation Measure A-5: Use retroreflective materials for signage

If signage is installed as part of the project, the contractor will be required to use retroreflective materials that meet Caltrans standards.

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

Discussion of Impacts

a) ***No Impact.*** Lands within and surrounding the project area have not been designated by the state as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation 2012a). The project would not affect important farmland.

b) ***Less than Significant Impact.*** Lands within and surrounding the project area are designated as open space (OS) under the County's General Plan (Alpine County 2009) and are zoned as agriculture (AG) under the Alpine County Code (Alpine County 2013). These lands are not under Williamson Act contract (California Department of Conservation 2012b). Construction activities could encroach onto grazing land and restrict access to grazing areas; however, grazing activities would still be able to continue

and grazing land would be accessed via the temporary path. No grazing land would be permanently converted as a result of the project; therefore, the project would not conflict with land zoned for agricultural use.

c, d) ***No Impact.*** The project area is not zoned as forest or timberland; no forest land would be affected by the project.

e) ***No Impact.*** The project is not growth inducing and would not have other impacts that could affect farmland or forest land.

Mitigation Measures

No mitigation measures are necessary.

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
III. AIR QUALITY — Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion of Impacts

a, b) ***Less than Significant Impact.*** The project is located within the Great Basin Unified Air Pollution Control District (GBUAPCD). Alpine County is currently a state-designated "non-attainment" area for coarse particulate matter (PM_{10}) and is in attainment for all federal air quality standards (California Air Resources Board 2012). The project area is not under any applicable air quality plan; however, GBUAPCD has established District Rule 401 to reduce fugitive dust from ground disturbing activities.

Construction activities would result in short-term increases in emissions from the use of heavy equipment that generates dust, exhaust, and tire-wear emissions; soil disturbance; materials used in construction; and construction traffic. These emissions would include fugitive dust (PM_{10} and $PM_{2.5}$) from ground-disturbing activities and both reactive organic compounds (ROG) and nitrogen oxides (NOx) emissions from vehicle and equipment operations. The PM_{10} and ozone precursor emissions associated with the project would be minimized through the implementation of Conservation Measure #3 –

Air Quality/Dust Control in combination with the relatively small disturbance footprint (3.32 acres) and short-term construction period (approximately 5 months). Construction-related emissions would also be expected to remain localized around the project area and dissipate within the immediate vicinity, based on the surrounding topography and vegetation. The requirements of District Rule 401 have been incorporated into Conservation Measure #3 – Air Quality/Dust Control. Therefore, with implementation of the conservation measure, the project would be in compliance with GBUAPCD rules for fugitive dust and with Caltrans Standard Specifications.

Although Alpine County is designated nonattainment for PM_{10}, implementation of Conservation Measure #3 – Air Quality/Dust Control, as described in Chapter 2, would ensure the emissions do not result in a violation of air quality standards in the air basin or a substantial adverse contribution to air quality in the region, and impacts on air quality would be less than significant.

The new bridge is not designed to increase traffic along Dixon Mine Road; it would improve safety conditions for travelers using the road. Long-term emissions from traffic using Dixon Mine Road would be similar to current conditions and would not increase as a result of the project.

c) ***Less than Significant Impact.*** As discussed under items a, 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 pollution emissions for which Alpine County is currently in nonattainment (PM_{10}).

d) ***Less than Significant Impact.*** Sensitive receptors at nearby recreational residences and recreationists in the vicinity of the project area could be exposed to temporary air pollutants from construction activities, such as fugitive dust, CO, and ozone precursors. Construction activities would last approximately 5 months, and emissions would not be substantial with implementation of Conservation Measure #3 – Air Quality/Dust Control. With the minor and temporary nature of emission, receptors would not be exposed to substantial pollution 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.

Mitigation Measures

No mitigation measures are necessary.

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
IV. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion of Impacts

a) ***Less than Significant with Mitigation Incorporated.*** The dominant natural vegetation communities in the project vicinity are meadow, riverine, and Jeffrey pine (North State Resources 2014b). Jeffrey pine (*Pinus jeffreyi*) is the dominant habitat type on the slopes surrounding Wolf Creek Meadow. The meadow habitat type occurs on the active floodplain within the portion of the project area that is east of the creek and south of the road. Riverine habitat type occurs within the channel of Wolf Creek and is dominated by run and riffle habitats, with cobble, gravel, and sand substrates. The developed road corridor and other areas devoid of vegetation, including the steep gravelly slopes in the ravine downstream of the bridge, are categorized as barren.

Based on the review of habitat requirements and the results of the field assessment, no special-status plant species or fish are expected to occur in the project area, but five

special-status animal species were determined to have the potential to occur in the project area (North State Resources 2014b):

- Yosemite toad (*Anaxyrus canorus*) – federally listed as threatened
- Sierra Nevada yellow-legged frog (*Rana sierrae*) – federally listed as endangered
- willow flycatcher (*Empidonax traillii*) – state-listed as threatened
- long-eared owl (*Asio otus*) – California species of special concern
- California spotted owl (*Strix occidentalis occidentalis*) – California species of special concern

Habitat for migratory birds and nesting raptors is present in the project area and vicinity. Cliff swallows (*Petrochelidon pyrrhonota*), barn swallows (*Hirundo rustica*), and other migratory birds are known to build nests under artificial structures such as bridges. The existing bridge structure was visually surveyed for evidence of previous migratory bird nesting activity (e.g., remnant mud nests) during the field assessment, and inactive cliff swallow nests were observed.

Invasive Plants. Construction activities could introduce invasive plants into the project area from seeds or plant material on equipment, if the equipment is not washed prior to entering the project area. Ground disturbance could encourage the spread of invasive plants already present in the project area by creating conditions that are more favorable for invasive plants than native plants. The introduction or spread of invasive plants can reduce the quality of habitat for special-status and other species. Implementation of Conservation Measure #4 - Prevention of Spread of Invasive Species would prevent the spread of invasive species.

Yosemite Toad and Sierra Nevada Yellow-legged Frog. Yosemite toad has a low potential to use meadow habitat east of Wolf Creek, and Sierra Nevada yellow-legged frog has a low potential to use the creek for dispersal. Both species could be affected during construction activities in the wetted portion of the creek or the adjacent wet meadow, if they are present. In particular, installation and removal of the temporary path and diversion structure would result in the placement of fill material and piping in the creek and disturbance to the wet meadow. Other activities associated with bridge removal and installation would take place when the creek is dry (dewatered as a result of the diversion piping) and would have a lower potential to affect the species. The implementation of Conservation Measure #1- Erosion and Sedimentation Control and Conservation Measure #2 - Prevention of Accidental Spills (see Chapter 2) would reduce the potential for water quality impacts that could affect the species' habitats, but other impacts could be significant if individuals are injured or killed. Mitigation Measures Bio-1 through Bio-7 shall be implemented to ensure that project impacts to Yosemite toad and Sierra Nevada yellow-legged frog would be less than significant. Caltrans is consulting with the USFWS on their determination of effects on these species; based on the results of the biological assessment, the project may affect, but is not likely to adversely affect either species.

Special-Status Birds. Construction activities in the project area could disturb nesting willow flycatcher along the creek and in the meadow, nesting long-eared owl along the meadow edges of the coniferous forest, and nesting California spotted owl in the Jeffery pine forest along the edges of the project area, if present during construction. Construction activities during the nesting season for the birds (typically March through August) could result in the loss of fertile eggs or nestlings or otherwise lead to nest abandonment, which would result in a potentially significant impact. 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, ground vibrations, and other construction-related disturbance. 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 Bio-8 and Bio-9 would reduce potentially significant impacts by avoiding construction during the nesting season to the extent practicable or by conducting pre-construction bird surveys and establishing no-disturbance buffers around active nests if construction activities do occur during the nesting season. For the willow flycatcher, implementation of the measures would avoid incidental take of the state-listed bird.

Nesting Raptors and Migratory 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 of the work area. Impacts would be the same as those described for special-status birds. Implementation of Mitigation Measures Bio-8 and Bio-9 would reduce potentially significant impacts as described above.

b, c) ***Less than Significant with Mitigation Incorporated.*** Waters of the United States within the project area encompass a total of approximately 0.828 acre and include a perennial stream, an intermittent stream, a riparian wetland, and a seasonal wet meadow (North State Resources 2014c). Riparian habitat within the project area occurs as riparian wetlands (0.078 acre) along Wolf Creek. The riparian wetlands, which are identified by the California Department of Fish and Wildlife as a sensitive natural community, are dominated by willows (*Salix sp.*) and black cottonwood (*Populus balsamifera*).

The project includes construction of temporary falsework in the creek and a temporary path with pipes for crossing the creek and dewatering the work area. These temporary structures would result in temporary impacts (through placement of fill and ground disturbance) on approximately 0.034 acre of waters of the United States, including approximately 0.017 acre (45 linear feet) of Wolf Creek, 0.003 acre of riparian wetlands, and 0.014 acre of seasonal wet meadow. After construction, the falsework and the temporary path would be removed. The temporary fill across the creek would be removed, and the underlying area would be re-contoured to match the existing contours. Riparian vegetation is expected to naturally populate areas that are temporarily disturbed during construction.

RSP would be placed around the new bridge abutments to stabilize the banks of Wolf Creek beneath the bridge. Fill would be permanently placed within the creek for the RSP

and in a portion of the riparian wetlands for the roadbed. The concrete abutments to support the bridge would be on the creek banks, above the ordinary high water mark, but some of the RSP would extend below the ordinary high water mark. The project would result in permanent impacts on approximately 0.024 acre of waters of the United States, including approximately 0.013 acre (163 linear feet) of Wolf Creek and 0.011 acre of riparian wetland, and up to 750 tons of RSP may be placed within the creek.

