POISON POND 2 DISPOSAL SITE PROJECT

Trinity County, California

DISTRICT 2 – TRI – 299 (Post Mile 46.2)

EA 02-1J700 / EFIS 02-20000119

INITIAL STUDY

with Proposed Mitigated Negative Declaration



Prepared by the State of California, Department of Transportation



March 2022



General Information About This Document

What is in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study with proposed Mitigated Negative Declaration (IS/ND) which examines the potential environmental effects of a proposed project on State Route 299 in Trinity County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). This document tells you why the project is being proposed, how the existing environment could be affected by the project, the potential impacts of the project, and proposed avoidance, minimization, and/or mitigation measures.

What should you do?

- Please read this document.
- Additional copies of this document are available for review at Trinity County Library, 351 Main Street, Weaverville, CA 96093. This document may be downloaded at the following website:
- Please send comments via U.S. mail to:

California Department of Transportation Attention: Kimi Brown North Region Environmental–District 2 1031 Butte Street, MS 70 Redding, CA 96001

- Send comments via e-mail to: emiliano.pro@dot.ca.gov
- Be sure to send comments by the deadline: May 8, 2022

What happens after this?

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) conduct additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is obtained, Caltrans could complete the design and construct all or part of the project.



For individuals with sensory disabilities, this document is available in Braille, in large print, or in digital format. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Kimi Brown, North Region Environmental—District 2, 1031 Butte Street MS 70, Redding, CA 96001; (530) 759-3455 Voice, or use the California Relay Service TTY number, 711 or 1-800-735-2929.



POISON POND 2 DISPOSAL SITE PROJECT

Develop an Earthen Material Disposal Site along State Route 299 in Trinity County

In Trinity County near Junction City at 0.7 mile east of Slattery Pond Road

INITIAL STUDY

WITH PROPOSED MITIGATED NEGATIVE DECLARATION

Submitted Pursuant to: Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

3/31/22

Date of Approval

Wesley Stroud

Wesle Stroud, Office Chief North Region Environmental–District 2 California Department of Transportation CEQA Lead Agency

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PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, California Public Resources Code

SCH Number: Pending

Project Description

The California Department of Transportation (Caltrans) proposes to develop an earthen material disposal site on State Route 299, post mile 46.2, in Trinity County.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt an MND for this project. This does not mean that Caltrans' decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant impact on the environment based on the following findings:

The project would have No Effect on the following resources:

- Cultural Resources
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing

- Public Services
- Recreation
- Tribal Cultural Resources
- Wildfire

The project would have Less than Significant Impacts on the following resources:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Energy
- Geological Resources

- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Transportation
- Utilities and Service Systems

With the following mitigation measure incorporated, the project would have a less than significant impact to biological resources (as discussed in Section 2.4):

- To offset impacts to on-site streams, Caltrans may participate in a project sponsored by the Trinity River Restoration Program or similar organization. Caltrans would fund a suitable restoration project at a minimum 1:1 ratio to ensure no net loss of waters in accordance with the following resource agency permits:
 - North Coast Regional Water Quality Control Board Waste Discharge Requirements
 - Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife.

The final mitigation plan would be finalized during the regulatory permit review process.

	-	
Wesley Stroud, Office Chief	Date	
North Region Environmental - District 2		
California Department of Transportation		

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LIST OF ABBREVIATED TERMS

Abbreviation	Description
AB	Assembly Bill
ARB	Air Resources Board
BMPs	Best Management Practices
CAA	Clean Air Act
CALFIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CH ₄	methane
CIA	Cumulative Impact Analysis
CNPS	California Native Plant Society
CO ₂	carbon dioxide
CTP	California Transportation Plan
CWA	Clean Water Act
dB	decibels
DOT	Department of Transportation
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESL	Environmental Study Limits
°F	degrees Fahrenheit
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act

Abbreviation	Description	
FHWA	Federal Highway Administration	
GWP	Global Warming Potential	
H&SC	Health & Safety Code	
HFCs	hydrofluorocarbons	
IPCC	Intergovernmental Panel on Climate Change	
IS	Initial Study	
IS/MND	Initial Study/Mitigated Negative Declaration	
LCFS	low carbon fuel standard	
LSAA	Lake and Streambed Alteration Agreement	
MBTA	Migratory Bird Treaty Act	
MMTC02e	million metric tons of carbon dioxide equivalent	
MPO	Metropolitan Planning Organization	
MSA Magnuson-Stevens Fishery Conservation and		
N ₂ O	Management Act nitrous oxide	
NAHC		
NC	Native American Heritage Commission North Coast	
NCRWQCB	North Coast Regional Water Quality Control Board	
ND	Negative Declaration	
NEPA	National Environmental Policy Act	
NES	Natural Environment Study	
NHTSA	National Highway Traffic Safety Administration	
NMFS	National Marine Fisheries Service	
NOAA	National Oceanic and Atmospheric Administration	
NPDES	National Pollutant Discharge Elimination System	
NRHP	National Register of Historic Places	
O ₃	ozone	
Pb	Lead	
PDT	Project Development Team	
PM(s)	post mile(s)	
Porter-Cologne Act	Porter-Cologne Water Quality Control Act	
PRC	Public Resources Code	
RTP	Regional Transportation Plan	

Abbreviation	Description
RTPA	Regional Transportation Planning Agency
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	Sustainable Communities Strategy
SF ₆	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SHS	State Highway System
SNC	Sensitive Natural Community
SO ₂	sulfur dioxide
SR	State Route
SSSC	State Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMP	Transportation Management Plan
U.S. or US	United States
USC	United States Code
USDOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGCRP	U.S. Global Change Research Program
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled
WDRs	Waste Discharge Requirements
WQAR	Water Quality Assessment Report



Chapter 1 Proposed Project

1.1 Project History

The California Department of Transportation (Caltrans) is proposing to construct, operate, and maintain an earthen material disposal site adjacent to State Route (SR) 299, located approximately 5 miles west of the community of Weaverville in Trinity County (Figure 1). On a regular basis, a significant volume of rock and earthen debris falls onto SR 299 and surrounding highways. To maintain public safety, minimize highway closures, and provide an operational highway, Caltrans is responsible for removing this material from the highway in a timely fashion and disposing of it in a proper manner.

The proposed disposal site is located in the Klamath Mountains. The region is represented by steep terrain, which is highly erodible due to significant levels of granite. The climate of the Klamath Mountains is Mediterranean, characterized by wet, cool winters and dry, warm summers. Area precipitation primarily occurs between October and March. The combination of steep terrain, high erosion potential, and saturated soil conditions in winter results in regular slide activity along SR 299. The proposed project site would receive earthen debris. Caltrans is the lead agency under the California Environmental Quality Act (CEQA).

1.2 Project Description

Initial site development includes gravel road construction, guardrail replacement, and culvert installation. The ±27-acre disposal site would be accessed through construction of a one-way gravel access road located immediately north of SR 299 (see site plan, Appendix A). This would provide safe ingress and egress for construction vehicles, while also providing access to dump areas. Disposal activities would start at the southern portion of the project site and extend upslope as the site is filled. Upon full build-out, the anticipated fill slope would be 3:1. To maintain public safety, existing

guardrail would be temporarily removed and reinstalled or replaced with new guardrail.

To maintain stormwater flows, culverts would be installed under SR 299 and the one-way gravel access road. To maintain flows during active disposal activities, a ±48-inch-diameter by ±273-foot-long culvert would be installed at the base of the SR 299 fill slope, using the jack and bore method. Additionally, a ±60-inch-diameter standpipe with debris rack would be installed at the culvert inlet. The standpipe would be extended as needed to correspond to applicable fill levels (±100 feet tall at full build-out). The culvert outfall would receive an energy dissipator to minimize the potential for erosion. Further, smaller culverts would be installed along portions of the gravel access road to maintain area drainage. To maintain flows following build-out (i.e., 3:1 slope), another culvert would be installed under SR 299 near the road surface. A minor amount of pavement patching may be needed following culvert installation. Once the full build-out culvert is in operation, the standpipe/culvert would be abandoned in place and capped.

Approximately 27 acres of soil would be disturbed during project implementation; maximum excavation depth would be approximately four feet. To minimize the potential for erosion, construction vehicle use would be limited to the proposed disposal site and SR 299 roadway. Further, on-site vegetation would be preserved until disposal activities warrant removal. Project construction would utilize one-way reversing traffic control as needed. Staging would occur within the Caltrans right-of-way and the proposed disposal site.

The disposal site occurs on lands managed by the Bureau of Land Management (BLM). Caltrans would coordinate with BLM staff as needed to facilitate the proposed project. Project activities would be limited to Caltrans right-of-way and the project site.

1.2.1 Purpose and Need

Purpose

The purpose of the project is to maintain public safety, minimize highway closure times, provide an operational highway, and provide opportunities for excess earthen material generated by emergency slides and maintenance activities.

Need

The SR 299 corridor in Trinity County is prone to slides and has limited locations to dispose of earthen material. The project is needed to provide capacity for disposal of future slide materials and maintenance activities.

1.2.2 Project Location

The ±27-acre project site is located on SR 299, post mile 46.2, in Trinity County. The site consists of portions of Trinity County Assessor's Parcels 024-010-00 and -19, as well as Caltrans right-of-way.

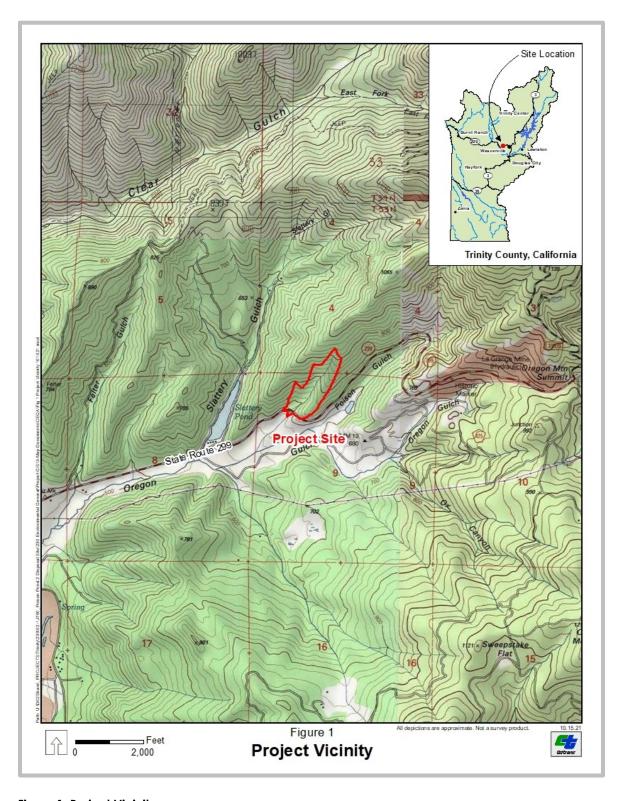


Figure 1. Project Vicinity

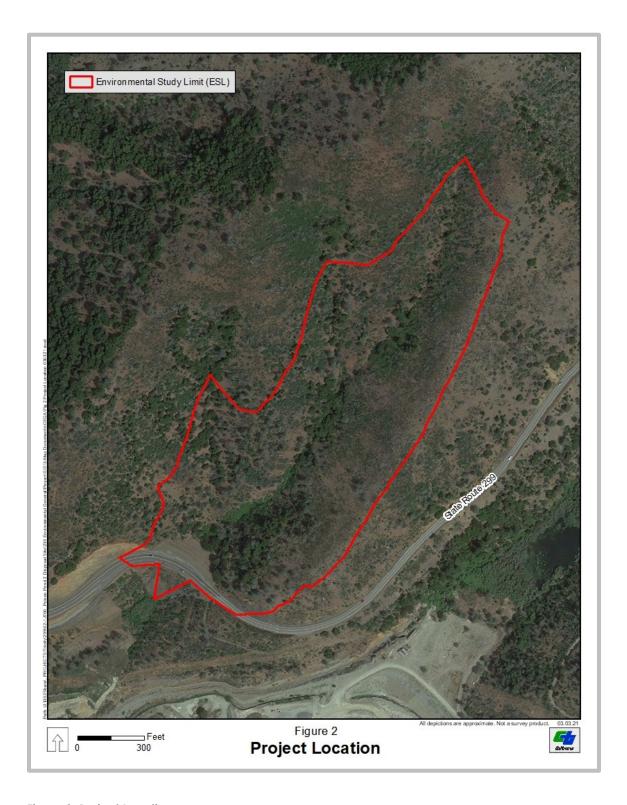


Figure 2. Project Location

1.2.3 No-Build Alternative

This alternative would maintain current circumstances, which is not sustainable. In the event of a large emergency slide, Caltrans is responsible for identifying/approving an appropriate disposal site. The nearest approved landfill is located in the City of Anderson in the upper Sacramento Valley. In addition to increased costs associated with trucking and landfill fees, longer haul trips would significantly increase highway closure times. Thus, the No-Build alternative would not meet the purpose and need of the project. For each potential impact area discussed in Chapter 2, the No-Build alternative has been determined to have no impact. Under the No-Build alternative, no alterations to the existing conditions would occur, and the proposed project would not be implemented.

1.2.4 Considered Alternatives

Caltrans considers multiple factors when evaluating sites for potential disposal use. Site selection factors fall into two categories: logistical considerations and environmental constraints.

Logistical Considerations

On an ongoing basis, Caltrans construction and maintenance staff review potential disposal sites along slide-prone highways. Representative construction and maintenance considerations are as follows:

- Centrally located to slide-prone areas (e.g., steep topography and unstable soils)
- Accessible to equipment needed for material disposal, including safe ingress/egress for construction and maintenance personnel
- Adjacent to the subject State route
- Larger sites, a minimum of 10,000+ cubic yards of available storage, preferred
- Land available for State purchase/easement
- Consultation with private landowners to discuss a possible land purchase or easement to facilitate disposal

Environmental Constraints

Caltrans environmental staff use a multifaceted approach in reviewing potential sites. Once a potential site has been identified by the Caltrans Disposal Site Coordinator, the site is reviewed by Caltrans environmental staff through the following steps:

- Aerial imagery interpretation
- Records review to determine if sensitive cultural, biological, and/or water resources have been reported in the project vicinity (e.g., California Natural Diversity Database (CNDDB), U.S. Fish and Wildlife Service species list, Caltrans Cultural Resources Database (CCRD))
- Coordination with land/resource managers (e.g., U.S. Forest Service, California Department of Fish and Wildlife)
- Field reviews (as appropriate)

Representative environmental constraints include:

- Listed plant/animal species, including anadromous fish
- Prehistoric/historic resources
- Designated critical habitat
- Historic districts
- Wetlands/streams
- Potential visual/noise impacts
- Riparian habitat
- FEMA floodway

1.2.5 Alternatives Removed from Further Consideration

As part of the Caltrans review, a total of 28 alternative sites were considered during the site selection process but were removed from further consideration (see Table 1). Twenty-four sites exhibit significant archaeological and/or biological constraints, causing them to be unsuitable for disposal activities. Further, all 28 sites do not meet the purpose and need of the project (i.e., insufficient disposal space).

Table 1. Alternative Sites Removed From Further Consideration

Loca (SR 299 P		Rationale for Removal of Alternative	
Alternative	e Sites Rem	oved From Further Consideration (28 Sites)	
11.91	22.0	The sites may be suitable for Caltrans short-term disposal needs. However, due to	
31.4		insufficient size, the sites do not meet the project's purpose and need.	
66.3	67.3	Sites are undergoing environmental review for maintenance use. However, due to	
71.8		insufficient size, the sites do not meet the project's purpose and need.	
40.	.25	Despite ongoing negotiations to purchase the property, the site was determined not to meet the project's purpose and need due to insufficient size.	
11.9	21.9		
43.5	43.7	Landowners were not interested in selling property or granting easement (11.9, 21.9, 43.7, and 62.5B). County rejected disposal request (43.5).	
62.5B			
12.9	50.7	Insufficient size. With ≤500 cubic yards/site available, it's impractical to purchase	
28.6E		the private property.	
16.7 Site rejected, as disposal activities would interfere with public river access.		Site rejected, as disposal activities would interfere with public river access.	
0.3	41.7	Due to the presence of significant any irrepresental constraints these sites have	
8.2	44.9	Due to the presence of significant environmental constraints, these sites have been removed from further consideration. Examples include sensitive biological	
9.5	45.0	resources, designated critical habitat, wetland/other waters, riparian habitat, and	
24.5	47.2	archaeological resources. Further, these sites do not meet the purpose and need of the project, as they do provide sufficient storage capacity for emergency slides.	
37.0	63.7		
38.9			
Vari	ious	Commercial disposal sites (e.g., landfills and quarries) do not meet the State's disposal needs. Factors include, but are not limited to, restricted operating hours, insufficient capacity, high disposal costs, contracting requirements, and long-term availability concerns.	

Through completion of the site selection and alternatives analysis process, it was determined that the Poison Pond 2 Disposal Site was best suited to serve as a disposal site. The site does not support special-status plant or animal species or federally designated critical habitat. Although project development would result in the permanent fill of on-site streams, said features are hydrologically isolated from downstream waters, provide minimal water quality benefits, and offer minimal habitat value for wildlife.

General Plan Description, Zoning, and Surrounding Land Uses

The project site occurs on lands maintained by the BLM; thus, a general plan description and zoning are not applicable. Surrounding land uses include open space to the north, west, and east, while SR 299 and an active gravel mine facility occur to the south.

1.3 Permits and Approvals Needed

The following table indicates the permitting agency, permits/approvals, and status of permits anticipated for the project:

Table 2. Agency Approvals

Agency	Permit/Approval	Status
California Department of Fish and Wildlife (CDFW)	Lake and Streambed Alteration Agreement	Not yet applied. Would obtain upon completion of the CEQA environmental document.
State Water Resources Control Board (SWRCB)	Stormwater Pollution Prevention Plan	Contractor to submit Notice of Intent prior to construction activities.
State Water Resources Control Board (SWRCB)	Facility Pollution Prevention Plan	Prior to disposal activities, Caltrans would prepare the FPPP in accordance with the State's National Pollution Discharge Elimination System (NPDES) Permit.
Regional Water Quality Control Board (RWQCB)	Waste Discharge Requirements	Not yet applied. Would obtain upon completion of the CEQA environmental document.
Bureau of Land Management (BLM)	30-Year Right-of-Way Grant	Not yet applied. Would obtain upon completion of the CEQA environmental document.

1.4 Standard Measures and Best Management Practices Included in All Alternatives

Under CEQA, "mitigation" is defined as avoiding, minimizing, rectifying, reducing/eliminating, and compensating for an impact. In contrast, Standard Measures and Best Management Practices (BMPs) are prescriptive and sufficiently standardized to be generally applicable, and do not require special tailoring for a project. They are measures that typically result from laws, permits, agreements, guidelines, and resource management plans. For this reason, the measures and practices are not considered mitigation under CEQA, rather, they are included as part of the project description in environmental documents.

The section below provides a list of project features, standard practices (measures), and BMPs that are included as part of the project description. These avoidance and minimization measures are prescriptive and sufficiently standardized to be generally applicable and do not require special tailoring to a project situation. These are generally measures that result from laws, permits, guidelines, and resource management plans that are relevant to the project. They contain refinements in planning policies and implementing actions. These practices predate the project's proposal and apply to all similar projects. For this reason, these measures and practices do not qualify as project mitigation, and the effects of the project are analyzed with these measures in place.

Standard measures relevant to the protection of natural resources deemed applicable to the proposed project include the following:

Aesthetics Resources

- AR-1: Temporary access roads, construction easements, disposal areas, and staging areas that were previously vegetated would be restored to a natural contour to the maximum extent feasible and revegetated with eco-regionally appropriate native vegetation.
- **AR-2:** Where feasible, the removal of established trees and vegetation would be minimized. Environmentally sensitive areas would have

Temporary High Visibility Fencing (THVF) installed before start of construction to demarcate areas where vegetation would be preserved and root systems of trees protected.

Biological Resources

BR-1: General

Before start of work, as required by permit or consultation conditions, a Caltrans biologist or Environmental Construction Liaison/Coordinator (ECL) would meet with the contractor to brief them on environmental permit conditions and requirements relative to each stage of the proposed project, including, but not limited to, work windows, drilling site management, and how to identify and report regulated species within the project areas.

BR-2: Animal Species

- A. To protect migratory and nongame birds (occupied nests and eggs), if possible, vegetation removal would be limited to the period outside of the bird breeding season (removal would occur between September 16 and January 31). If vegetation removal is required during the breeding season, a nesting bird survey would be conducted by a qualified biologist within one week prior to vegetation removal. If an active nest is located, a qualified biologist would establish appropriate species-specific buffer(s) and any monitoring requirements. The buffer would be delineated around each active nest, and construction activities would be excluded from these areas until birds have fledged, or the nest is determined to be unoccupied.
- B. Pre-construction surveys for active raptor nests within onequarter mile of the construction area would be conducted by a qualified biologist within one week prior to initiation of construction activities. Areas to be surveyed would be limited to those areas subject to increased disturbance because of construction activities (i.e., areas where existing traffic or human

activity is greater than or equal to construction-related disturbance need not be surveyed). If any active raptor nests are identified, appropriate conservation measures (as determined by a qualified biologist) would 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 near the active nest site until the young have fledged.

- C. To prevent attracting corvids (birds of the Corvidae family which include jays, crows, and ravens), no trash or foodstuffs would be left behind or stored on-site. All trash would be deposited in a secure container daily and disposed of at an approved waste facility at least once a week. Also, on-site workers would not attempt to attract or feed any wildlife.
- D. Artificial night lighting may be required. To reduce potential disturbance to sensitive resources, lighting would be temporary and directed specifically on the portion of the work area actively under construction. Use of artificial lighting would be limited to Cal/OSHA work area lighting requirements.
- E. A Limited Operating Period would be observed, whereby all instream work below ordinary high water would be restricted to the period between June 15 and October 15.

BR-3: Invasive Species

Invasive non-native species control would be implemented. Measures would include:

 Straw, straw bales, seed, mulch, or other material used for erosion control or landscaping would be free of noxious weed seed and propagules. All equipment would be thoroughly cleaned of all dirt and vegetation prior to entering the job site to prevent importing invasive non-native species. Project personnel would adhere to the latest version of the California Department of Fish and Wildlife Aquatic Invasive Species Cleaning/Decontamination Protocol (Northern Region) for all field gear and equipment in contact with water.

BR-4: Plant Species, Sensitive Natural Communities, and ESHA

A. After completion of the project, all superfluous construction materials would be completely removed from the site. The site would then be hydroseeded with a mixture of native species along with fast growing sterile erosion control seed, as required by the Erosion Control Plan.

Cultural Resources

- CR-1: If cultural materials are discovered during construction, work activity within a 60-foot radius of the discovery would be stopped and the area secured until a qualified archaeologist can assess the nature and significance of the find in consultation with the State Historic Preservation Officer (SHPO).
- CR-2: If human remains and related items are discovered on private or State land, they would be treated in accordance with State Health and Safety Code § 7050.5. Further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to California Public Resources Code (PRC) § 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD).

Human remains and related items discovered on federally-owned lands would be treated in accordance with the Native American Graves Repatriation Act of 1990 (NAGPRA) (23 USC 3001). The

procedures for dealing with the discovery of human remains, funerary objects, or sacred objects on federal land are described in the regulations that implement NAGPRA 43 CFR Part 10. All work in the vicinity of the discovery shall be halted and the administering agency's archaeologist would be notified immediately. Project activities in the vicinity of the discovery would not resume until the federal agency complies with the 43 CFR Part 10 regulations and provides notification to proceed.

Geology, Seismic/Topography, and Paleontology

GS-1: The project would be designed to minimize slope failure, settlement, and erosion using recommended construction techniques and BMPs. New earthen slopes would be vegetated to reduce erosion potential.

Greenhouse Gas Emissions

- **GHG-1:** Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality.
- **GHG-2:** Compliance with Title 13 of the California Code of Regulations includes restricting idling of diesel-fueled commercial motor vehicles and equipment with gross weight ratings of greater than 10,000 pounds to no more than five minutes.
- **GHG-3:** Caltrans Standard Specification "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board (CARB).
- **GHG-4:** Use of a Transportation Management Plan (TMP) to minimize vehicle delays and idling emissions. As part of this, construction traffic would be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along the highway during peak travel times.

GHG-5: All areas temporarily disturbed during construction would be revegetated with appropriate native species. Landscaping reduces surface warming and, through photosynthesis, decreases CO₂. This replanting would help offset any potential CO₂ emissions increase.