The implementation of Conservation Measure #1- Erosion and Sedimentation Control and Conservation Measure #2 - Prevention of Accidental Spills (see Chapter 2) would minimize water quality-related impacts during construction activities, but the temporary and permanent impacts to waters of the United States and riparian wetlands would still be significant. Mitigation Measure Bio-11 through Bio-14 would be implemented to ensure that the proper permits/authorizations are obtained, waters of the United States are restored as close as practicable to their original contour and conditions, and the permanent loss of wetlands is fully compensated for. These mitigation measures would reduce potentially significant impacts to a less-than-significant level.

d) ***Less than Significant Impact.*** Migratory fish are not present in the project area; however, wildlife movement could be affected by the project. The temporary path could restrict movement through the project area and along the creek, but wildlife would be able to use adjacent habitats and the access restrictions would be temporary.

e, f) ***No Impact.*** The proposed project would be consistent with the Alpine 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.

Mitigation Measures

The County will implement the following mitigation measures to ensure impacts to biological resources would be reduced to a less-than-significant level.

Mitigation Measure Bio-1: Minimize disturbance to in-channel and riparian habitat

The dewatered work area and disturbance to in-channel and riparian habitat shall be kept to the minimum area necessary to perform work. Vegetation clearing shall be limited to the smallest area necessary within 200 feet of the banks of Wolf Creek. Disturbance to wildlife burrows shall be avoided, to the extent practicable. Aquatic and upland habitats to be avoided shall be flagged and/or signed. No construction activities or personnel shall be allowed to enter the avoidance areas. Flagging and signage shall be inspected on a daily basis and repaired as necessary. Flagging and signage shall remain in place until construction activities are complete and shall be removed upon completion of construction. Construction access and equipment shall be restricted to existing roads, the proposed temporary path and staging areas, or previously disturbed gravel/dirt parking areas. Speed limits shall not exceed 15 miles per hour within the BSA to avoid potential impacts to wildlife crossing the road.

Mitigation Measure Bio-2: Cover intake pipes

If intake pipes are required for dewatering the construction area, a maximum 0.2-inch (5-millimeter) diameter mesh screen will be used to cover intake pipes to avoid entrapment of toads or frogs in the pipes.

Mitigation Measure Bio-3: Implement biological measures during construction

A qualified biologist(s) shall be assigned to the project to assist the County with implementation of biological measures during construction. The biologist shall be familiar with habitat requirements and the distinguishing physical characteristics to identify all life stages of Yosemite toad and Sierra Nevada yellow-legged frog and their calls from other amphibians found in the Sierra Nevada region.

Mitigation Measure Bio-4: Conduct a pre-construction survey for Yosemite toad and Sierra Nevada yellow-legged frog and their habitat

Within 48 hours prior to the onset of construction activities, the qualified biologist will perform a pre-construction survey for Yosemite toad and Sierra Nevada yellow-legged frog and their habitat. The survey will be conducted in all potential habitat within the BSA and within 250 feet of the BSA. At a minimum, the survey will consist of one night-time survey and one daytime survey, which can be completed during the same day, to locate individuals. The daytime survey will also be used to identify suitable breeding habitat (e.g., flooded meadow pools for toad) and overwintering habitat (e.g., burrows for toad). If a Yosemite toad or Sierra Nevada yellow-legged frog is detected during the survey, the USFWS shall be notified immediately for guidance. Construction activities shall not proceed until protective measures (e.g., exclusionary fencing around breeding or overwintering habitat, delaying construction, biological monitoring) have been developed and implemented in coordination with the USFWS.

Mitigation Measure Bio-5: Conduct environmental awareness training

Prior to the initiation of construction activities, all workers will participate in environmental awareness training provided by the qualified biologist. The training will instruct workers: 1) how to identify Yosemite toad and Sierra Nevada yellow-legged frog, their various life forms, and their habitat components; 2) the potential for these species to be discovered, where they are most likely to be found, which life forms are most likely to be encountered, and how they could be affected during construction activities; 3) the Conservation Measures, avoidance and minimization measures and measures from other documents that have been incorporated into the project; and 4) what to do if a Yosemite toad or Sierra Nevada yellow-legged frog is encountered during construction activities.

Mitigation Measure Bio-6: Monitor for Yosemite toad and Sierra Nevada yellow-legged frog

A qualified biologist shall be present to monitor for Yosemite toad and Sierra Nevada yellow-legged frog during installation and removal of the temporary path across Wolf Creek. The designated biologist will have stop work authority and will immediately contact the USFWS if a Yosemite toad or Sierra Nevada yellow-legged frog is encountered.

Mitigation Measure Bio-7: Implement protective measure if a Yosemite toad or Sierra Nevada yellow-legged frog is detected

If a Yosemite toad or Sierra Nevada yellow-legged frog is detected in the work area at any time during construction activities, all construction activities will cease, and the qualified biologist and the USFWS will be immediately notified. Any Yosemite toads or Sierra Nevada yellow legged frogs that are encountered will be allowed to move away from construction activities on their own. Work activities shall not resume until protective measures have been developed and implemented in coordination with the USFWS. Protective measures include but are not limited to delaying construction, installing exclusionary fencing to prevent protected toads or frogs from entering the work area, relocating toads or frogs to a nearby location outside the exclusionary fencing, and/or increasing biological monitoring. Capture and relocation is not permitted unless specifically approved by the USFWS.

Mitigation Measure Bio-8: Avoid construction activities during the nesting season

To the extent practicable, construction activities shall be scheduled outside the nesting season, which is March 31–August 31. If construction activities are conducted completely outside of the nesting season, no further measures are necessary.

Mitigation Measure Bio-9: Conduct pre-construction bird surveys

If construction activities during the nesting season cannot be avoided, pre-construction surveys shall be conducted by a qualified biologist within 15 days prior to the initiation of construction activities. The surveys shall be conducted within 500 feet of the BSA for nesting raptors and within 250 feet of the BSA for other migratory birds (where accessible). If any active nests are identified, appropriate conservation measures (as determined by a qualified biologist) shall be implemented. These measures may include, but are not limited to, establishing a construction-free buffer zone around the active nest site, biological monitoring of the active nest site, and delaying construction activities in the vicinity of the active nest site until the young have fledged.

Mitigation Measure Bio-10: Remove existing cliff swallow nests prior to construction

If construction activities during the nesting season cannot be avoided, existing cliff swallow nests on the Dixon Mine Road Bridge shall be removed prior to the onset of construction, preferrably between September 1 and March 31 to discourage nesting on the bridge prior to construction. If nests cannot be removed prior to the nesting season (i.e., end of March), a qualified biologist shall determine if nests are inactive and can be removed before construction begins without disturbing nesting activity. If active nests are identified, construction in the vicinity of the bridge may need to be postponed until nests are determined by a qualified biologist to be inactive or the USFWS and/or CDFW authorizes the removal of active nests. An effective deterrent to cliff swallow nesting should be installed on the bridge once the nests are removed. If a nesting deterrent is used, the deterrent shall be monitored for integrity and effectiveness until the project is completed. If nesting activities cannot be effectively deterred, continuous removal of cliff swallow nest starts prior to egg-laying (typically by late spring) may be necessary before construction activities are initiated. Disturbance or removal of active nests (i.e., nests containing eggs) shall not be conducted without the appropriate authorization(s) from the USFWS and/or the CDFW.

Mitigation Measure Bio-11: Obtain a streambed alteration agreement

Prior to any activities that would obstruct the flow of, or alter the bed, channel, or bank of Wolf Creek, notification of streambed alteration shall be submitted to the CDFW. A streambed alteration agreement shall be obtained from CDFW and all conditions of the agreement shall be implemented.

Mitigation Measure Bio-12: Obtain the required permits/authorizations pursuant to Sections 401 and 404 of the Clean Water Act

Prior to any discharge of dredged or fill material into Wolf Creek or any wetlands, the required permits/authorizations shall be obtained from the Corps and the RWQCB pursuant to Sections 401 and 404 of the Clean Water Act. Prior to any work in the creek or adjacent riparian vegetation, notification of streambed alteration shall be submitted to CDFW, and a streambed alteration agreement may be necessary to conduct the work. All terms and conditions of the required permits/authorizations shall be implemented.

Mitigation Measure Bio-13: Minimize the movement and placement of vehicles near Wolf Creek

The movement and placement of vehicles, equipment, and other materials within 200 feet of the banks of Wolf Creek shall be minimized to the greatest extent practicable.

Mitigation Measure Bio-14: Restore waters of the United States to their original contour and conditions

All waters of the United States that are temporarily affected by project construction shall be restored as close as practicable to their original contour and conditions within 10 days after the completion of construction activities. For riparian wetlands temporarily and permanently affected by the project, onsite creation/restoration shall occur in areas disturbed during project construction or other areas deemed suitable. The amount of habitat created/restored shall be at a 3:1 ratio of new plantings per large (≥6 inches or greater in diameter at breast height) woody plant removed (e.g., *Salix* spp.). These replanting ratios will help ensure successful establishment of at least one vigorous plant for each plant removed to accommodate the project. Planted species shall include willow, black cottonwood, and other riparian species native to Wolf Creek. Non-native tree species removed along the creek during construction will be replaced with native riparian species. Plant spacing intervals will be determined as appropriate based on site conditions following construction.

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
V. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion of Impacts

a, b) ***Less than Significant with Mitigation Incorporated.*** The project area is situated within the traditional lands of the Washoe; a native people culturally linked to both California and the Great Basin. Historically the principle industry in Alpine County was timber harvesting and milling, which was founded largely to support mining operations. Gold and silver mining were the next largest industries at the time. Today 95 percent of Alpine County is administered by federal agencies. Dixon Mine Road was used in the past to access Dixon Mine (aka the Log Cabin Mine), a now defunct gold mine (Keith and Miller 1988) located on the mountainside along the East Fork Carson River, approximately 1 aerial mile north of the project area.