Hazardous Waste and Material

- HW-1: If required by the North Coast Unified Air Quality Management District, in accordance with Caltrans requirements, the contractor(s) shall prepare a project-specific Asbestos Compliance Plan (CCR Title 8, § 1529, the "Asbestos in Construction" standard) to reduce worker exposure to naturally occurring asbestos (NOA).
- HW-2 If required by the North Coast Unified Air Quality Management District, in accordance with Caltrans requirements, the contractor(s) shall prepare a project-specific Dust Control Plan (CCR Title 8, §8438, the Dust Control in Construction" standard) for NOA.
- HW-3: Per Caltrans requirements, the contractor(s) would prepare a project-specific Lead Compliance Plan (CCR Title 8, § 1532.1, the "Lead in Construction" standard) to reduce worker exposure to lead-impacted soil. The plan would include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of lead-impacted soil.
- **HW-4:** If treated wood waste (such as removal of signposts or guardrail) is generated during this project, it would be disposed of in accordance with Standard Specification "Treated Wood Waste."

Noise

N-1: The contractor would be required to conform to the provisions of Standard Specification, Section 14-8.02 "Noise Control" which states, "Control and monitor noise from work activities." And, "Do not exceed 86 dBA LMax at 50 feet from the job site activities from 9 p.m. to 6 a.m."

Traffic and Transportation

TT-1: A Transportation Management Plan (TMP) would be applied to the project.

Utilities and Emergency Services

UE-1: All emergency response agencies in the project area would be notified of the project construction schedule and would have access to SR 299 throughout the construction period.

Water Quality and Stormwater Runoff

WQ-1: The project would comply with the Provisions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order 2012-0011-DWQ) as amended by subsequent orders, which became effective July 1, 2013, for projects that result in a land disturbance of one acre or more, and the Construction General Permit (Order 2009-0009-DWQ).

Before any ground-disturbing activities, the contractor would prepare a Stormwater Pollution Prevention Plan (SWPPP) (per the Construction General Permit Order 2009-0009-DWQ) or Water Pollution Control Program (WPCP) (projects that result in a land disturbance of less than one acre), that includes erosion control measures and construction waste containment measures to protect waters of the State during project construction.

The SWPPP or WPCP would identify the sources of pollutants that may affect the quality of stormwater; include construction site Best Management Practices (BMPs) to control sedimentation, erosion, and potential chemical pollutants; provide for construction materials management; include non-stormwater BMPs; and include routine inspections and a monitoring and reporting plan. All construction site BMPs would follow the latest edition of the Caltrans Storm Water Quality Handbooks: Construction Site BMPs Manual to control and

reduce the impacts of construction-related activities, materials, and pollutants on the watershed.

The project SWPPP or WPCP would be continuously updated to adapt to changing site conditions during the construction phase.

Construction may require one or more of the following temporary construction site BMPs:

- Any spills or leaks from construction equipment (i.e., fuel, oil, hydraulic fluid, and grease) would be cleaned up in accordance with applicable local, State, and/or federal regulations.
- Temporary sediment control and soil stabilization devices would be installed.
- Existing vegetated areas would be maintained to the maximum extent practicable.
- Clearing, grubbing, and excavation would be limited to specific locations, as delineated on the plans, to maximize the preservation of existing vegetation.
- Vegetation reestablishment or other stabilization measures would be implemented on disturbed soil areas per the Erosion Control Plan.
- **WQ-2:** The project would comply with the Caltrans NPDES Permit and Construction General Permit referenced in WQ-1.

In accordance with the Caltrans NPDES permit, Caltrans shall prepare and implement a Facility Pollution Prevention Plan (FPPP). FPPPs are developed for a variety of facility types, including permanent stockpile locations. The FPPP describes the activities conducted at a facility and the BMPs to be implemented to reduce or eliminate the discharge of pollutants in stormwater runoff from the facility. The FPPP will include the following:

- All potential pollutants at a given facility
- Specific BMPs selected to control each pollutant source
- A facility site map showing selected BMPs for implementation
- Name of the water body (including distance to the water body) or MS4 receiving stormwater discharges from the facility, and person responsible for preparation of the FPPP
- Person responsible for implementing the FPPP
- Date the FPPP was last revised and certified

1.5 Discussion of National Environmental Policy Act Compliance

With State funding only, the project does not have FHWA funding, nor does it require FHWA approval. However, the project would be subject to the issuance of a BLM Right-of-Way Grant. It is anticipated that BLM would prepare a NEPA document as part of its approval process.

Chapter 2 CEQA Environmental Checklist

Environmental Factors Potentially Affected

The environmental factors noted below would be potentially affected by this project. Please see the CEQA Environmental Checklist on the following pages for additional information.

Potential Impact Area	Impacted: Yes / No			
Aesthetics	Yes			
Agriculture and Forest Resources	Yes			
Air Quality	Yes			
Biological Resources	Yes			
Cultural Resources	No			
Energy	No			
Geology and Soils	Yes			
Greenhouse Gas Emissions	Yes			
Hazards and Hazardous Materials	Yes			
Hydrology and Water Quality	Yes			
Land Use and Planning	No			
Mineral Resources	No			
Noise	Yes			
Population and Housing	No			
Public Services	Yes			
Recreation	No			
Transportation	Yes			
Tribal Cultural Resources	No			
Utilities and Service Systems	Yes			
Wildfire	No			
Mandatory Findings of Significance	Yes			

The CEQA Environmental Checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the project will indicate there are no impacts to a particular resource. A "No Impact"

answer in the last column of the checklist reflects this determination. The words "significant" and "significance" used throughout the checklist and this document are only related to potential impacts pursuant to CEQA. The questions in the CEQA Environmental Checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, as well as standardized measures applied to all or most Caltrans projects (such as BMPs and measures included in the Standard Plans and Specifications or as Standard Special Provisions [Section 1.4]), are an integral part of the project and have been considered prior to any significance determinations documented in the checklist or document.

Project Impact Analysis Under CEQA

CEQA broadly defines "project" to include "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" (14 CCR § 15378). Under CEQA, normally the baseline for environmental impact analysis consists of the existing conditions at the time the environmental studies began. However, it is important to choose the baseline that most meaningfully informs decision-makers and the public of the project's possible impacts. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record. The CEQA Guidelines require a "statement of the objectives sought by the proposed project" (14 CCR § 15124(b)).

CEQA requires the identification of each potentially "significant effect on the environment" resulting from the action, and ways to mitigate each significant

effect. Significance is defined as "substantial or potentially substantial adverse change to any of the physical conditions within the area affected by the project" (14 CCR § 15382). CEQA determinations are made prior to and separate from the development of mitigation measures for the project.

The legal standard for determining the significance of impacts is whether a "fair argument" can be made that a "substantial adverse change in physical conditions" would occur. The fair argument must be backed by substantial evidence including facts, reasonable assumption predicated upon fact, or expert opinion supported by facts. Generally, an environmental professional with specific training in an area of environmental review can make this determination.

Though not required, CEQA suggests Lead Agencies adopt thresholds of significance, which define the level of effect above which the Lead Agency will consider impacts to be significant, and below which it will consider impacts to be less than significant. Given the size of California and it's varied, diverse, and complex ecosystems, as a Lead Agency that encompasses the entire State, developing thresholds of significance on a statewide basis has not been pursued by Caltrans. Rather, to ensure each resource is evaluated objectively, Caltrans analyzes potential resource impacts in the project area based on their location and the effect of the potential impact on the resource as a whole. For example, if a project has the potential to impact 0.10 acre of wetland in a watershed that has minimal development and contains thousands of acres of wetland, then a "less than significant" determination would be considered appropriate. In comparison, if 0.10 acre of wetland would be impacted that is located within a park in a city that only has 1.00 acre of total wetland, then the 0.10 acre of wetland impact could be considered "significant."

If the action may have a potentially significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the lead agency may adopt a negative declaration (ND) if there is no substantial evidence that the project may have a potentially significant effect on the environment (14 CCR § 15070(a)). A proposed negative declaration must be

circulated for public review, along with a document known as an Initial Study. CEQA allows for a "Mitigated Negative Declaration" in which mitigation measures are proposed to reduce potentially significant effects to less than significant (14 CCR § 15369.5).

Although the formulation of mitigation measures shall not be deferred until some future time, the specific details of a mitigation measure may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review. The lead agency must (1) commit itself to the mitigation, (2) adopt specific performance standards the mitigation will achieve, and (3) identify the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure. Compliance with a regulatory permit or other similar processes may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards (§15126.4(a)(1)(B)).

Per CEQA, measures may also be adopted, but are not required, for environmental impacts that are not found to be significant (14 CCR § 15126.4(a)(3)). Under CEQA, mitigation is defined as avoiding, minimizing, rectifying, reducing, and compensating for any potential impacts (CEQA 15370). Regulatory agencies may require additional measures beyond those required for compliance with CEQA. Though not considered "mitigation" under CEQA, these measures are often referred to in an Initial Study as "mitigation," Good Stewardship, or Best Management Practices. These measures can also be identified after the Initial Study/Negative Declaration is approved.

CEQA documents must consider direct and indirect impacts of a project (CAL. PUB. RES. CODE § 21065.3). They are to focus on significant impacts (14 CCR § 15126.2(a)). Impacts that are less than significant need only be briefly described (14 CCR § 15128). All potentially significant effects must be addressed.

No-Build Alternative

For each of the following CEQA Environmental Checklist questions, the "No-Build" alternative has been determined to have "No Impact". Under the "No-Build" alternative, no alterations to the existing conditions would occur and no proposed improvements would be implemented. The "No-Build" alternative will not be discussed further in this document.

2.1 Aesthetics

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?			✓	
Would the project:				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
Would the project:				
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✓	
Would the project: d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				✓

2.1.1 Regulatory Setting

The California Environmental Quality Act (CEQA) establishes it is the policy of the State to take all action necessary to provide the people of the State "with ... enjoyment of aesthetic, natural, scenic and historic environmental qualities" (CA Public Resources Code [PRC] Section 21001[b]).

2.1.2 Environmental Setting

The project site is located on SR 299 in a rural portion of Trinity County. The site is characterized by steep topography that slopes generally to the south. The project site ranges in elevation between 1,900 and 2,700 feet above mean sea level. On-site vegetation consists of an open gray pine/oak woodland with a moderately dense shrub understory. Lands to the south comprise an active gravel mining facility; lands to the west, east, and north are undeveloped.

The gravel quarry comprises approximately 210 acres and is visible to the traveling public for approximately 0.85 miles along SR 299. SR 299, between the cities of Redding and Arcata, is a designated U.S. Forest Service (USFS) Scenic Byway.

In support of the aesthetics evaluation, a Visual Impact Assessment (VIA) (California Department of Transportation, 2021) was prepared for the proposed project.

2.1.3 Discussion of CEQA Question 2.1—Aesthetics

a) Would the project have a substantial adverse effect on a scenic vista?

Scenic vistas are defined as expansive views of highly valued landscapes from publicly accessible viewpoints. Scenic vistas include views of natural features such as mountains, hills, valleys, water courses, outcrops, and natural vegetation, as well as man-made scenic structures. According to the VIA, the project's visual assessment area includes lands located north and south of SR 299. Scenic resources occurring north of the highway include trees and other vegetation, streams, and open space. However, observed trees are common in the area, while rock outcroppings exhibit little or no variety and possess no uniqueness of form or special aesthetic merit. The visual assessment area south of the highway is dominated by an active gravel quarry. The ±210-acre, 0.85-mile long quarry is primarily unvegetated, undergoes regular disturbance, and supports large industrial equipment and construction vehicles through normal quarry operations. The proposed

project would result in tree removal, active disposal activities that would be visible to the traveling public, and modifications to the overall landform. However, due to the presence of the quarry, and the commonplace scenic resources located north of the highway, disposal site development would result in a less-than-significant impact to a scenic vista.

b) Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings, within a state scenic highway?

The nearest officially designated State Scenic Highway is Route 151 (Shasta Dam Boulevard) in Shasta County. The nearest eligible highways are State Route 3 (entire highway) and State Route 299 (Weaverville to Redding segment), both located east of the project site. Due to topography, the project site is not visible from these eligible scenic routes. Therefore, the proposed project would have no impact to scenic resources within a designated State Scenic Highway.

As previously described, SR 299, between the cities of Redding and Arcata, is a USFS designated scenic byway. The purpose of this federal designation is to recognize the wide variety of plant and animal life that exist along the route, as well as cultural and historical aspects of the region. Due to ongoing quarry operations south of the highway, the absence of sensitive biological and/or cultural resources, and that project site frontage along SR 299 is limited to ±550 linear feet, the project would not impact the overall character of the area, nor would it affect the scenic byway designation.

c) Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.)

Public views in the immediate area are limited to those of the traveling public on SR 299. As described above, scenic resources located north of this section of highway are considered commonplace, while the area south of the highway supports an active quarry. Nonetheless, access road construction

and subsequent disposal activities would result in temporary impacts to the visual character of the area. As discussed in Section 1.4, Caltrans would implement Standard Measures AR-1 and AR-2, which include restoring the project landform to the maximum extent feasible and revegetating the site as appropriate. As such, site development would not substantially degrade the existing character or quality of the public views of the site and its surroundings. Therefore, impacts would be less than significant.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed project does not include lighting of any kind; therefore, the project would not adversely affect day or nighttime views in the area.

2.1.4 Avoidance and Minimization Measures

To minimize visual impacts to the traveling public, Caltrans would plant trees along the project frontage of SR 299 (e.g., top of the road prism) at the project outset to partially screen the site during the interim build-out period. As the trees become established, they would serve to further screen the site from the traveling public.

2.1.5 Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

2.2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project; the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?				√
Would the project: b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				√
Would the project: c) Conflict with existing zoning 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))?				✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: d) Result in the loss of forest land or conversion of forest land to non-forest use?			√	
Would the project: 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?				✓

2.2.1 Regulatory Setting

The California Environmental Quality Act (CEQA) requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other uses.

Public Resources Code § 12220(g) defines "Forest Land" as "land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." Impacts to timberland are analyzed as required by the California Timberland Productivity Act of 1982 (CA Government Code Sections 51100 et seq.) which was enacted to preserve forest resources. Similar to the Williamson Act, this program gives landowners tax incentives to keep their land in timber production. Contracts involving Timber Production Zones (TPZ) are on 10-year cycles. Although State highways are exempt from provisions of the Act, the California Secretary of Resources and the local governing body are notified in writing if new or additional right of way from a TPZ will be required for a transportation project.

2.2.2 Environmental Setting

The project site is located on SR 299 in a rural portion of Trinity County. The topography in the project vicinity is characterized by steep, mountainous terrain with forested slopes. The project site occurs on lands that meet the definition of forest land as defined under Public Resources Code §12220(g). The project site occurs on lands maintained by the Bureau of Land Management (BLM); thus, the site does not qualify as timberland, nor is it subject to TPZ contracts.

2.2.3 Discussion of CEQA Question 2.2—Agriculture and Forest Resources

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

According to the California Department of Conservation (2021a), the project site is not designated as prime farmland, unique farmland, or farmland of statewide importance. Thus, there would be no impact to farmland.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. As the project site occurs on lands managed by the BLM, the Williamson Act is not applicable. The project would not conflict with existing zoning for agricultural use or a Williamson Act contract; thus, there would be no impact.

c) Would the project conflict with existing zoning or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned

Timberland Production (as defined by Government Code Section 51104(g))?

The proposed project is consistent with existing zoning and would not cause the rezoning of forest land, timberland, or timberland zoned Timberland Production. Because the site is managed by the BLM, the project site does not qualify as timberland, nor is it subject to TPZ contracts. Therefore, there would be no conflict.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

As part of the proposed project, on-site vegetation would be removed to facilitate disposal activities. As the site is filled, and finished grade is achieved (south to north), the subject areas would be replanted with native vegetation. The site is also expected to benefit from natural regeneration. Due to replanting activities/natural regeneration, and the amount forest land in the region, the temporary loss of forest land or conversion of forest land to non-forest use would be less than significant. As previously stated, the project site consists of lands that are managed by the BLM). Following project completion (full build-out, replanting, etc.), land management activities would be returned to the BLM.

e) Would the project 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?

As described above, the proposed project would not result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. Following project completion, land management activities would be returned to the BLM.

2.2.4 Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

2.3 Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations:

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
Would the project: b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				√
Would the project: c) Expose sensitive receptors to substantial pollutant concentrations?				√
Would the project: d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			~	

2.3.1 Regulatory Setting

The Federal Clean Air Act (CAA), as amended, is the primary federal law that governs air quality, while the California Clean Air Act is its corresponding State law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and CARB, set standards for the concentration of pollutants in the air.

The U.S. Environmental Protection Agency (USEPA), under the federal Clean Air Act (CAA), establishes maximum ambient concentrations for criteria air pollutants (CAP), known as the National Ambient Air Quality Standards (NAAQSs). The six CAPs are:

Ozone (O₃). Ozone is formed through chemical reactions between two major classes of air pollutants: reactive organic gases (ROG) and oxides of nitrogen (NO_X). These reactions are stimulated by sunlight and temperature; thus, ozone occurs in higher concentrations during warmer times of the year. Major sources: Combustion sources associated with motor vehicles and factories, and evaporation of solvents and fuels.

Nitrogen Dioxide (NO₂). Nitrogen oxides (NO_X) include nitric oxide (NO), nitrogen dioxide (NO₂), and nitrous oxide (N₂O) and are formed when nitrogen (N₂) combines with oxygen (O₂). Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation and acid deposition. Of the seven types of nitrogen oxide compounds, NO₂ is the most abundant in the atmosphere and is related to traffic density. Major sources: Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.

Sulfur Dioxide (SO₂). Sulfur dioxide results mainly from burning high-sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO₂ oxidizes in the atmosphere, it forms sulfate (SO₄). Collectively, these pollutants are referred to as sulfur oxides (SO_x). Major sources: Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.

Carbon Monoxide (CO). Carbon monoxide is produced by the incomplete combustion of carbon-containing fuels, such as gasoline and wood. Because CO is emitted directly from internal combustion engines, motor vehicles operating at slow speeds are the primary source of carbon monoxide. Major sources: Motor vehicles and internal combustion engines.

Lead (Pb). Lead is a heavy metal that is highly persistent in the environment. In the past, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. Currently, emissions of lead are largely limited to stationary sources such as lead smelters. Major sources: Lead smelters, battery manufacturing, recycling facilities, and combustion of leaded aviation gasoline by piston-driven aircraft.

Particulate Matter, 10 and 2.5 microns in size (PM_{10} and $PM_{2.5}$). PM_{10} is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. PM_{10} is emitted from mobile and stationary sources, construction operations (e.g., grading and other earth disturbance), wildfires, fireplaces and wood stoves, and natural windblown dust. $PM_{2.5}$ is formed in the atmosphere from primary gaseous emissions that include sulfates formed from SO_2 released from power plants and industrial facilities and nitrates that are formed from NO_X released from power plants, automobiles, and other types of combustion sources. Major sources: Dust- and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).

The California CAA establishes maximum concentrations for the six federal CAPs, as well as the four additional air pollutants identified below. The four additional standards are intended to address regional air quality conditions, not project-specific emissions.

Visibility-Reducing Particles. Particulate matter impacts the environment by decreasing visibility. Visibility-reducing particles vary greatly in shape, size, and chemical composition, and come from a variety of natural and manmade sources. Major sources: Wildfires, residential fireplaces, and wood stoves; windblown dust; ocean sprays; biogenic emissions; dustand fume-producing construction; industrial and agricultural operations; and fuel combustion.

Sulfate (SO₄). Sulfate is oxidized to sulfur dioxide (SO₂) during the combustion process and is subsequently converted to sulfate compounds in the atmosphere. Major sources: Industrial processes and the

combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur.

Hydrogen Sulfide (H₂S). Hydrogen sulfide is a colorless gas with the odor of rotten eggs. Major sources: Geothermal power plants, petroleum refineries, and wastewater treatment plants.

Vinyl Chloride (chloroethene). Vinyl chloride, a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to manufacture polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites due to microbial breakdown of chlorinated solvents.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under NEPA. In addition to this analysis, a parallel "conformity" requirement under the CAA also applies.

2.3.2 Environmental Setting

The project is located in the North Coast Air Basin and is within the jurisdiction of the North Coast Air Quality Management District (NCAQMD) and CARB. The project site is located in an attainment/unclassified area for all current federal and State air quality standards (California Air Resources Control Board, 2021a).

In support of the air quality evaluation, an Air Quality Study (Caltrans, 2021b) was prepared for the proposed project.

2.3.3 Discussion of CEQA Question 2.3—Air Quality

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

The project is located in the North Coast Air Basin and is within the jurisdiction of the NCAQMD and CARB. The NCAQMD is the primary local agency responsible for regional air quality planning, monitoring, and stationary source and facility permitting in accordance with standards set by the CARB.

As proposed, project activities would not include actions that have the potential to conflict with or obstruct an applicable air quality plan. Thus, there would be no impact.

b) Would the project 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?

As noted above, the proposed project is located in Trinity County, which is in attainment or unclassified for all federal and State ambient air quality standards. Project construction and subsequent disposal activities would cause a minor temporary increase in criteria pollutants associated with fuel combustion and earth work (i.e., O₃, NO₂, SO₂, CO, PM₁₀/PM_{2.5}, and visibility-reducing particles) in the immediate area.

In addition, the proposed project would not result in significant impacts associated with hydrogen sulfide (H_2S), vinyl chloride, or visibility-reducing particles as discussed below.

Lead. Elevated levels of airborne lead at the local level are usually found near industrial operations that process materials containing lead, such as smelters and battery manufacturing/recycling facilities. However, aerially deposited lead may be present along the margins of the highway due to the historic use of leaded gasoline. Compliance with standard measures for lead contamination (described in Section 2.9) would ensure impacts related to lead would be less than significant.

Hydrogen Sulfide. Hydrogen sulfide is formed during the decomposition of organic material in anaerobic environments, including sewage treatment processes. Because these conditions are not applicable to the proposed project, project implementation would not result in hydrogen sulfide emissions.

Vinyl Chloride. Vinyl chloride is used to manufacture PVC plastic and other vinyl products. Approximately 98 percent of vinyl chloride produced in the United States is used during the manufacture of PVC. Additionally,

vinyl chloride is produced during the microbial breakdown of chlorinated solvents (e.g., engine cleaner, degreasing agent, adhesive solvents, paint removers). The potential for vinyl chloride exposure is primarily limited to areas in close proximity to PVC production facilities. Because PVC manufacturing facilities are absent from the project area, and project implementation would include the use of chlorinated solvents, project implementation would not result in vinyl chloride emissions.

As discussed above, Trinity County is currently designated in attainment or unclassified status for all federal and State criteria pollutants; therefore, the county is not required to have a local air quality attainment plan. The project would not result in a cumulatively considerable net increase of any criteria pollutant that would cause the area to enter into non-attainment for any criteria pollutant. Further, construction emissions are temporary, and active disposal activities are expected to be conducted infrequently. Thus, there would be no impact.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors are individuals or groups of people that are more affected by air pollution than others, including young children, the elderly, and people weakened by disease or illness. Locations that may contain high concentrations of sensitive receptors include residential areas, schools, playgrounds, childcare centers, hospitals, convalescent homes, and retirement homes. For the purposes of this project, pollutants consist of construction emissions and fugitive dust associated with disposal activities. The closest sensitive receptors to the project site are single-family residences located approximately 0.35 miles to the southeast on La Grange Road, and 0.45 miles to the west on the northside of SR 299. Given their distance from the project site, and the temporary/intermittent nature of initial site development and subsequent disposal activities, the project would not impact sensitive receptors. Thus, there would be no impact.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction/disposal activities have the potential to emit odors from diesel equipment and fugitive dust. Odors from construction are intermittent and temporary, and generally would not extend beyond the construction area. Due to the temporary and intermittent nature of construction odors, impacts would be less than significant.

2.3.4 Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

2.4 Biological Resources

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?			✓	
Would the project: b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		√		
Would the project: c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		√		
Would the project: 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?			√	

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
Would the project: 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?				✓

2.4.1 Regulatory Setting

Within this section of the document (2.4. Biological Resources), the topics are separated into Natural Communities, Wetlands and Other Waters, Plant Species, Animal Species, Threatened and Endangered Species, and Invasive Species. Plant and animal species listed as "threatened" or "endangered" are covered within the Threatened and Endangered sections. Other special-status plant and animal species, including California Department of Fish and Wildlife fully protected species, species of special concern, State Candidate species, U.S. Fish and Wildlife Service and National Marine Fisheries Service Candidate species, and California Native Plant Society (CNPS) rare and endangered plants are covered in the Plant and Animal sections.

NATURAL COMMUNITIES

CDFW maintains records of sensitive natural communities (SNC) in the California Natural Diversity Database (CNDDB). SNC are those natural communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special-status taxa or their habitat.

WETLANDS AND OTHER WATERS

"Waters" of the United States (including wetlands) and State are protected under several laws and regulations. The primary laws and regulations governing wetlands and other waters include:

- Federal Clean Water Act (CWA), 33 USC 1344
- Federal Executive Order for the Protection of Wetlands (EO 11990)
- State Sections 1600–1607 of the California Fish and Game Code (CFGC)
- State Porter-Cologne Water Quality Control Act, Section 3000 et seq.