Bridge 31C-0002 is presently listed by Caltrans as a Category 5 structure (not eligible for NRHP listing) (North State Resources 2014d). No prehistoric or historic-era sites, features, or artifacts (pursuant to Section 15064.5) are known to be located within the project area. The lack of documented cultural resources and sensitive landforms within and near the project area suggests that the project area and immediate surrounding area possess a low level of sensitivity for exhibiting traces of prehistoric and early historic-period activities. Consequently, it is considered unlikely that ground-disturbing activities would encounter any historic-era or early Native American sites, features, artifacts, or human remains.

If previously undiscovered subsurface cultural resources are encountered during project construction and they are considered historical resources under CEQA, impacts could be significant. Implementation of Mitigation Measure CR-1 would protect those resources and ensure that impacts are less than significant.

c) ***No Impact.*** The project area and vicinity lack fossil-bearing rock formations (John et al. 1981), and few occurrences of paleontological resources have been documented in Alpine county (University of California Museum of Paleontology 2014). Because of these findings, the project is not expected to affect paleontological resources. The project area does not contain any other unique geologic features.

d) ***Less than Significant with Mitigation Incorporated.*** Based on the prehistoric and historic uses of the area and the current disturbed nature of the project area, human remains are not expected to be affected by construction activities. If previously undiscovered remains are encountered during project construction and the remains are human, then impacts could be significant. Implementation of Mitigation Measure CR-2 would help ensure that any potential impacts on human remains are less than significant.

Mitigation Measures

The County will implement the following mitigation measures to ensure impacts to cultural resources are less than significant.

Mitigation Measure CR-1: Accidental discovery of cultural resources

The Caltrans standard policy for previously unidentified cultural resources states that "work be halted in that area until a qualified archaeologist can assess the significance of the find." In the event cultural resources (other than those determined to lack eligibility for either the National Register or the California Register) are unearthed inadvertently as a result of project-related activities, all work in the immediate vicinity of the discovery will be stopped, and the County and Caltrans will be notified. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be retained to evaluate the find and recommend appropriate conservation measures. Appropriate conservation measures shall be implemented prior to re-initiation of activities in the immediate vicinity of the discovery.

Mitigation Measure CR-2: Accidental discovery of human remains

In the event that any human remains or any associated funerary objects are encountered during construction, all work will cease within the vicinity of the discovery. In accordance with CEQA (Section 1064.5) and the California Health and Safety Code (Section 7050.5), the Alpine County Sheriff/coroner should be contacted immediately. If the human remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, who will notify and appoint a Most Likely Descendent. The descendant will work with a qualified archaeologist to decide the proper treatment of the human remains and any associated funerary objects.

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
VI. GEOLOGY AND SOILS — Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on strata or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems?	☐	☐	☐	☒

Discussion of Impacts

a-i) ***No Impact.*** The project area is not located within an Alquist-Priolo Earthquake Fault Zone (California Geological Survey 2012).

ii-iv) ***Less than Significant Impact.*** The closest inactive faults are the Carson Range (Genoa) located approximately 7 miles north of the project area and the Antelope Valley Fault located approximately 9 miles east of the project area (Holdrege & Kull 2014). In the event of a major earthquake from nearby faults, the new bridge may be subject to strong ground shaking, but would not be expected to sustain substantial damage. Furthermore, the potential for seismic-related ground failure or landslides in the project area is considered to be low and would be unlikely to damage the new bridge (Holdrege & Kull 2014).

b) ***Less than Significant Impact.*** Soils within the project area include Hopeval complex, 0 to 2 percent slopes (map unit 190) and Joecut–Heenlake association (map unit 381). Hopeval complex is generally found to the south of Dixon Mine Road within the project area while Joecut–Heenlake association is generally found to the north. Both soils have low to moderate erosion potential (Natural Resources Conservation Service 2011).

Construction activities would disturb soil and increase the potential for soil erosion from wind and water until the new road is paved and vegetation re-establishes in adjacent disturbed areas. Although excavation for the abutments would disturb soil along the creek, the creek would be dewatered during construction activities, which would prevent sediment from entering the creek and affecting water quality. Soil along the bank where the existing bridge is removed would be initially exposed to erosion during the first rain event after bridge removal, but the placement of RSP and the natural reestablishment of vegetation along the bank would protect the soils from substantial erosion associated with normal rain events over the long term. Likewise, removal of the temporary path and pipes would initially expose soils along the banks to erosion as creek flows return to normal, but RSP and vegetation along the creek would help stabilize soils and reduce the potential for erosion. While a sizeable amount of soil disturbance would occur during construction, indirect effects from soil erosion would be minimized with implementation of Conservation Measure #1 - Erosion and Sedimentation Control. Long-term effects from soil erosion are not anticipated because the road would be paved, the banks of the creek around the abutments would be protected, and adjacent disturbed areas would be revegetated with grasses or restore naturally with vegetation.

c, d) ***No Impact.*** Soils in the project area have a low potential for expansion and are not unstable or susceptible to landslide, lateral spreading, subsidence, liquefaction, or collapse (Holdrege & Kull 2014).

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

Mitigation Measures

No mitigation measures are necessary.

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

Discussion of Impacts

a) ***Less than Significant Impact.*** 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).

Emissions of GHGs from the project would be produced from the materials used in the bridge as well as construction-related equipment emissions. The project would not increase the generation of emissions after construction is complete because traffic levels would be similar to current conditions. Emissions of GHGs resulting from 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.*** 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 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.

Mitigation Measures

No mitigation measures are necessary.

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

Discussion of Impacts

a) ***Less than Significant with Mitigation Incorporated.*** Small amounts of hazardous materials (e.g., fuel and solvents) would be used during construction activities. 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.

Wood that had been treated with creosote was found at a depth of 7.5 to 9 feet below the surface (Holdrege & Kull 2013). The subsurface wood is presumably associated with the existing bridge structure. In addition, the above ground wood is likely to consist of treated wood, which is considered a hazardous material. The removal of treated wood from the project area could expose workers to hazardous conditions, potentially resulting in health concerns, which would be a significant impact. To ensure the treated wood waste is properly handled and disposed, Mitigation Measure Haz-1 would be implemented to comply with requirements of the Department of Toxic Substances Control (DTSC). With implementation of this measure, health-related impacts would be minimized, and impacts would be less than significant.

b) ***Less than Significant Impact.*** Hazardous materials or other substances would not be allowed to enter the creek during bridge removal. Hazardous materials would not be stored or used, such as for equipment maintenance, near Wolf Creek to prevent accidental discharge of hazardous materials into the water, and the creek would be dewatered during construction. Conservation Measure #2 - Prevention of Accidental Spills requires the contractor to immediately clean up any spills and properly dispose of all wastes and used spill control materials. With implementation of Conservation Measure #2 - Prevention of Accidental Spills, impacts associated with the use or accidental spill of hazardous materials would be less than significant.

c-f) ***No Impact.*** The project area is not near any schools, airports, private airstrips, or active clean-up or hazardous material sites (U.S. Environmental Protection Agency 2013b, State Water Resources Control Board 2013).

g) ***Less than Significant with Mitigation Incorporated.*** During construction, Dixon Mine Road would be closed to public highway vehicles except those operated by landowners requiring access to their property west of the bridge. The bridge would be closed during construction; however, a 6-foot wide temporary path would be built across the creek, which could be used to provide emergency access to the northeast side of the creek.

Due to the road closure, emergency access on the east side of the bridge, which is normally accessed via Dixon Mine Road, would be difficult. Emergency responders would be able to access the area by crossing the temporary path by foot, horseback, or small off-highway vehicle (e.g., quad). The area could also be accessed by using the informal trail system accessible from the Wolf Creek Trailhead. In addition, helicopters might be used to transport medical and law enforcement personnel and persons needing emergency assistance. In the event of an emergency on the east side of the bridge during

construction, emergency response could be delayed due to the bridge closure and potentially difficult access using the temporary path, resulting in a potentially significant impact. Mitigation Measure Haz-2 would be implemented to ensure that the County coordinates with emergency responders and informs them of possible delays due to construction. Because the closure of Dixon Mine Road would be temporary, and emergency responders would be able to reach the area to the east of Wolf Creek bridge during construction activities, impacts would be less than significant.

h) ***Less than Significant with Mitigation Incorporated.*** Dixon Mine Road is used by emergency responders for wilderness fire suppression. Fire hazard rating in the project area and vicinity is mapped as "very high" (California Department of Forestry and Fire Protection 2007). The use of construction equipment without a proper spark arrestor or welding activities during bridge installation could ignite a fire in the project area, threatening nearby recreation residences. Mitigation Measure Haz-3 would be implemented to reduce the risk of wildfire associated with construction to a less-than-significant level. Long-term use of the bridge would not increase wildfire potential above existing conditions.

Mitigation Measures

The County will implement the following mitigation measures to ensure impacts relating to hazards and hazardous materials are less than significant.

Mitigation Measure Haz-1: Ensure proper handling and disposal of creosote treated wood

The contractor will be required to handle and dispose treated wood waste in accordance with state and local guidelines. DTSC has adopted alternative management standards for handling and disposal of this waste. The contractor will be required to implement the following measures to comply with the adopted standards:

- Confirm with the solid waste facility or hazardous waste facility to be used for the project that it will accept treated wood waste.
- Avoid ground contact during removal of treated wood waste by storing the waste off the ground by placing it on blocks, on concrete surfaces, or in containers or using another appropriate method (e.g., bailing or palletizing the waste).
- Store the treated wood waste for no longer than the allowed limits based on the storage method (i.e., 90 days for block and tarp, 180 days for containment pad, 1 year for container and storage building).
- Store the waste away from public access (e.g., away from the temporary path) and other waste.
- Cover treated wood waste during inclement weather to prevent rain water from leaching chemicals out of the waste.
- Do not burn treated wood waste without first obtaining a hazardous waste permit.
- Contact DTSC if planning to reuse the removed treated wood waste to ensure compliance with existing hazardous waste laws.