PLANT SPECIES

The USFWS and CDFW have regulatory responsibility for the protection of special-status plant species. The primary laws governing plant species include:

- Federal Endangered Species Act (FESA), United States Code 16 (USC),
 Section 1531, et seq. See also 50 CFR Part 402
- California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et sea.
- Native Plant Protection Act, California Fish and Game Code, Sections 1900–1913
- National Environmental Policy Act (NEPA), 40 C.F.R. Section 1500– Section 1508
- California Environmental Quality Act (CEQA), California Public Resources Code, Sections 21000–21177

ANIMAL SPECIES

The USFWS, NMFS, and CDFW have regulatory responsibility for the protection of special-status animal species. The primary laws governing animal species include:

- NEPA, 40 C.F.R. Section 1500–Section 1508
- CEQA, California Public Resources Code, Sections 21000–21177
- Migratory Bird Treaty Act, 16 U.S.C. Sections 703–712

- Fish and Wildlife Coordination Act, 16 U.S. Code Section 661
- Sections 1600–1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

THREATENED AND ENDANGERED SPECIES

The primary laws governing threatened and endangered species include:

- FESA, United States Code 16 (USC), Section 1531, et seq. See also 50
 CFR Part 402
- CESA, California Fish and Game Code, Section 2050, et seq.
- CEQA, California Public Resources Code, Sections 21000–21177
- Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.
 Code Section 1801

INVASIVE SPECIES

The primary laws governing invasive species are Executive Order (EO) 13112 and NEPA.

2.4.2 Environmental Setting

The project site is located in a rural area. Lands to the south comprise an active gravel mining facility; lands to the west, east, and north are undeveloped. The site is characterized by steep topography that slopes generally to the south. The project site ranges in elevation between 1,900 and 2,700 feet above mean sea level.

The project site is comprised of an open gray pine/oak woodland. The site supports four streams, which convey flow south toward SR 299. On-site streams dissipate to sheet flow immediately north of the highway.

The climate of the project vicinity consists of hot summers and very cold winters. The average annual temperature is approximately 53.4 degrees Fahrenheit (°F). Monthly mean maximum temperatures range from a high of 94.1°F in July to a low of 27.6°F in January. Daily high temperatures commonly exceed 90°F during the summer. Precipitation is about 35 inches per year.

A Natural Environment Study (Minimal Impacts) (NES MI) (Caltrans, 2021c) was prepared for the project. Caltrans coordinated with fisheries biologists and water quality specialists, as well as agency personnel from the NCWQCB and BLM. See Chapter 3 for a summary of these coordination efforts and professional contacts.

RECORDS REVIEW AND FIELD SURVEYS

As documented in the NES MI, records reviewed for this evaluation consisted of the following:

- CNDDB records for special-status plants and animals
- CNPS Inventory of Rare and Endangered Plants of California
- USFWS records for federally listed, proposed, and Candidate plant and animal species under the jurisdiction of the USFWS
- National Marine Fisheries Service Records for federally listed, proposed, and Candidate animal species under the jurisdiction of the NMFS
- Soils records maintained by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS, 2021a)
- National Wetlands Inventory (NWI) maps (USFWS, 2021)

The CNDDB records search covered a 5-mile radius around the project site. This entailed review of records for portions of the U.S. Geologic Survey's Dedrick, Junction City, Rush Creek Lakes, and Weaverville 7.5-minute quadrangles.

The field surveys were conducted on June 26, December 3, and December 30, 2019; and April 8, June 15, and December 14, 2021. Most special-status species potentially occurring on the site would have been evident at the time the fieldwork was conducted; presence/absence of those special-status species that would not have been apparent could readily be determined based on habitat characteristics.

NATURAL COMMUNITIES

The site is primarily comprised of open gray pine/oak woodland, with a shrub understory, as well as a minor amount of riparian vegetation along the

margin of the intermittent stream. Riparian vegetation provides minimal habitat value (e.g., narrow margin along stream, no woody vegetation (i.e., no shading), minimal refugia, flows of relatively short duration). Representative upland trees and shrubs include gray pine, interior live oak, buck brush, poison oak, and redbud. Herbaceous species are represented by ripgut brome, downy brome, silver hair grass, field-hedge parsley, and common woolly flower. Riparian vegetation is represented by California wild grape, California blackberry, and Himalayan blackberry.

Gray pine/oak woodland is not considered a sensitive natural community, while streams are considered a sensitive natural community. Field surveys and CNDDB records did not identify any other sensitive natural communities as occurring on the project site or within a five-mile radius. The USFWS does not identify any designated critical habitats for federally listed species within the study area.

WETLANDS AND OTHER WATERS

The records review showed that one soil type, Brockgulch Dedrick Brownbear Complex, 50 to 75 percent slopes, is present on the site. The soil is not listed as hydric; however, it may contain hydric inclusions. According to the National Wetland Inventory data, a single stream has been previously mapped on the project site: Riverine; Intermittent; Streambed; Seasonally Flooded (R4SBC).

During the field review, Caltrans identified four streams, one intermittent and three ephemeral, on the project site; wetlands are not present (Figure 3). Due to steep topography, on-site stream flows are generally of short duration (i.e., ephemeral); stream 4:IS supports intermittent flows. The site supports ±2,315 linear feet (±0.134 acres) of ephemeral stream and ±593 linear feet (±0.049 acres) of intermittent stream. On-site streams dissipate to sheet flow immediately north of SR 299. There is no surface connectivity with downstream waters.

PLANT SPECIES

This section addresses special-status plant species, including CDFW species of special concern, USFWS Candidate and sensitive species, BLM sensitive species, and CNPS rare and endangered plants.

According to the records search, 109 special-status plant species have been reported within the project area. Based on habitat requirements, the following five of these species have the potential to occur on the project site:

- branched collybia
 (BLM S-Sensitive/Survey and Manage, USFS S-Sensitive)
- Canyon Creek stonecrop (CNPS 1B.3, BLM S-Sensitive, USFS S-Sensitive)
- English Peak greenbrier (CNPS 4.2, BLM S-Sensitive)
- Heckner's lewisia (CNPS 1B.2)
- mountain lady's slipper (CNPS 4.2, BLM S-Sensitive/Survey and Manage, USFS S-Sensitive)

See Appendix C, Table 1 for an evaluation of the potential for each special status species to occur on the project site.

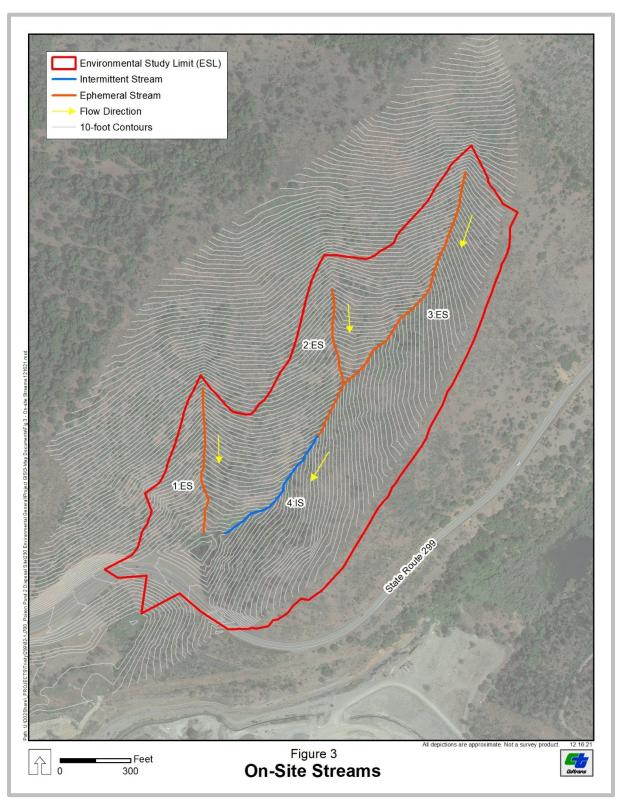


Figure 3. On-Site Streams

ANIMAL SPECIES

This section addresses special-status animal species, including CDFW State species of special concern (SSSC), USFWS Federal candidate (FC) species, and State candidate (SC) species. Due to a lack of connectivity with downstream waters, species maintained by the National Marine Fisheries Service would not be present.

According to the records search, 54 special-status animal species have the potential to occur in the project area. Based on habitat requirements, none of these species have the potential to occur on the project site. See Appendix C, Table 2 for an evaluation of the potential for each special-status species to occur on the project site.

Under the Migratory Bird Treaty Act (MBTA) of 1918, as amended, migratory bird species listed in CFR Title 50, §10.13, including their nests and eggs, are protected from injury or death, and any project related disturbances. The MTBA applies to over 1,000 bird species, including geese, ducks, shorebirds, raptors, songbirds, and other bird species that were near extinction before MBTA protections were put in place in 1918. The MTBA also provides protections for native bird species, including non-migratory birds.

THREATENED AND ENDANGERED SPECIES

This section addresses plant and animal species that are listed as "threatened" or "endangered" under the Federal or State Endangered Species Acts, including Federally threatened (FT), Federally endangered (FE), and State endangered (SE).

According to the records search, eight listed plant species have the potential to occur in the project area. Based on habitat requirements, none of these species have the potential to occur on the project site.

According to the records search, 24 listed animal species have the potential to occur in the project area. Based on habitat requirements, none of these species have the potential to occur on the project site. However, potential dispersal, foraging, and/or nesting/roosting habitat for the northern spotted

owl (federal and State threatened) has been mapped by the Shasta Trinity National Forest on adjacent lands.

See Appendix C, Tables 1 and 2 for an evaluation of the potential for each special-status species to occur on the project site.

INVASIVE SPECIES

The project site has the potential to support invasive species. However, during active disposal activities, the ground surface would undergo regular disturbance and would be frequently overtopped with new earthen material. The frequent overtopping of the seed bank (i.e., top 6 to 12 inches) would minimize the potential for invasive species to become established. Additionally, as discussed in Section 1.4, implementation of Standard Measure BR-3 would serve to minimize the introduction of invasive species. Further, Caltrans would implement any invasive species measures required by the BLM.

2.4.3 Discussion of CEQA Question 2.4a)—Biological Resources

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries/NMFS?

PLANT SPECIES

As described in the Environmental Setting section, based on the records search, five special-status plant species have the potential to occur on the project site: branched collybia, Canyon Creek stonecrop, English Peak greenbrier, Heckner's lewisia, and mountain lady's slipper. As documented in Appendix C, Table 1, the site does not support the species mentioned above. Due to the lack of suitable habitat for the remaining species (e.g., wetlands or other moist areas, appropriate soils, elevation range limitations), the remaining plant species would not occur on the project site. Although special-status plant species are absent from the site, project implementation

would impact suitable habitat. Thus, due to habitat modifications, impacts would be less than significant.

ANIMAL SPECIES

Due to the lack of suitable habitat (e.g., perennial or near perennial streams/open water, mature old-growth forest, minimal human activity/disturbance in the area), special-status animal species would not occur on the project site (see Appendix C, Table 2). Based on the results of the records search and habitat evaluation, site development would not result in substantial adverse effects, either directly or through habitat modifications, of any special-status animal species. Thus, there would be no impact.

THREATENED AND ENDANGERED SPECIES

The project site occurs within the year-long range of the northern spotted owl (NSO). The project site does not support dispersal, foraging, and/or nesting/roosting habitat for NSO. However, according to data maintained by the Shasta Trinity National Forest, such habitat has been previously mapped within 1.3 miles of the project site. As such, Standard Measure BR-2 would be implemented to ensure that NSO are not impacted during project activities. The remaining species would not be present due to the lack of suitable habitat (e.g., perennial streams/wetlands/open water, extensive deciduous riparian thickets with a dominant willow component). No listed plant species were documented during the records search.

2.4.4 Discussion of CEQA Question 2.4b)—Biological Resources

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

NATURAL COMMUNITIES

The project site supports four streams, one intermittent and three ephemeral, which are considered a sensitive natural community. Further, the intermittent stream supports a minor amount of riparian vegetation, which provides minimal habitat value (e.g., narrow margin along stream, no woody vegetation (i.e., no shading), minimal refugia, flows of relatively short duration). CNDDB records do not identify any other sensitive natural communities within a five-mile radius of the project site.

Due to the small amount of on-site riparian habitat, and minimal habitat value, impacts are considered less than significant.

As proposed, the site development would result in the permanent fill of on-site streams (±0.183 acres, ±2,908 linear feet). Due to the linear feet of stream to be filled, this is considered a CEQA-significant impact. However, these impacts would be mitigated through participation in a project sponsored by the Trinity River Restoration Program or similar non-profit organization. Caltrans would fund a suitable restoration project at a minimum 1:1 ratio to ensure no net loss of waters in accordance with resource agency permits. Therefore, stream impacts would be less than significant with mitigation.

2.4.5 Discussion of CEQA Question 2.4c)—Biological Resources

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

WETLANDS

The project site does not support wetlands; therefore, there would be no impact.

2.4.6 Discussion of CEQA Question 2.4d)—Biological Resources

d) Would the project 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?

ANIMAL SPECIES

Wildlife nursery sites in the project vicinity may include deer fawning grounds and bird nesting habitats. With SR 299 abutting the southern boundary, as well as year-round quarry activities, the project site has a low potential to serve as an important nursery site or wildlife corridor. Therefore, site development, including active disposal activities, would not further affect wildlife passage.

The project area is located within the Pacific Flyway, and it is possible that migratory birds could nest in or adjacent to the project area. Because vegetation removal would occur outside of the migratory bird nesting season, as required by Standard Measure BR-2 (Section 1.4), and the abundance of suitable habitat in the project area, the proposed project would not result in direct mortality of nesting birds.

If vegetation removal activities occur during the bird nesting season, a nesting survey would be conducted within one week prior to removal of vegetation.

If active nests are found in the project area, a qualified biologist would establish appropriate species-specific buffer(s) and any monitoring requirements. The buffer would be delineated around each active nest, and construction activities would be excluded from these areas until birds have fledged, or the nest is determined to be unoccupied. Compliance measures may include, but are not limited to, exclusion buffers and ongoing monitoring by biologists.

Therefore, because disposal site activities would not further impede wildlife movement, and Standard Measure BR-2 would reduce the potential for

adversely affecting nesting birds, the proposed project would have a less than significant impact on the movement of wildlife species and would not significantly impact migratory wildlife corridors or native wildlife nursery sites.

2.4.7 Discussion of CEQA Question 2.4e)—Biological Resources

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project site occurs on lands managed by the BLM, which is not subject to local policies or ordinances. However, Caltrans would conduct disposal activities in accordance with the right-of-way grant to be issued for the project. Therefore, there would be no conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Thus, there would be no impact.

2.4.8 Discussion of CEQA Question 2.4f)—Biological Resources

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

A Habitat Conservation Plan (HCP) is a federal planning document that is prepared pursuant to Section 10 of the FESA. A Natural Community Conservation Plan (NCCP) is a State planning document administered by CDFW. The project site occurs on lands managed by the BLM, which does not take part in HCPs, NCCPs, or similar plans. Therefore, there would be no conflict with an HCP, NCCP, or other approved local, regional, or State habitat conservation plan. Thus, there would be no impact.

2.4.9 Mitigation Measure

To offset impacts to on-site streams, Caltrans may participate in a project sponsored by the Trinity River Restoration Program or similar organization. Caltrans would fund a suitable restoration project at a minimum 1:1 ratio to ensure no net loss of waters in accordance with the following resource agency permits:

- North Coast Regional Water Quality Control Board Waste Discharge Requirements
- Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife

The final mitigation plan would be finalized during the regulatory permit review process.

2.5 Cultural Resources

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

2.5.1 Regulatory Setting

The term "cultural resources," as used in this document, refers to the built environment (e.g., structures, bridges, railroads, water conveyance systems), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under California State laws, cultural resources that meet certain criteria of significance are referred to by various terms including "archaeological resources," "historic resources," "historic districts," "historical landmarks," and "tribal cultural resources" as defined in PRC § 5020.1(j) and PRC § 21074(a). The primary State laws and regulations governing cultural resources include:

- California Historical Resources, PRC 5020 et seq.
- California Register of Historical Resources, PRC 5024 et seq. (codified 14 CCR § 4850 et seq.)
 - PRC 5024, Memorandum of Understanding: The MOU between Caltrans and the State Historic Preservation Officer streamlines the PRC 5024 process.

- California Environmental Quality Act, PRC § 21000 et seq. (codified 14 CCR § 15000 et seq.)
- Native American Historic Resource Protection Act, PRC § 5097 et seq.
- Assembly Bill (AB) 52, amends California Environmental Quality Act and the Native American Historic Resource Protection Act
 - An effect that may cause a substantial adverse change in the significance of a tribal cultural resource, as defined, is a project that may have a significant effect on the environment.
 - Additional consultation guidelines and timeframes.
- California Native American Graves Protection and Repatriation Act,
 CA Health and Safety Code 8010-8011

2.5.2 Environmental Setting

The area is known historically for mining, and specifically in the region of the project area for the historic La Grange Mine located south of SR 299. At present, an active gravel mine facility occurs south of the project site. Lands to the north, west, and east are comprised of open space.

An Archaeological Survey Report (ASR) (Caltrans, 2021d) was completed for the proposed project by Caltrans. The study included a records search, Native American consultation, and field evaluation.

AREA OF POTENTIAL EFFECTS (APE)

The ±27-acre horizontal APE for the project includes areas for staging and construction/disposal access. The vertical APE (i.e., associated with the potential for buried cultural resources) is based upon the existing topography, geological history, site development history, and the engineering design of the project. The vertical APE for the proposed project is anticipated to be no more than four feet.

FIELD SURVEY

Archaeological fieldwork took place on March 29, 2021, and November 5, 2021. Approximately 60 percent of the project site was surveyed at 5 to 20 meter transects; the remaining 40 percent was deemed unsafe or inaccessible due to steepness. One hundred percent of the study area with slopes less than 30 percent were surveyed. Ground visibility was estimated at 40 percent.

RECORDS SEARCH

The Northeast Information Center/California Historic Resources Information System (NEIC/CHRIS) provided the results of the records search on May 25, 2021, which covered an approximate quarter-mile radius around the APE for previously recorded archaeological sites and for previously conducted surveys. The size and scope of the search area was determined to be sufficient based on the results.

The records search revealed that five archaeological surveys have previously been conducted within a quarter-mile radius of the APE. There are three previously recorded historical sites within a quarter-mile radius of the project site. Two of these sites have the potential to occur in the project site.

According to the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), one soil type, Brockgulch Dedrick Brownbear Complex, 50 to 75 percent slopes, is present in the project site. The Brockgulch series consists of moderately deep, well drained soils that formed in material weathered from metavolcanic rocks. This soil unit is classified as a pre-Quaternary (>1.9 million years ago) surface landform soil; due to its extreme age and erosional properties, it is unlikely to harbor buried archaeological materials.

NATIVE AMERICAN CONSULTATION

In response to Caltrans's request for information on the APE, on July 7, 2021, the Native American Heritage Commission (NAHC) conducted a search of the Sacred Lands File; the search did not reveal any known Native American

sacred sites or cultural resources in the project area. The NAHC also provided contact information for several Native American representatives and organizations, who were contacted with a request to provide comments on the proposed Project. One response was received from Tracy Foster-Olstad with the Nor-Rel-Muk Wintu on June 16, 2021. Ms. Foster-Olstad requested a site visit with Caltrans staff, which occurred on November 29, 2021. The field visit consisted of walking portions of the APE. Based on the site evaluation, Ms. Foster-Olstad stated there are no cultural resources within or adjacent to the project area and expressed no further concerns.

2.5.3 Discussion of CEQA Question 2.5—Cultural Resources

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

A previously unrecorded section of Old State Route 299/Legislative Route 20, an historic resource, was identified during the pedestrian survey. No prehistoric resources were identified. As part of the cultural resources compliance effort, Caltrans recorded the subject section, comprised of two segments, occurring within the APE. Old Legislative Route 20 and Highway 299 have both been previously evaluated and determined ineligible through consensus with the State Historic Preservation Officer (SHPO) for the National Register of Historic Places (NRHP). Because the project APE does not contain historic resources listed or eligible for listing fin the NRHP, the project would have no impact to historical resources pursuant to § 15064.5. Thus, there would be no impact.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Because the project APE does not contain archaeological resources listed or eligible for listing in the NRHP, the project would have no impact to historical resources pursuant to § 15064.5 As discussed in Section 1.4, Caltrans would implement Standard Measure CR-1 to address previously unknown cultural resources.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

The project area does not include any known cemeteries, burial sites, or human remains. As discussed in Section 1.4, Caltrans would implement Standard Measure CR-2 in the unlikely event human remains are encountered. The project is not expected to disturb any human remains, including those interred outside of dedicated cemeteries. Thus, there would be no impact.

2.5.4 Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

2.6 Energy

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?			✓	
Would the project: b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				√

2.6.1 Regulatory Setting

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

CEQA Guidelines Section 15126.2(b) and CEQA Guidelines Appendix F— Energy Conservation require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

2.6.2 Environmental Setting

The project site is located in a rural portion of Trinity County and is undeveloped. Energy use in the project area is affected by the volume of SR 299 through traffic and ongoing quarry operations.

2.6.3 Discussion of CEQA Question 2.6—Energy

a) Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

An Energy Analysis Report was prepared for the project (Caltrans, 2021e). Upon full build-out, the project would not increase or decrease energy use within the project area. During construction, there would be a minor short-term increase in energy use due to the operation of construction vehicles and equipment, and from vehicles idling at one-way reversing traffic controls (the idling of vehicles is an inefficiency in energy use). The minor temporary increase in energy usage associated with construction activities would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Given the project scope, proposed disposal activities would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, there would be no impact.

2.6.4 Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

2.7 Geology and Soils

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
ii) Strong seismic ground shaking?				✓
iii) Seismic-related ground failure, including liquefaction?				√
iv) Landslides?				✓
Would the project: b) Result in substantial soil erosion or the loss of topsoil?			√	
Would the project:				
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onor off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				~
Would the project: e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓
Would the project: f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓

2.7.1 Regulatory Setting—Geology and Soils

The primary laws governing geology and soils include:

- Historic Sites Act of 1935, 16 U.S.C. 461 et seq.
- CEQA, California Public Resources Code (PRC) 21000

2.7.2 Environmental Setting—Geology and Soils

The project site is located within the Klamath Mountains, which encompass portions of northwestern California and southwestern Oregon. The mountains date to the Paleozoic or Mesozoic periods. The underlying geology in the project area consists of marine sedimentary and metasedimentary rocks (California Department of Conservation, 2021b). A single soil type, Brockgulch-Dedrick-Brownbear Complex, 50 to 75 percent slopes, occurs on the project site (Natural Resources Conservation Service, 2021). A summary of on-site soil characteristics is depicted in Table 3.

Table 3. Soil Type and Characteristics (Source: U.S. Department of Agriculture, Natural Resources Conservation Service, 2021)

Soil Name	Landform and Parent Material	Surface Erosion Potential	Drainage	Surface Runoff	Permeability	Shrink- Swell Potential
Brockgulch- Dedrick- Brownbear Complex, 50– 75 percent slopes	Mountains; residuum weathered from metavolcanics	Severe	Well- drained	Moderate	Slow	Low

2.7.3 Discussion of CEQA Questions 2.7 (a–e)—Geology and Soils

- a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

According to the Alquist-Priolo Earthquake Fault Zoning Maps, the closest known fault is the Mad River Fault Zone (California Department of Conservation, 2021c), located approximately 51 miles west of the project area near the community of Blue Lake. Therefore, there would be no rupture of a known earthquake fault.

ii) Strong seismic ground shaking?

According to seismic ground shaking data maintained by the California Department of Conservation (California Department of Conservation, 2021d), the potential for strong seismic ground shaking is low. Due to the nature of proposed disposal activities and the project area, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction?

Liquefaction results from an applied stress on the soil, such as earthquake shaking or other sudden change in stress condition, and is primarily associated with saturated, cohesionless soil layers located close to the ground surface. During liquefaction, soils lose strength and ground failure may occur. This is most likely to occur in alluvial (geologically recent, unconsolidated sediments) and stream channel deposits, especially when the groundwater table is high. According to data maintained by the California Department of Conservation (California Department of Conservation, 2021e), California regions susceptible to liquefaction are limited to the San Francisco Bay Area and the Los Angeles Basin. Thus, there is no potential for impacts resulting from seismic-related ground failure, including liquefaction.

iv) Landslides?