- Label all treated wood waste bundle/shipments with the following information: **TREATED WOOD WASTE** – Do not burn or scavenge; TWW Handler (Name, Address, Accumulation Date).
- Keep records for at least three years from date of shipment or receipt to demonstrate that treated wood waste was properly managed. Records should include: (1) name and address of the facility to which the waste was sent; (2) estimated weight of the waste or the weight of the waste as measured by the receiving facility; and (3) date of the shipment.
- Train employees involved in treated wood waste handling and keep the training records for three years. The training shall include applicable requirements of Cal/OSHA and regulations relating to hazardous waste, methods for identifying and segregating treated wood waste, safe handling practices, requirements of alternative management standards; and proper disposal methods.

Mitigation Measure Haz-2: Coordinate with emergency responders

The County will coordinate with the Forest Service (including the Carson Ranger District office), Alpine County Sheriff, and the Sierra Front Interagency Dispatch Center to ensure that each agency is notified of the dates that Dixon Mine Road will be temporarily closed. The County will keep emergency service providers advised of the construction activities going on at the time. The County will notify the Forest Service, Alpine County Sheriff, and the Sierra Front Interagency Dispatch Center of the timing of the road closure and alternate access availability when it is known. The County will coordinate with local landowners to ensure that fire suppression crews will be allowed access, if necessary, through private lands adjacent to the project area.

Mitigation Measure Haz-3: Implement a fire prevention plan

The County will include specifications in its construction plans requiring the construction contractor to prepare and implement a fire prevention plan during construction and requiring compliance with the requirements of Public Resources Code 4442. This code requires internal combustion engines powered by hydrocarbon fuels used on forest-covered land, brush-covered land, or grass-covered land to be equipped with a spark arrester or to be constructed, equipped, and maintained for the prevention of fire pursuant to Public Resources Code Section 4443.

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
XI. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
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)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course	☐	☐	☒	☐

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
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?	☐	☐	☒	☐
j) Inundation of seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion of Impacts

a) ***Less than Significant Impact.*** Wolf Creek is currently impaired for sediment and siltation, primarily as a result of natural processes upstream of the project area (U.S. Environmental Protection Agency 2010). Historic grazing and irrigation practices at Wolf Creek Meadow have exacerbated this problem. A total maximum daily load for sedimentation has not been established for Wolf Creek.

Construction activities across and along the banks of Wolf Creek would occur between May and October, when flows are the lowest, to minimize impacts to the creek. In addition the creek would be dewatered during construction activities, which would prevent sediment or hazardous materials from entering the creek. Soil along the bank where the existing bridge is removed would be initially exposed to erosion during the first rain event after bridge removal, but the placement of RSP and the natural reestablishment of vegetation along the bank would protect the soils from substantial erosion associated with normal rain events over the long term and reduce the potential for eroded soil or sediment to enter the creek and affect water quality. Likewise, removal of the temporary path and pipes would initially expose soils along the banks to erosion, but RSP and vegetation along the banks would reduce the potential for water quality impacts. The implementation of Conservation Measure #1 – Erosions and Sedimentation Control and Conservation Measure #2 – Prevention of Accidental Spills would also minimize water quality impacts during construction, ensuring impacts are less than significant.

b) ***No Impact.*** The project would not involve the use of groundwater supplies and would not affect groundwater recharge in the project area.

c) ***Less than Significant Impact.*** Hydrology within the project area is provided by Wolf Creek, groundwater and surface flows through the Wolf Creek Meadow, and runoff and snowmelt from the surrounding mountain slopes (North State Resources 2014e). Wolf Creek and the meadow are the dominant hydrologic features within the project area, and an unnamed intermittent stream flows into Wolf Creek. The Wolf Creek stream channel as it runs through Wolf Creek Meadow is unconfined and meandering with a relatively low gradient. However, the stream banks appear to be more unstable and more deeply incised than would normally be expected for a stream of this type (Mactec Engineering and Consulting et al. 2004). Historic modifications made to the stream for grazing and irrigation purposes may have contributed to this incision, but the effects of large floods and bed load transport from upstream are also important factors.

Immediately downstream of the Wolf Creek bridge at Dixon Mine Road, Wolf Creek enters a narrow, steep gorge. Landslides are evident along both canyon walls. Such occurrences have resulted in the natural discharge of high sediment loads, substantial coarse bed load (i.e., boulders), and very little floodplain development (Mactec Engineering and Consulting et al. 2004). The gradient of the stream is fairly gradual near the bridge but steepens further downstream. Wolf Creek drains into the East Fork Carson River approximately 1.2 miles downstream of the project area.

The project would require temporary dewatering of Wolf Creek during construction of the new bridge. The temporary path across the creek would serve as a diversion structure. Three or four plastic pipes would convey flow under the path, which would serve as a headwall, and through the dewatered work area. All work in or along the creek would take place in the dewatered area, including construction of the abutment footings, construction of temporary falsework, and placement of RSP. A brief increase in flows in the dewatered area as the temporary path is removed would result in a minor release of sediment into the creek, as discussed for impact a) above, and impacts relating to alterations in drainage patterns would be less than significant.

The project would not have any negative long-term impacts to water quality as a result of drainage pattern alterations because the changes in drainage patterns would be temporary. The placement of RSP would provide long-term protection around the abutments and banks near the bridge and reduce erosion and sedimentation. The new bridge would span the creek and would not affect flows over the long term.

d) ***Less than Significant Impact.*** The temporary dewatering of Wolf Creek and the increased surface area of the new bridge and road would have minimal effects on flooding in the area. Creek flows would be temporarily dammed and diverted during construction, but instream activities would occur during the summer, low flow months, and the temporary diversion in not expected to result in flooding upstream of the temporary dam. A minor increase in impervious surface area would slightly increase runoff into the creek. In addition, the temporary path would direct creek flows through

pipes while it is in place, but this would not result in flooding because the pipes would be properly sized to convey the required flow and because they would be in place during low flow periods when flooding is not anticipated. The new bridge would improve flood flows over the long term because it has been designed to decrease the water surface elevation during flood events as compared to the existing bridge structure (Quincy Engineering, Inc. 2014).

e) ***Less than Significant Impact.*** The wider new bridge structure and modified roadway approaches would increase the amount of impervious surface in the project area. Because of the larger size of the new bridge, the additional surface area would result in a slight increase in storm water runoff, which would result in a less-than-significant impact. The potential for polluted runoff (e.g., containing lubricants) to enter Wolf Creek during operation would be similar to current conditions because the new bridge would have the same function and use as the existing bridge.

f) ***No Impact.*** No additional impacts to water quality are anticipated.

g) ***No Impact.*** The project does not include the construction of new housing.

h) ***Less than Significant Impact.*** The temporary path and pipes are not expected to be affected by flooding because the pipes would be properly sized to convey the required flow and because the structure would be in place during low flow periods when flooding is not anticipated.

The new bridge soffit would be approximately 1.5 feet above the 100-year flood elevation (Quincy Engineering, Inc. 2014). In addition, the new bridge would allow more flow to pass under the bridge and would reduce flood elevations. The new bridge would also increase the velocity of flood flows at the bridge. These changes would not substantially increase channel instability in the vicinity of the new bridge and would not impede or redirect flood flows.

i) ***Less than Significant Impact.*** Footings and abutments for the new bridge would be placed in the flood zone of Wolf Creek, but the bridge itself would be above the floodplain and be capable of conveying flows associated with the 100-year flood event. If a major flood event is anticipated during the construction period, activities would be postponed for the safety of the workers. 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.

j) ***No Impact.*** The project area is not at risk of inundation from a seiche, tsunami, or mudflow.

Mitigation Measures

No mitigation measures are necessary.

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
X. LAND USE AND PLANNING — Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural communities' conservation plan?	☐	☐	☐	☒

Discussion of Impacts

a) ***No Impact.*** The project area is not in an established community. The bridge is designed to improve safety for travelers on Dixon Mine Road and would not divide any communities.

b) ***Less than Significant Impact.*** Land to the south of the existing bridge within the project area is privately owned except for the Dixon Mine Road corridor, which is owned by the County. Land to the north of the existing bridge is managed by the U.S. Forest Service (North State Resources 2014f). The project area is designated by the Alpine County General Plan as Open Space and is zoned as Agricultural. Portions of the project area and Dixon Mine Road within the Humboldt-Toiyabe National Forest are designated as Management Area 3 (Alpine) in the Toiyabe Land and Resource Management Plan (LRMP) as amended (U.S. Forest Service 1986). NFS lands within the project area would only be used for staging activities; no new structures would be built on NFS lands. The new bridge would have the same function as the existing bridge and would not change land uses in the project area. The proposed project would not conflict with the Alpine County General Plan or Toiyabe LRMP.

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

Mitigation Measures

No mitigation measures are necessary.

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

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Discussion of Impacts

a) ***No Impact.*** Dixon Mine Road was used in the past to access Dixon Mine (aka the Log Cabin Mine), a now defunct gold mine (Keith and Miller 1988) located on the mountainside along the East Fork Carson River, approximately 1 aerial mile north of the project area. Currently, no known active mines are accessed via Dixon Mine Road (Morris, pers. comm. 2013). The project area has not been mapped by the Surface Mining and Reclamation Act (California Department of Conservation 2013). Gravel mining activities do not occur at this location. It is unlikely that the project area would be considered an important aggregate resource.

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

Mitigation Measures

No mitigation measures are necessary.