Based on data maintained by the U.S. Geologic Survey (Irwin, W.P., 2010), the project site does not occur within a mapped slide area. Further, when considering the soil displacement hazard, the potential for soil displacement has a "slight" rating. The soil displacement hazard predicts the hazard for soil displacement from operation of ground-based equipment for forest harvesting and site preparation activities whether the soils are dry or moist. Displacement is the horizontal movement of soil caused by scraping or machine gouging. Displacement can remove the organic forest litter and upper portions of the mineral surface layer, reducing the availability of plant nutrients and the soil's water-holding capacity. A "slight" rating indicates that soils are highly resistant to displacement. Detrimental displacement is not expected to occur during equipment operations. The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Proposed disposal activities would expose disturbed areas to potential storm events. This could generate localized erosion and sedimentation. On-site

vegetation would be preserved until disposal activities warrant removal, which would limit the exposure of disturbed soil. Standard practices that may be implemented to minimize the potential for erosion include the provision of silt fencing, straw wattles, gravel berms, rock check dams, and revegetating disturbed areas through hydroseeding or other similar measure. Because BMPs for erosion and sediment control would be implemented in accordance with standard practices, the potential for soil erosion and loss of topsoil would be less than significant.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

On-site slope stability is addressed in question a(iv) above. Because the project would implement Standard Measure GS-1 (Section 1.4), the project would not result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. Thus, there would be no impact.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Some soils have a potential to swell when they absorb water and shrink when they dry out. These expansive soils generally contain clays that expand when moisture is absorbed into the crystal structure. When these soils swell, the change in volume can exert significant pressure on loads that are upon them. A soil's shrink-swell potential is determined through linear extensibility. Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. The amount and type of clay minerals in the soil influence the change in volume. According to data maintained by the Natural Resource Conservation Service (NRCS, 2021b), the linear extensibility of on-site soils is low. The project site is not located on expansive soils and thus would not create substantial risks to life or property. Therefore, there would be no impact.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed project does not include the installation or use of alternative wastewater disposal systems. Therefore, there would be no impact.

2.7.4 Mitigation Measures—Geology and Soils

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

2.7.5 Regulatory Setting—Paleontological Resources

Several sections of the California Public Resources Code protect paleontological resources, including Sections 5097.5 and 30244.

2.7.6 Environmental Setting—Paleontological Resources

Paleontological resources and fossils are found primarily in sedimentary rock deposits. According to the California Geological Survey (CGS), rock formations on the project site are Paleozoic-age metavolcanic rocks.

2.7.7 Discussion of CEQA Question 2.7 (f)—Paleontological Resources

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site occurs within the Devonian Schist formation in which paleontological resources have not been previously reported. Further, because metavolcanic rocks were generated from volcanic eruptions and were formed under high temperature and pressure conditions, the project site has an extremely low potential to harbor fossils. Due to the geologic conditions of the project area, and the fact that no paleontological resources have been reported in the Devonian Schist formation, the project

would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Thus, there would be no impact.

2.7.8 Mitigation Measures—Paleontological Resources

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

2.8 Greenhouse Gas Emissions

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

2.8.1 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of Earth's climate system. An everincreasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), and various hydrofluorocarbons (HFCs). CO₂ is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, humangenerated CO₂.

Two terms are typically used when discussing how the impacts of climate change are addressed: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

2.8.2 Regulatory Setting

This section outlines federal and State efforts to comprehensively reduce greenhouse gas emissions from transportation sources.

FEDERAL

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability" (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global

efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA, in conjunction with the National Highway Traffic Safety Administration, is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

STATE

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3)

80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of AB 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (CARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551 (b)). The law requires the CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. The CARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

SB 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the CARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012): Orders State entities under the direction of the Governor, including the CARB, the California Energy Commission, and the

Public Utilities Commission, to support the rapid commercialization of zeroemission vehicles. This EO directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015): Establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all State agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. The EO also directs the CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO2e). Finally, this EO requires the Natural Resources Agency to update the State's climate adaptation strategy, Safeguarding California: Reducing Climate Risk (Safeguarding California), every three years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016: Codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016: Declared "it to be the policy of the State that the protection and management of natural and working lands ... is an important strategy in meeting the State's greenhouse gas reduction goals, and would require all State agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

AB 134, Chapter 254, 2017: Allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot

GHGs differ in how much heat each trap in the atmosphere (global warming potential or GWP). CO₂ is the most important GHG, so amounts of other gases are expressed relative to CO₂, using a metric called "carbon dioxide equivalent" (CO₂e). The global warming potential of CO₂ is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO₂.

projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles traveled, to promote the State's goals of reducing greenhouse gas emissions and traffic-related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires the CARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018): Sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

EO N-19-19 (September 2019): Advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. The EO orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs the CARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

EO N-79-20 (September 2020) establishes goals for 100 percent of in-state sales of new passenger cars and trucks to be zero-emissions vehicles by 2035, that the State transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible, and that 100 percent of medium- and heavy-duty vehicles in the State be zero-emissions by 2045 where feasible.

2.8.3 Environmental Setting

The proposed project is located in a rural part of Trinity County, with a primarily natural resources based agricultural and tourism economy. SR 299 is the main transportation route to and through the area for both passenger and commercial vehicles. The nearest alternate route is SR 36, located approximately 30 miles to the south. Traffic counts are low and SR 299 is rarely congested. The Trinity County Transportation Commission guides transportation development. The Trinity County General Plan Safety element addresses GHGs in the project area.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the CARB does so for the State, as required by H&SC Section 39607.4.

NATIONAL GHG INVENTORY

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change (Figure 4). The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO₂, CH₄, N₂O, HFCs, perfluorocarbons, SF₆, and nitrogen trifluoride. It also accounts for emissions of CO₂ that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO₂ (carbon sequestration). The 1990–2019 inventory found that overall GHG emissions were 6,558 million metric tons (MMT) in 2019, down 1.7 percent from 2018 but up 1.8 percent from 1990 levels. Of these, 80 percent were CO₂, 10 percent were CH₄, and 7 percent were N₂O; the balance consisted of fluorinated gases. CO₂ emissions in 2019 were 2.2 percent less than in 2018, but 2.8 percent more than in 1990. As shown in Figure 4, the transportation sector accounted for 29 percent of U.S. GHG emissions in 2019 (U.S. EPA 2021a, 2021b).

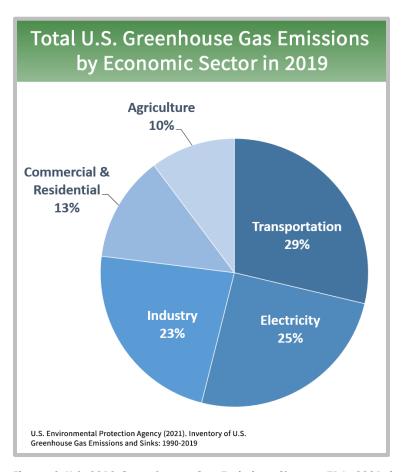


Figure 4. U.S. 2019 Greenhouse Gas Emissions (Source EPA, 2021a)

STATE GHG INVENTORY

The CARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year (Figure 5). It then summarizes and highlights major annual changes and trends to demonstrate the State's progress in meeting its GHG reduction goals. The 2021 edition of the GHG emissions inventory reported emissions trends from 2000 to 2019. It found total California emissions were 418.2 MMTCO₂e in 2019, a reduction of 7.2 MMTCO₂e since 2018 and almost 13 MMTCO₂e below the statewide 2020 limit of 431 MMTCO₂e. The transportation sector (including intrastate aviation and off-road sources) was responsible for about 40 percent of direct GHG emissions, a 3.5 MMTCO₂e decrease from 2018. Overall statewide GHG emissions declined from 2000 to 2019 despite growth in population and State economic output (Figure 6) (CARB 2021b).

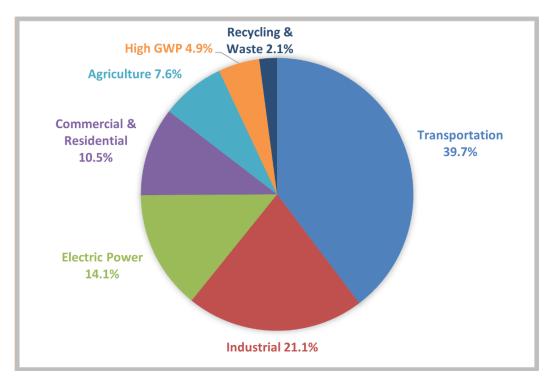


Figure 5. California 2019 Greenhouse Gas Emissions (Source: CARB 2021a)

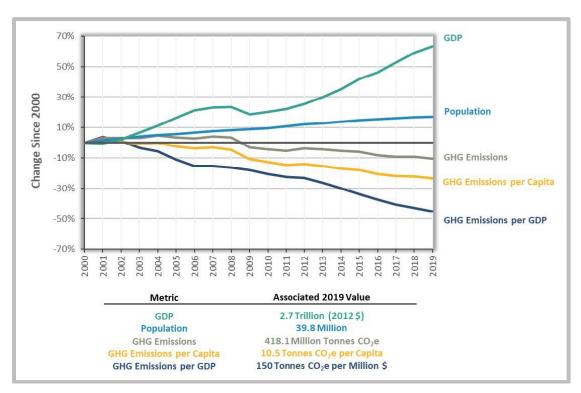


Figure 6. Change in California GDP, Population, and GHG Emissions Since 2000 (Source: CARB 2021a)

AB 32 required CARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every five years. The CARB adopted the first scoping plan in 2008. The second updated plan, California's 2017 Climate Change Scoping Plan, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

REGIONAL PLANS

ARB sets regional targets for California's 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is not within the jurisdiction of an MPO and therefore does not have GHG reduction targets set by CARB and is not required to prepare an SCS. The project is within the jurisdiction of the Trinity County Transportation Commission (TCTC) and included its 2017 RTP.

The 2016 TCTC RTP (Trinity County Transportation Commission 2017) includes climate change goals to support non-motorized transportation and public transit. These are not applicable to the purpose of the proposed project, which is to safely dispose of debris that blocks the roadway. The following climate-change related transportation strategy is potentially applicable to the proposed project:

 Goal 1: Streets and Highways: Develop and maintain an efficient and safe system of streets, highways, and bridges that is sensitive to existing and future needs and promotes preservation of the environment, reliable access to communities and enhancement of the economy.

The Trinity County General Plan Safety Element (Trinity County Planning Department, 2014), includes Goal S.7, Climate Change: Successful mitigation of greenhouse gas (GHG) emissions associated with this Plan to levels of non-

significance as established by the Global Warming Solutions Act (AB 32) and subsequent implementing legislation and regulations.

• S.7 Objective: Actions taken to implement the Policies of the Safety Element have no significant impact on greenhouse gas emissions.

2.8.4 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the State Highway System (SHS) and those produced during construction. The primary GHGs produced by the transportation sector are CO₂, CH₄, N₂O, and HFCs. CO₂ emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH₄ and N₂O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Public Resources Code § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines §§ 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

OPERATIONAL EMISSIONS

The purpose of the project is to provide much-needed space for emergency soil disposal along SR 299. The project would serve to maintain public safety,

minimize highway closure times, and provide an operational highway. The project would not increase the vehicle capacity of the roadway, nor would it increase operational emissions. Because the project would not increase the number of travel lanes on SR 299, no increase in vehicle miles traveled (VMT) would occur due to construction of the project. While some GHG emissions during the construction period would be unavoidable, there would be no increase in operational GHG emissions.

CONSTRUCTION EMISSIONS

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase. Their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

The Caltrans Construction Emission Tool (CAL-CET2021 version 1.0) was used to estimate average carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs) emissions from construction activities (Caltrans, 2021b). Table 4 summarizes estimates of GHG emissions during the construction period for the project.

Table 4. Maximum Greenhouse Gas Emissions From Construction

Construction Year 2024	CO ₂	CH₄	N ₂ O	HFC
Total: Tons	40	<1	<1	<1

The following standards would be included in the project scope:

 Caltrans Standard Specifications Sections 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all CARB emission reduction regulations.

- Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes.
- Common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

2.8.5 CEQA Conclusion

While the proposed project would result in GHG emissions during construction, it is anticipated the project would not result in an increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG-reduction measures, the impact would be less than significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

2.8.6 Greenhouse Gas Reduction Strategies

STATEWIDE EFFORTS

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals (Figure7) that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to fifty percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the State's climate adaptation strategy, Safeguarding California.