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
XII. NOISE — Would the project result in:				
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?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion of Impacts

a, d) ***Less than Significant with Mitigation Incorporated.*** Noise levels in the project area and vicinity are fairly quiet with periodic vehicle noise from Wolf Creek Road and Dixon Mine Road. The primary source of noise is vehicle traffic, residences, and natural sounds generated from the creek, wildlife, and wind (North State Resources, Inc. 2014g). Nearby sensitive receptors include residences to the west of the existing bridge and recreationists in the surrounding area. The County does not specify noise standards for transportation projects (Alpine County 2009).

Replacement of the Wolf Creek bridge would generate temporary noise from equipment use, bridge installation, and bridge removal. Construction noise would temporarily increase ambient noise levels within and adjacent to the project area. In addition, construction noise may periodically exceed 90 dB during the most intense activities, such as pile driving. As discussed under population and housing, sensitive receptors are likely to be present at the nearby recreational residences during portions of the construction period. Furthermore, recreationists are more likely to be near the project area during the time of year construction activities would take place. Construction noise, particularly from pile driving, could disrupt sensitive receptors at the nearby residences and/or recreationists in the surrounding area, which could result in a significant impact. Implementation of Mitigation Measures Noise-1 and Noise-2 would minimize noise disturbances to sensitive receptors from construction, and impacts would be considered less than significant.

b) ***Less than Significant Impact.*** Construction-related groundborne vibration resulting from the movement of heavy equipment within the construction area would be temporary and localized. The project would involve the use pile driving; however, no people or structures are within the immediate construction area that could be affected by groundborne vibration. The distance to the nearest residence (approximately 125 feet) would dampen the vibrations, resulting in less-than-significant impacts.

c) ***No Impact.*** Because the project would not increase roadway capacity, noise generated by the project would be temporary and limited to the construction phase.

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

Mitigation Measures

The following mitigation measures will be implemented to ensure impacts relating to noise are less than significant.

Mitigation Measure Noise-1: Require equipment noise control

The contractor shall implement the following noise-reduction measures in order to minimize noise and vibration disturbances at sensitive receptor locations during construction:

- Use newer equipment with improved muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment generally operates more quietly than older equipment. Inspect all construction equipment at periodic intervals to ensure proper maintenance and functioning of noise control devices.
- To the degree possible, utilize construction methods or equipment that will reduce the volume of noise generated.
- Turn off idling equipment when not in use longer than a few minutes.

Mitigation Measure Noise-2: Implement administrative measures

The County will coordinate with the contractor when planning construction activities and implement the following administrative measures in order to minimize noise and vibration disturbances at sensitive receptor locations during construction:

- Plan noisier operations during times of least sensitivity to receptor locations (e.g., midday, midweek, or when the nearby homes are vacant).
- Keep noise levels relatively uniform and avoid impulsive noises to the extent practicable.
- Maintain good communication with nearby residents to minimize objections to unavoidable construction noise impacts.

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

Discussion of Impacts

a) ***No Impact.*** Housing within the vicinity of the project area includes several recreational residences to the west of the existing bridge. These residences are occupied periodically throughout the year, with peak use occurring during the summer months, and are not considered to be primary residences. Replacement of the existing Wolf Creek bridge structure would not increase traffic capacity or extend road access beyond what is

available without the project and would have no effect on population or housing in the vicinity of the project area.

b) ***No Impact.*** Existing housing in the vicinity of Dixon Mine Road would not be displaced by the project and no replacement housing would be required.

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

Mitigation Measures

No mitigation measures are necessary.

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

Discussion of Impacts

a) ***No Impact.*** The proposed project would not affect public services in Alpine County, increase the demand for public services, or require construction of new governmental facilities.

Mitigation Measures

No mitigation measures are necessary.

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
XV. RECREATION — Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational	☐	☐	☒	☐

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion of Impacts

a) ***Less than Significant Impact.*** NFS lands within the vicinity of the project area are used for recreational purposes, including lands to the east of the Dixon Mine Road bridge. Although these NFS lands are not designated by the National Forest as being for significant park or recreation resources (NSR 2014h), they are used by recreationists to access the Wolf Creek Pack Trail system, which leads into the Carson-Iceberg Wilderness from the High Trail/East Carson River Trailhead. During construction, access on Dixon Mine Road would be restricted, but recreationists would be able to utilize other trails in the surrounding area to access NFS lands or cross Wolf Creek via the temporary path. Although access to the recreation lands may be temporarily affected, the use of the lands would not be restricted, and the project would not result in substantial physical deterioration of nearby facilities.

b) ***No Impact.*** The project does not include recreational facilities or require the construction or expansion of recreational facilities.

Mitigation Measures

No mitigation measures are necessary.

	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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

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

Discussion of Impacts

a, b) ***Less than Significant Impact.*** The proposed project is consistent with the goals and policies of the Alpine County General Plan and the Regional Transportation Plan (Alpine County 2009). The project is also consistent with the management direction regarding transportation systems and facilities in the Toiyabe National Forest LRMP. Construction traffic would temporarily increase traffic on Wolf Creek Road and Dixon Mine Road. The project would temporarily restrict access in the vicinity of the project area by closing a segment of Dixon Mine Road to public highway vehicles. Landowners would still be allowed to use the road to access to their properties west of the bridge, but no vehicle access would be allowed east of the bridge. Signs would be placed along the roads notifying travelers of the closure and on both sides of the project area along Dixon Mine Road to notify travelers of the pedestrian detour along the temporary path across the creek. As discussed under Recreation, recreationists are the primary visitors to the area east of the bridge, and pedestrian access would still be available via the temporary path. Although access may be limited, traffic levels on the nearby roads would not substantially increase, and traffic-related impacts during construction would be less than significant.

The project would not increase traffic levels or alter the circulation system over the long term. The new bridge is not designed to increase traffic on Dixon Mine Road, and long-term traffic along the road would be similar to current conditions.

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

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

e) ***Less than Significant with Mitigation Incorporated.*** Dixon Mine Road is used by emergency responders for wilderness fire suppression and other backcountry emergencies. The Dixon Mine Road bridge would be closed to vehicle traffic during

construction, and emergency access could be limited or restricted during the construction period. As discussed in Hazards and Hazardous Materials, other methods of emergency access may be used in the event of an emergency east of the bridge, and implementation of Mitigation Measure Haz-2 would ensure the County maintains communication with the emergency providers throughout construction. Impacts would be less than significant with implementation of the mitigation measure.

f) ***No Impact.*** The project would not conflict with any adopted plans, policies, or programs that support alternative transportation and would be consistent with the goals and policies of the Alpine County General Plan, Regional Transportation Plan, and Toiyabe National Forest LRMP. Persons which desire to access recreation areas to the east of the project area may do so via the temporary path, which would support access for small off-highway vehicles, bicycles, equestrians, and pedestrians.

Mitigation Measures

See Mitigation Measure Haz-2.

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
XVII. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion of Impacts

a, b, d, e) ***No Impact.*** The project would not generate wastewater or require a new water supply. It would not alter stormwater drainage. No new wastewater or water facilities would be constructed or needed as part of the project.

c) ***No Impact.*** The project would not involve the construction of stormwater drainage facilities.

f, g) ***Less than Significant Impact.*** Disposal of solid waste would occur at permitted facilities, such as the Bear Valley Transfer Station, which has a maximum capacity of 220 tons per year. The project would generate a small quantity of solid waste from removal of construction materials and demolished bridge components. Any materials used during or generated from construction would be properly disposed of in accordance with federal, state, and local regulations. The project is not likely to generate solid waste in amounts that would adversely affect the existing capacity of the Bear Valley Transfer Station.

Mitigation Measures

No mitigation measures are necessary.

	Potentially Significant Impact	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE (To be filled out by Lead Agency if required)				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

a) ***Less than Significant with Mitigation Incorporated.*** Construction-related activities could result in impacts on sensitive biological resources and previously undiscovered

cultural resources. Conservation and mitigation measures described in this Initial Study would be implemented to ensure minimal impacts to biological and cultural resources.

b) ***Less than Significant with Mitigation Incorporated.*** The proposed project could result in cumulatively considerable impacts on special-status wildlife species. Project design, conservation measures, and mitigation measures would ensure effects on these resources are less than significant, and no long-term adverse impacts are anticipated. With the implementation of conservation measures in Chapter 2 and mitigation measures in Chapter 3, the project would result in individually minor impacts and would not contribute substantially to cumulative impacts, resulting in a less than significant impact.

c) ***Less than Significant with Mitigation Incorporated.*** The proposed project, particularly during the construction phase, would result in a variety of temporary impacts to human beings. Potential adverse effects would be related to aesthetics, hazards and hazardous materials, noise, and transportation. The implementation of conservation measures and mitigation measures described in this Initial Study would ensure construction-related impacts on human beings are less than significant, and no long-term impacts are anticipated.

4 Determination

This Initial Study has determined that in the absence of mitigation the 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 (see Appendix A).

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

Signature Date

This page intentionally left blank

5 Report Preparation and References

5.1 List of Preparers

Alpine County Community Development Department – CEQA Lead Agency

Brian Peters	Community Development Director
Jason Jurrens	County Engineer
Scott Maas	Transportation Coordinator

North State Resources, Inc. – Environmental Compliance

Wirt Lanning	Project Director
Leslie Perry	Project Manager/Environmental Analyst
Andrew Minks	Environmental Analyst
Connie MacGregor Carpenter	Environmental Analyst
Mark Wuestehube	Senior Biologist
Patrick Martin	Biologist
Paul Kirk	Botanist
Brian Ludwig	Principal Archaeological Investigator

5.2 References

Alpine County. 2009. Alpine County General Plan. Available online at: <http://www.alpinecountyca.gov/DocumentCenter/View/51>. Accessed October 29, 2013.

Alpine County. 2013. Alpine County Code – Title 18: Zoning. Available online at: <http://www.codepublishing.com/CA/alpinecounty/>. Accessed October 29, 2013.

California Air Resources Board. 2012. Area Designations Maps/State and National. Available online at: <http://www.arb.ca.gov/desig/adm/adm.htm#state>. Accessed October 29, 2013.

California Department of Conservation. 2010. Geologic map of California. Available online at: <http://www.quake.ca.gov/gmaps/GMC/stategeologicmap.html>. Accessed September 19, 2012.

California Department of Conservation. 2012a. California Important Farmland Finder. Available online at: <http://maps.conservation.ca.gov/ciff/ciff.html>. Accessed October 29, 2013.

California Department of Conservation. 2012b. State of California Williamson Act Contract Land. Available online at: < ftp://ftp.consrv.ca.gov/pub/dlrp/wa/>. Accessed October 29, 2013.

California Department of Conservation. 2013. State of California Department of Conservation SMARA Maps. Available online at: <http://www.quake.ca.gov/gmaps/WH/smaramaps.htm>. Accessed October 29, 2013.

California Department of Forestry and Fire Protection. 2007. Alpine County: Draft Fire Hazard Severity Zones in LRA. Available online at: <http://www.fire.ca.gov/fire_prevention/fhsz_maps_alpine.php>. Accessed October 31, 2013.

California Department of Transportation (Caltrans). 2011. California Scenic Highway System. Available online at: <http://www.dot.ca.gov/hq/LandArch/scenic_highways/>. Accessed October 29, 2013.

California Geological Survey. 2012. Alquist-Priolo Earthquake Fault Zones. Available online at: <http://www.conservation.ca.gov/cgs/rghm/ap/Pages/Index.aspx>. Accessed October 29, 2013.

Desert USA and Digital West Media Inc. 2012. Great Basin Desert. Available online at: <http://www.desertusa.com/du_basin.html>. Accessed July 9, 2012.

Holdrege & Kull. 2013. Initial Site Assessment – Wolf Creek Bridge Replacement (Bridge Number: 31C-0002), Alpine County, California. Nevada City, California.

Holdrege & Kull. 2014. Draft Geotechnical Engineering Report for Wolf Creek Bridge Replacement (Bridge Number 31C-0002), Alpine County, California. Nevada City, California.

John, D.A., Giusso, James, Moore, W.J., Armin, R.A., and Dohrenwend, J.C. 1981. Reconnaissance geologic map of the Topaz Lake 15 minute quadrangle, California and Nevada: U.S. Geological Survey, Open-File Report OF-81-273, scale 1:62,500

Keith, W. J., and M. S. Miller. 1988. Mineral resources of the Carson Iceberg Wilderness study area, Alpine County, California. Prepared for the U.S. Geological Survey, the U.S. Bureau of Mines, and the U.S. Bureau of Land Management. Report No. 88-273.

Mactec Engineering and Consulting, River Run Consulting, Swanson Hydrology and Geomorphology, and C.G. Celio and Sons. 2004. Upper Carson River watershed stream corridor condition assessment. Prepared for the Alpine Watershed Group and the Sierra Nevada Alliance. South Lake Tahoe, California. June 2004.

Morris, Daniel. 2013. Personal Communication. Recreation staff officer, Carson Ranger District, Humboldt-Toiyabe National Forest. April 3, 2013. Telephone conversation with Connie MacGregor Carpenter, environmental analyst, North State Resources, Inc.

Natural Resources Conservation Service. 2011. Web soil survey: Toiyabe National Forest Area, California. Available online at: <http://websoilsurvey.nrcs.usda.gov/app/>. Accessed October 30, 2013.

North State Resources. 2014a. Visual Impact Assessment – Dixon Mine Road Bridge (31C-0002) Replacement Project. Sacramento, California.

North State Resources. 2014b. Dixon Mine Road Bridge Replacement Project: Natural Environmental Study. Sacramento, California.

North State Resources. 2014c. Dixon Mine Road Bridge Replacement Project: Delineation of Waters of the United States. Sacramento, California.

North State Resources. 2014d. Dixon Mine Road at Wolf Creek Bridge Replacement Project: Archaeological Survey Report/Historic Property Survey Report. Sacramento, California.

North State Resources. 2014e. Water Quality Assessment Report – Dixon Mine Road Bridge (31C-0002) at Wolf Creek Replacement Project. Sacramento, California.

North State Resources. 2014f. Dixon Mine Road Bridge Replacement Project (Bridge No. 31C-0002): Community Land Use Technical Memorandum. Sacramento, California.

North State Resources. 2014g. Construction Noise Technical Memorandum – Dixon Mine Road Bridge Replacement Project (Bridge No. 31C-0002). Sacramento, California.

North State Resources. 2014h. Section 4(f) Technical Memorandum – Dixon Mine Road Bridge (31C-0002) Replacement Project. Sacramento, California.

Quincy Engineering, Inc. 2014. Bridge Design Hydraulic Study and Location Hydraulic Study Report – Bridge No. 31C0002. Sacramento, California.

State Water Resources Control Board. 2013. Geotracker. Available online at: <http://geotracker.waterboards.ca.gov/>. Accessed October 30, 2013.

Timmer, K., M. Suarez-Brand, J. Cohen, and J. Clayburgh. 2006. State of Sierra waters. A Sierra Nevada watersheds index. Sierra Nevada Alliance. South Lake Tahoe, California. March 2006.

University of California Museum of Paleontology. 2014. UC Museum of Paleontology Specimen Search. Electronic database available at: <http://ucmpdb.berkeley.edu/>. Accessed July 2, 2014.

U.S. Census Bureau. 2012. American fact finder, decennial census. 2010 census. Available online at: <http://factfinder2.census.gov/faces/nav/jsf/pages/wc_dec.xhtml>. Accessed July 9, 2012.

U.S. Environmental Protection Agency (EPA). 2010. 2010 Waterbody Report for Wolf Creek (Alpine County). Available online at: <http://ofmpub.epa.gov/waters10/attains_waterbody.control?p_list_id=CAR6321003019980805163307&p_cycle=2010&p_report_type=>. Accessed October 31, 2013.

U.S. Environmental Protection Agency. 2013a. MyWATERS Mapper. Available online at: <http://www.epa.gov/waters/enviromapper/index.html>. Accessed September 10, 2013.

U.S. Environmental Protection Agency. 2013b. EnviroMapper. Available online at: <http://www.epa.gov/emefdata/em4ef.home>. Accessed September 19, 2013.

U.S. Forest Service. 1986. Toiyabe National Forest land and resource management plan. U.S. Department of Agriculture, Forest Service, Toiyabe National Forest. Sparks, Nevada.

Western Regional Climate Center. 2011. Markleeville, California (045356) period of record monthly climate summary: 8/ 1/1909 to 5/31/20047. Available online at: <www.wrcc.dri.edu/summary/climsmnca.html>. Accessed October 29, 2013.

APPENDIX A

Mitigation Monitoring and Reporting Plan

Dixon Mine Road Bridge (No. 31C-0002) Replacement Project

Mitigation Monitoring and Reporting Plan

April 2015

CEQA Lead Agency:
Alpine County
Community Development Department
Contact: Brian Peters
50 Diamond Valley Road
Markleeville, CA 96120
(530) 694-2140

Introduction

This document comprises the Mitigation Monitoring and Reporting Plan (MMRP) for the Dixon Mine Road Bridge (No. 31C-0002) Replacement Project (project) near Markleeville in Alpine County. It identifies the mitigation measures described in the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the project and the monitoring requirements for each measure (see Table 1). The mitigation measures listed herein were identified to reduce or avoid potentially significant impacts on the visual environment, biological resources, cultural resources, hazard and hazardous material conditions, the noise environment, and traffic conditions.

The legal basis for the development and implementation of the MMRP is from the California Environmental Quality Act (CEQA), Public Resources Code Sections 21002 and 21081.6, which state:

- Public agencies should not approve projects, as proposed, if there are feasible alternatives or feasible mitigation measures available that would substantially lessen the significant environmental effects of such projects.

- When adopting a mitigated negative declaration, the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.

Responsibilities and Authority

As the lead agency under CEQA, Alpine County is responsible for monitoring implementation of the project and ensuring that adopted conservation and mitigation measures are implemented. The County may delegate duties and responsibilities for monitoring to other mitigation monitors or consultants as deemed necessary. The County will ensure that the person(s) delegated any duties or responsibilities are qualified to monitor compliance.

Complaints of noncompliance with adopted mitigation measures shall be directed to Alpine County (attention Brian Peters) in written form, providing specific information on the alleged violation. If any complaints are received, the County shall conduct an investigation, determine the validity of the complaint, and take the appropriate action to remedy the violation if appropriate. The person filing the complaint shall receive written confirmation indicating the results of the investigation.

Monitoring Requirements

Table 1 includes the following items to track completion of each mitigation measure:

- **Conservation/Mitigation Measure:** presents the conservation and mitigation measures identified in the IS/MND that are incorporated into the project.
- **Timing:** identifies when the mitigation measures will be implemented.
- **Responsible Party:** identifies the entity responsible for implementing and monitoring the mitigation measure.
- **Verification:** provides spaces to be initialed and dated by the individual responsible for verifying compliance with each specific mitigation measure.

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
Conservation Measures			
Conservation Measure #1 - Erosion and Sedimentation Control Erosion control measures will be implemented during construction activities. The County or its contractor will prepare a Storm Water Pollution Prevention Plan that describes and illustrates placement of Best Management Practices (BMPs) within the work area. BMPs include, but are not limited to, the following: ▪ To the extent practicable, activities that increase erosion potential will be restricted to the relatively dry summer and early fall periods to minimize the potential for rainfall events to transport sediment to surface water features. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures will be in place and operational at the end of each construction day and will be maintained until permanent erosion control structures are in place. ▪ Vegetation clearing and ground-disturbing activities will be limited to the minimum area necessary for project implementation. ▪ Areas where woody vegetation needs to be removed will be identified in advance of ground disturbance and will be limited to only those areas that have been approved by the County. Within 10 days of completion of construction in those areas, weed-free mulch will be applied to disturbed areas to reduce the potential for short-term erosion. Prior to a rain event, or when weather forecasts by the National Weather Service indicate a greater than 50 percent possibility of rain within the next 24 hours, weed-free mulch will be applied to all exposed areas at the completion of activities that day. Soils will not be left exposed during the rainy season. ▪ Suitable BMPs, such as silt fences, straw wattles, or catch basins, will be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures will be installed prior to any clearing or grading activities. Erosion control measures that employ monofilament netting will be prohibited within the	Prior to and during construction	Construction contractor (implementation) County (monitoring)	

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
work area. ▪ If spoil sites are used, they will be located such that they do not drain directly into a surface water feature, if possible. If a spoil site drains into a surface water feature, catch basins will be constructed to intercept sediment before it reaches the feature. Spoil sites will be graded and vegetated to reduce the potential for erosion. ▪ Sediment control measures will be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated. ▪ All disturbed areas will be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native or approved non-invasive exotic species.			
Conservation Measure #2 - Prevention of Accidental Spills Construction specifications will include the following measures to minimize the potential for adverse effects resulting from accidental spills of pollutants (e.g., fuel, oil, grease): ▪ A site-specific spill prevention plan will be implemented for potentially hazardous materials. The plan will include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms will be constructed to prevent spilled materials from reaching surface water features. ▪ Equipment and hazardous materials will be stored a minimum of 50 feet away from surface water features. ▪ Vehicles and equipment used during construction will receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling will be conducted in an area at least 50 feet away from surface water features or within an adequate fueling containment area.	Prior to and during construction	Construction contractor (implementation) County (monitoring)	

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
Conservation Measure #3 - Air Quality/Dust Control Construction specifications will include a requirement to implement a dust control program to limit fugitive dust emissions. The dust control program will include, but not be limited to, the following elements: ▪ Water inactive work areas and exposed stockpile sites at least twice daily or until soils are stable. ▪ Pursuant to California Vehicle Code, all trucks hauling soil and other loose material to and from the work area will either be covered or maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer). ▪ Any topsoil that is removed during construction will be stored on-site in piles not to exceed 4 feet tall to allow development of microorganisms prior to replacement of soil in the work area. These topsoil piles will be clearly marked and flagged. Topsoil piles that will not be immediately returned to use will be revegetated with a non-persistent erosion control mixture. ▪ Soil piles for backfill will be marked and flagged separately from native topsoil stockpiles. These soil piles will also be surrounded by silt fencing, straw wattles, or other sediment barriers or covered unless they are to be immediately used. ▪ Equipment or manual watering will be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.	Prior to and during construction	Construction contractor (implementation) County (monitoring)	
Conservation Measure #4 - Prevention of Spread of Invasive Species ▪ All equipment used for off-road construction activities will be weed-free prior to entering the project area. ▪ If project implementation calls for mulch or fill, it will be weed free. ▪ Any seed mixes or other vegetative material used for revegetation of disturbed areas will consist of locally adapted native plant materials to the extent practicable.	Prior to and during construction	Construction contractor (implementation) County (monitoring)	

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
Aesthetics/Visual Resources			
Mitigation Measure A-1: Include pattern elements in project design Project designs will include pattern elements (e.g., line, texture) found in the surrounding environment on the exposed concrete abutments and bridge surfaces. Before implementation, this measure would require Caltrans Local Assistance Division approval of the additional construction cost required for this measure. If the additional construction cost is not approved, the concrete abutments and bridge surface will be designed to match the surrounding visual environment, to the extent practicable.	Prior to construction	County (implementation and monitoring)	
Mitigation Measure A-2: Avoid damaging the roots of retained trees The contractor will avoid damaging the roots of retained trees adjacent to the construction area to the extent possible.	During construction	Construction contractor (implementation) County (monitoring)	
Mitigation Measure A-3: Treat the metal guardrail with acid The contractor shall treat the metal guardrail with acid etching to provide a weathered look to the metal.	During construction	Construction contractor (implementation) County (monitoring)	
Mitigation Measure A-4: Use non-glare construction materials The contractor will be required to use non-glare construction materials (i.e., metal guardrail).	During construction	Construction contractor (implementation) County (monitoring)	
Mitigation Measure A-5: Use retroreflective materials for signage If signage is installed as part of the project, the contractor will be required to use retroreflective materials that meet Caltrans standards.	During construction	Construction contractor (implementation) County (monitoring)	
Biological Resources			
Mitigation Measure Bio-1: Minimize disturbance to in-channel and riparian habitat The dewatered work area and disturbance to in-channel and riparian habitat shall be kept to the minimum area necessary to perform work. Vegetation clearing shall be limited to the smallest area necessary within	Prior to and during construction	Construction contractor (implementation) County (monitoring)	

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
200 feet of the banks of Wolf Creek. Disturbance to wildlife burrows shall be avoided, to the extent practicable. Aquatic and upland habitats to be avoided shall be flagged and/or signed. No construction activities or personnel shall be allowed to enter the avoidance areas. Flagging and signage shall be inspected on a daily basis and repaired as necessary. Flagging and signage shall remain in place until construction activities are complete and shall be removed upon completion of construction. Construction access and equipment shall be restricted to existing roads, the proposed temporary path and staging areas, or previously disturbed gravel/dirt parking areas. Speed limits shall not exceed 15 miles per hour within the BSA to avoid potential impacts to wildlife crossing the road.			
Mitigation Measure Bio-2: Cover intake pipes If intake pipes are required for dewatering the construction area, a maximum 0.2-inch (5-millimeter) diameter mesh screen will be used to cover intake pipes to avoid entrapment of toads or frogs in the pipes.	During construction	Construction contractor (implementation) County (monitoring)	
Mitigation Measure Bio-3: Implement biological measures during construction A qualified biologist(s) shall be assigned to the project to assist the County with implementation of biological measures during construction. The biologist shall be familiar with habitat requirements and the distinguishing physical characteristics to identify all life stages of Yosemite toad and Sierra Nevada yellow-legged frog and their calls from other amphibians found in the Sierra Nevada region.	Prior to and during construction	Construction contractor (implementation) County (monitoring)	
Mitigation Measure Bio-4: Conduct a pre-construction survey for Yosemite toad and Sierra Nevada yellow-legged frog and their habitat Within 48 hours prior to the onset of construction activities, the qualified biologist will perform a pre-construction survey for Yosemite toad and Sierra Nevada yellow-legged frog and their habitat. The survey will be conducted in all potential habitat within the BSA and within 250 feet of the BSA. At a minimum, the survey will consist of one night-time survey and one daytime survey, which can be completed during the same day, to locate individuals. The daytime survey will also be used to identify	Prior to and during construction	Construction contractor (implementation) County (monitoring)	

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
suitable breeding habitat (e.g., flooded meadow pools for toad) and overwintering habitat (e.g., burrows for toad). If a Yosemite toad or Sierra Nevada yellow-legged frog is detected during the survey, the USFWS shall be notified immediately for guidance. Construction activities shall not proceed until protective measures (e.g., exclusionary fencing around breeding or overwintering habitat, delaying construction, biological monitoring) have been developed and implemented in coordination with the USFWS.			
Mitigation Measure Bio-5: Conduct environmental awareness training Prior to the initiation of construction activities, all workers will participate in environmental awareness training provided by the qualified biologist. The training will instruct workers: 1) how to identify Yosemite toad and Sierra Nevada yellow-legged frog, their various life forms, and their habitat components; 2) the potential for these species to be discovered, where they are most likely to be found, which life forms are most likely to be encountered, and how they could be affected during construction activities; 3) the Conservation Measures, avoidance and minimization measures and measures from other documents that have been incorporated into the project; and 4) what to do if a Yosemite toad or Sierra Nevada yellow-legged frog is encountered during construction activities.	Prior to construction	Construction contractor (implementation) County (monitoring)	
Mitigation Measure Bio-6: Monitor for Yosemite toad and Sierra Nevada yellow-legged frog A qualified biologist shall be present to monitor for Yosemite toad and Sierra Nevada yellow-legged frog during installation and removal of the temporary path across Wolf Creek. The designated biologist will have stop work authority and will immediately contact the USFWS if a Yosemite toad or Sierra Nevada yellow-legged frog is encountered.	During construction	Construction contractor (implementation) County (monitoring)	
Mitigation Measure Bio-7: Implement protective measure if a Yosemite toad or Sierra Nevada yellow-legged frog is detected If a Yosemite toad or Sierra Nevada yellow-legged frog is detected in the work area at any time during construction activities, all construction activities will cease, and the qualified biologist and the USFWS will be	During construction	Construction contractor (implementation) County (monitoring)	

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
immediately notified. Any Yosemite toads or Sierra Nevada yellow legged frogs that are encountered will be allowed to move away from construction activities on their own. Work activities shall not resume until protective measures have been developed and implemented in coordination with the USFWS. Protective measures include but are not limited to delaying construction, installing exclusionary fencing to prevent protected toads or frogs from entering the work area, relocating toads or frogs to a nearby location outside the exclusionary fencing, and/or increasing biological monitoring. Capture and relocation is not permitted unless specifically approved by the USFWS.			
Mitigation Measure Bio-8: Avoid construction activities during the nesting season To the extent practicable, construction activities shall be scheduled outside the nesting season, which is March 31–August 31. If construction activities are conducted completely outside of the nesting season, no further measures are necessary.	Prior to construction	Construction contractor (implementation) County (monitoring)	
Mitigation Measure Bio-9: Conduct pre-construction bird surveys If construction activities during the nesting season cannot be avoided, pre-construction surveys shall be conducted by a qualified biologist within 15 days prior to the initiation of construction activities. The surveys shall be conducted within 500 feet of the BSA for nesting raptors and within 250 feet of the BSA for other migratory birds (where accessible). If any active nests are identified, appropriate conservation measures (as determined by a qualified biologist) shall be implemented. These measures may include, but are not limited to, establishing a construction-free buffer zone around the active nest site, biological monitoring of the active nest site, and delaying construction activities in the vicinity of the active nest site until the young have fledged.	Prior to and during construction	Construction contractor (implementation) County (monitoring)	
Mitigation Measure Bio-10: Remove existing cliff swallow nests prior to construction If construction activities during the nesting season cannot be avoided, existing cliff swallow nests on the Dixon Mine Road Bridge shall be removed prior to the onset of construction, preferrably between September 1 and March 31 to discourage nesting on the bridge prior to	Prior to construction	Construction contractor (implementation) County (monitoring)	

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
construction. If nests cannot be removed prior to the nesting season (i.e., end of March), a qualified biologist shall determine if nests are inactive and can be removed before construction begins without disturbing nesting activity. If active nests are identified, construction in the vicinity of the bridge may need to be postponed until nests are determined by a qualified biologist to be inactive or the USFWS and/or CDFW authorizes the removal of active nests. An effective deterrent to cliff swallow nesting should be installed on the bridge once the nests are removed. If a nesting deterrent is used, the deterrent shall be monitored for integrity and effectiveness until the project is completed. If nesting activities cannot be effectively deterred, continuous removal of cliff swallow nest starts prior to egg-laying (typically by late spring) may be necessary before construction activities are initiated. Disturbance or removal of active nests (i.e., nests containing eggs) shall not be conducted without the appropriate authorization(s) from the USFWS and/or the CDFW.			
Mitigation Measure Bio-11: Obtain a streambed alteration agreement Prior to any activities that would obstruct the flow of, or alter the bed, channel, or bank of Wolf Creek, notification of streambed alteration shall be submitted to the CDFW. A streambed alteration agreement shall be obtained from CDFW and all conditions of the agreement shall be implemented.	Prior to and during construction	County (obtain permit, monitoring) Construction contractor (implementation)	
Mitigation Measure Bio-12: Obtain the required permits/authorizations pursuant to Sections 401 and 404 of the Clean Water Act Prior to any discharge of dredged or fill material into Wolf Creek or any wetlands, the required permits/authorizations shall be obtained from the Corps and the RWQCB pursuant to Sections 401 and 404 of the Clean Water Act. Prior to any work in the creek or adjacent riparian vegetation, notification of streambed alteration shall be submitted to CDFW, and a streambed alteration agreement may be necessary to conduct the work. All terms and conditions of the required permits/authorizations shall be implemented.	Prior to and during construction	County (obtain permits, monitoring) Construction contractor (implementation)	

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
Mitigation Measure Bio-13: Minimize the movement and placement of vehicles near Wolf Creek The movement and placement of vehicles, equipment, and other materials within 200 feet of the banks of Wolf Creek shall be minimized to the greatest extent practicable.	During construction	Construction contractor (implementation) County (monitoring)	
Mitigation Measure Bio-14: Restore waters of the United States to their original contour and conditions All waters of the United States that are temporarily affected by project construction shall be restored as close as practicable to their original contour and conditions within 10 days after the completion of construction activities. For riparian wetlands temporarily and permanently affected by the project, onsite creation/restoration shall occur in areas disturbed during project construction or other areas deemed suitable. The amount of habitat created/restored shall be at a 3:1 ratio of new plantings per large (≥6 inches or greater in diameter at breast height) woody plant removed (e.g., Salix spp.). These replanting ratios will help ensure successful establishment of at least one vigorous plant for each plant removed to accommodate the project. Planted species shall include willow, black cottonwood, and other riparian species native to Wolf Creek. Non-native tree species removed along the creek during construction will be replaced with native riparian species. Plant spacing intervals will be determined as appropriate based on site conditions following construction.	Following construction	Construction contractor (implementation) County (monitoring)	

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
Cultural Resources			
Mitigation Measure CR-1: Accidental discovery of cultural resources The Caltrans standard policy for previously unidentified cultural resources states that "work be halted in that area until a qualified archaeologist can assess the significance of the find." In the event cultural resources (other than those determined to lack eligibility for either the National Register or the California Register) are unearthed inadvertently as a result of project-related activities, all work in the immediate vicinity of the discovery will be stopped, and the County and Caltrans will be notified. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be retained to evaluate the find and recommend appropriate conservation measures. Appropriate conservation measures shall be implemented prior to re-initiation of activities in the immediate vicinity of the discovery.	During construction	Construction contractor (implementation) County (monitoring)	
Mitigation Measure CR-2: Accidental discovery of human remains In the event that any human remains or any associated funerary objects are encountered during construction, all work will cease within the vicinity of the discovery. In accordance with CEQA (Section 1064.5) and the California Health and Safety Code (Section 7050.5), the Alpine County Sheriff/coroner should be contacted immediately. If the human remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, who will notify and appoint a Most Likely Descendent. The descendant will work with a qualified archaeologist to decide the proper treatment of the human remains and any associated funerary objects.	During construction	Construction contractor (implementation) County (monitoring)	
Hazards/Hazardous Materials			
Mitigation Measure Haz-1: Ensure proper handling and disposal of creosote treated wood The contractor will be required to handle and dispose treated wood waste in accordance with state and local guidelines. DTSC has adopted alternative management standards for handling and disposal of this	During construction	Construction contractor (implementation) County (monitoring)	

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
waste. The contractor will be required to implement the following measures to comply with the adopted standards: ▪ Confirm with the solid waste facility or hazardous waste facility to be used for the project that it will accept treated wood waste. ▪ Avoid ground contact during removal of treated wood waste by storing the waste off the ground by placing it on blocks, on concrete surfaces, or in containers or using another appropriate method (e.g., bailing or palletizing the waste). ▪ Store the treated wood waste for no longer than the allowed limits based on the storage method (i.e., 90 days for block and tarp, 180 days for containment pad, 1 year for container and storage building). ▪ Store the waste away from public access (e.g., away from the temporary path) and other waste. ▪ Cover treated wood waste during inclement weather to prevent rain water from leaching chemicals out of the waste. ▪ Do not burn treated wood waste without first obtaining a hazardous waste permit. ▪ Contact DTSC if planning to reuse the removed treated wood waste to ensure compliance with existing hazardous waste laws. ▪ Label all treated wood waste bundle/shipments with the following information: TREATED WOOD WASTE – Do not burn or scavenge; TWW Handler (Name, Address, Accumulation Date). ▪ Keep records for at least three years from date of shipment or receipt to demonstrate that treated wood waste was properly managed. Records should include: (1) name and address of the facility to which the waste was sent; (2) estimated weight of the waste or the weight of the waste as measured by the receiving facility; and (3) date of the shipment. ▪ Train employees involved in treated wood waste handling and keep the training records for three years. The training shall include applicable requirements of Cal/OSHA and regulations relating to hazardous waste, methods for identifying and segregating treated wood waste, safe handling practices,			

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
requirements of alternative management standards; and proper disposal methods.			
Mitigation Measure Haz-2: Coordinate with emergency responders The County will coordinate with the Forest Service (including the Carson Ranger District office), Alpine County Sheriff, and the Sierra Front Interagency Dispatch Center to ensure that each agency is notified of the dates that Dixon Mine Road will be temporarily closed. The County will keep emergency service providers advised of the construction activities going on at the time. The County will notify the Forest Service, Alpine County Sheriff, and the Sierra Front Interagency Dispatch Center of the timing of the road closure and alternate access availability when it is known. The County will coordinate with local landowners to ensure that fire suppression crews will be allowed access, if necessary, through private lands adjacent to the project area.	Prior to and during construction	County (implementation, monitoring)	
Mitigation Measure Haz-3: Implement a fire prevention plan The County will include specifications in its construction plans requiring the construction contractor to prepare and implement a fire prevention plan during construction and requiring compliance with the requirements of Public Resources Code 4442. This code requires internal combustion engines powered by hydrocarbon fuels used on forest-covered land, brush-covered land, or grass-covered land to be equipped with a spark arrester or to be constructed, equipped, and maintained for the prevention of fire pursuant to Public Resources Code Section 4443.	Prior to and during construction	Construction contractor (implementation) County (monitoring)	
Noise			
Mitigation Measure Noise-1: Require equipment noise control The contractor shall implement the following noise-reduction measures in order to minimize noise and vibration disturbances at sensitive receptor locations during construction: ▪ Use newer equipment with improved muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment generally operates more quietly	During construction	Construction contractor (implementation) County (monitoring)	

Table 1. Conservation and Mitigation Measures and Monitoring Requirements

Conservation/Mitigation Measure	Timing	Responsible Party	Verification (Date/Initials)
than older equipment. Inspect all construction equipment at periodic intervals to ensure proper maintenance and functioning of noise control devices. ▪ To the degree possible, utilize construction methods or equipment that will reduce the volume of noise generated. ▪ Turn off idling equipment when not in use longer than a few minutes.			
Mitigation Measure Noise-2: Implement administrative measures The County will coordinate with the contractor when planning construction activities and implement the following administrative measures in order to minimize noise and vibration disturbances at sensitive receptor locations during construction: ▪ Plan noisier operations during times of least sensitivity to receptor locations (e.g., midday, midweek, or when the nearby homes are vacant). ▪ Keep noise levels relatively uniform and avoid impulsive noises to the extent practicable. ▪ Maintain good communication with nearby residents to minimize objections to unavoidable construction noise impacts.	Prior to and during construction	Construction contractor (implementation) County (monitoring)	