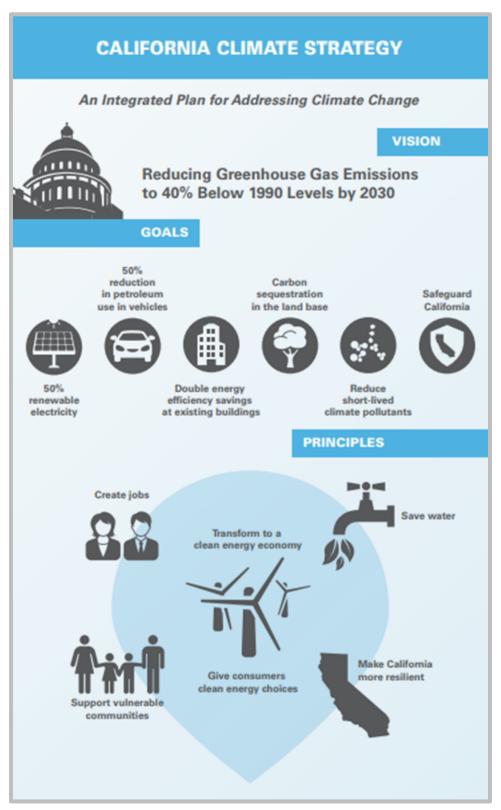


Figure 7. California Climate Strategy (Source: California EPA. 2015)

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the State build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of VMT. A key State goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 40 percent by 2030 (California Environmental Protection Agency 2015).

In addition, SB 1386 (Wolk 2016) established as State policy the protection and management of natural and working lands and requires State agencies to consider that policy in their own decision-making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Subsequently, Governor Gavin Newsom issued EO N-82-20 to combat the crisis in climate change and biodiversity. It instructs State agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged and vulnerable communities. Each agency is to develop a Natural and Working Lands Climate Smart Strategy that serves as a framework to advance the State's carbon neutrality goal and build climate resilience.

CALTRANS ACTIVITIES

Caltrans continues to be involved on the Governor's Climate Action Team as the CARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets:

California Transportation Plan (CTP 2040)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet future mobility needs and reduce GHG emissions. It serves as an umbrella document for all other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021f).

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the State's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, the CTP identifies additional strategies.

Caltrans Strategic Plan

The Caltrans 2020–2024 Strategic Plan includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021g).

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal

transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., Safeguarding California).

Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a Department policy to ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

Project-Level Greenhouse Gas Reduction Strategies

The following measures will also be implemented in the project to reduce greenhouse gas emissions and potential climate change impacts from the project:

- **GHG-1:** Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality.
- **GHG-2:** Compliance with Title 13 of the California Code of Regulations includes restricting idling of diesel-fueled commercial motor vehicles and equipment with gross weight ratings of greater than 10,000 pounds to no more than five minutes.
- **GHG-3:** Caltrans Standard Specification "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board (CARB.
- **GHG-4:** Use of a Traffic Management Plan minimizes vehicle delays and idling emissions. As part of this, construction traffic would be scheduled and routed to reduce congestion and related air

quality impacts caused by idling vehicles along the highway during peak travel times.

GHG-5: All areas temporarily disturbed during construction would be revegetated with appropriate native species. Landscaping reduces surface warming and, through photosynthesis, decreases CO₂. This replanting would help offset any potential CO₂ emissions increase.

2.8.7 Adaptation Strategies

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the State's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges, combined with a rising sea level, can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

FEDERAL EFFORTS

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the President every four years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. Ch. 56A § 2921 et seq.). The Fourth National Climate Assessment, published in 2018, presents the foundational

science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime" (USGCRP 2018).

The U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation (DOT) to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services, and operations remain effective in current and future climate conditions" (U.S. DOT 2011).

FHWA Order 5520 (Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events, December 15, 2014) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, State, and local levels (FHWA 2019).

STATE EFFORTS

Climate change adaptation for transportation infrastructure involves longterm planning and risk management to address vulnerabilities in the transportation system. California's Fourth Climate Change Assessment (2018) is the State's effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- Adaptation to climate change refers to adjustments in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- Adaptive capacity is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- Exposure is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- Resilience is the "capacity of any entity—an individual, a community, an organization, or a natural system—to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience". Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- Sensitivity is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- Vulnerability is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factors. These factors include, but are not limited to, ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key State policies have guided climate change adaptation efforts to date. Recent State publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the California Climate Adaptation Strategy (2009), updated in 2014 as Safeguarding California: Reducing Climate Risk (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim State of California Sea-Level Rise Interim Guidance Document (SLR Guidance) in 2010, with instructions to State agencies on how to incorporate "sea-level rise (SLR) projections into planning and decision-making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. Rising Seas in California—An Update on Sea-Level Rise Science was published in 2017, and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the State of California Sea-Level Rise Guidance Update in 2018.

EO B-30-15, signed in April 2015, requires State agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published Planning and Investing for a Resilient California: A Guidebook for State Agencies in 2017 to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multiagency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, Paying it Forward: The Path Toward Climate-Safe Infrastructure in California. The report provides agencies with guidance on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how State agencies can use infrastructure

planning, design, and implementation processes to address the observed and anticipated climate change impacts.

CALTRANS ADAPTATION EFFORTS

Caltrans Vulnerability Assessments

Caltrans conducted climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- Exposure—Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- Consequence—Determine what might occur to system assets in terms of loss of use or costs of repair.
- Prioritization—Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, State, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

PROJECT ADAPTATION ANALYSIS

Sea-Level Rise

The proposed project is outside the Coastal Zone and is not in an area subject to sea-level rise. Accordingly, direct impacts to disposal facilities due to projected sea-level rise are not expected.

Floodplains and Precipitation

According to the FEMA Flood Map Service Center (Panel 06105C1007F, effective July 20, 2016), the site is not located within a 100-year floodplain. The Caltrans District 2 Climate Change Vulnerability Assessment (Caltrans 2018) mapped projected changes in 100-year storm precipitation under a business-as-usual GHG emissions scenario. The 100-year storm metric is commonly used in highway design. The project area would be subject to a less than 5 percent increase in 100-years storm precipitation through 2055, and less than 10 percent through 2085. To convey stream flows south of SR 299, a 48-inch culvert would be installed under the highway. The culvert has been sufficiently sized to maintain flows and would accommodate the relatively small projected increases in 100-year rain events. Thus, there would be no impact.

Wildfire

According to CalFire's Fire Hazard Severity Zone mapping tool, the project site is located within a Federal Responsibility Area. Lands to the east, west, and south are within State Responsibility Areas with a "very high" fire hazard severity zone designation. Disposal site development would be confined to the project footprint and would not introduce structures or users into the area that would be vulnerable to wildfire. Caltrans Standard Specifications mandate fire prevention procedures, including a fire prevention plan, to avoid accidental fire starts during construction. Therefore, the project would not cause or exacerbate the risk of wildfire, regardless of climate conditions.

2.9 Hazards and Hazardous Materials

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			√	
Would the project: 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?				✓
Would the project: c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
Would the project: 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?				✓
Would the project: e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			√	
Would the project: g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				✓

2.9.1 Regulatory Setting

The primary laws governing hazardous materials include:

- California Health and Safety Code, Chapter 6.5
- Porter-Cologne Water Quality Control Act, § 13000 et seq.
- CFR Titles 22, 23, and 27

2.9.2 Environmental Setting

An Initial Site Assessment (ISA) was completed on April 20, 2021 (Caltrans, 2021h). According to the report, the project site is not located on a Hazardous Waste and Substances Site List (Cortese List) parcel.

2.9.3 Discussion of CEQA Question 2.9—Hazards and Hazardous Materials

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The project would not result in any long-term impacts related to the transport of hazardous materials. During construction activities, it is anticipated that limited quantities of hazardous substances, such as gasoline, diesel fuel, etc.,

would temporarily be brought into the project area. Further, Naturally Occurring Asbestos (NOA), considered a hazardous waste, is present in small quantities along SR 299. As such, there is the potential for NOA to be transported to/disposed of on the project site during the management of rock and earthen debris. Prior to disposal activities, the contractor would consult with the North Coast Unified Air Quality Management District to determine the potential for NOA to be present (source material), and the degree to which NOA must be monitored and controlled (as dust) (if applicable). As discussed in Section 1.4, compliance measures may include development and implementation of an Asbestos Dust Mitigation Plan (ADMP) and an Asbestos Compliance Plan (ACP) (Standard Measures HW-1 and HW-2).

As documented in the ISA, lead-contaminated soils may exist throughout the project limits due to the historical use of leaded gasoline on the roadway. Additionally, pollutants may be present in treated wood (i.e., guardrail posts). Project construction would require excavation of a relatively small amount of soil adjacent to the roadway, culvert installation, and removal of several existing treated guardrail posts. As discussed in Section 1.4, implementation of standard measures for lead contamination (Standard Measure HW-3) and treated wood posts (Standard Measure HW-4) would address such activities. Further, construction contractors would be required to comply with applicable federal and State environmental and workplace safety laws and implement BMPs for the storage, use, and transportation of hazardous materials. Therefore, impacts would be less than significant.

b) Would the project 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?

Project construction could potentially result in the accidental release of hazardous substances into the environment, such as spilling petroleum-based fuels used for construction equipment. However, construction contractors would be required to comply with applicable federal and State environmental and workplace safety laws and implement BMPs for the

storage, use, and transportation of hazardous materials. Therefore, the project is not expected to create a significant hazard to the public or the environment involving the release of hazardous materials into the environment. Thus, there would be no impact.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The nearest school to the project site is Junction City Elementary located on Red Hill Road, approximately 2.4 miles west of the project site; therefore, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Thus, there would be no impact.

d) Would the project 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?

The Cortese List is prepared in accordance with California Government Code §65962.5. The following databases were reviewed to locate "Cortese List" sites (CalEPA, 2021):

- List of Hazardous Waste and Substances sites from the Department of Toxic Substances Control (DTSC) EnviroStor database
- SWRCB GeoTracker Database

The EnviroStor database indicates the closest reported site to the project location is the Joseph Darin Development located on State Route 299, approximately 1.4 miles southwest of the project site. The Geotracker database indicates the closest cleanup site to the project location is the Trinity County DPW Junction City Yard located on State Route 299, approximately 2.1 miles southwest of the project site. The proposed disposal site would not be located on a site which is included on a list of hazardous

materials sites compiled pursuant to Government Code Section 65962.5. Thus, there would be no impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

According to the Federal Aviation Administration (FAA, 2021), the nearest airport is Lonnie Pool Field, approximately 4.5 miles east of the project site. Due to the distance between the airport and the project site, there would be no impact.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

With the exception of culvert installation and guardrail replacement activities on SR 299, which would be subject to a Traffic Management Plan (TMP) (Standard Measure TT-1) (Section 1.4), construction activities would occur on lands outside the road right-of-way. As proposed, the project would not impair any emergency response or evacuation plan. Caltrans would notify and coordinate with local emergency authorities to ensure the proper function of public services. With minimal work occurring on the SR 299, implementation of a TMP, and advanced coordination with local emergency authorities, the project would not impair or physically interfere with an adopted emergency response or emergency evacuation plan. Thus, there would be no impact.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

As part of the proposed project, the contractor would prepare an Emergency Evacuation Plan (EEP) for work activities that restrict passage through the work zone. The EEP would outline protocol for ensuring safe evacuation of local residents and the traveling public in the event of a fire or other natural disaster. With preparation and implementation of the EEP, disposal site development would not expose people or structures, either

directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Thus, there would be no impact.

2.9.4 Mitigation Measures

2.10 Hydrology and Water Quality

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			✓	
Would the project: b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				√
Would the project: c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site;			√	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				~
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				√
(iv) impede or redirect flood flows?				✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				✓
Would the project:				
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				√

2.10.1 Regulatory Setting

The primary laws and regulations governing hydrology and water quality include:

- Federal Clean Water Act (CWA), 33 USC 1344
- Federal Executive Order for the Protection of Wetlands (EO 11990)
- State Sections 1600–1607 of the California Fish and Game Code (CFGC)
- State Porter-Cologne Water Quality Control Act, § 13000 et seq.

2.10.2 Environmental Setting

On-site waters are limited to four streams, one intermittent and three ephemeral, that dissipate to sheet flow/percolate into the substrate immediately north of the road prism. On-site streams are hydrologically isolated from downstream waters. A wetland occurs immediately south of SR 299 (off-site) and would be fully avoided during project implementation.

As part of the evaluation, Caltrans determined the project presents a low risk to water quality and thus prepared a Water Quality Assessment Exemption (Caltrans, 2021i).

2.10.3 Discussion of CEQA Question 2.10—Hydrology and Water Quality

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

The proposed project would result in the permanent fill of State waters, which is subject to North Coast Regional Water Quality Control Board (NCRWQCB) waste discharge requirements. Compliance with NCRWQCB permit conditions ensures that the project would not violate any waste discharge requirements or otherwise substantially degrade surface or groundwater quality (e.g., silt fencing, straw wattles, gravel berms, rock check dams, and revegetating disturbed areas through hydroseeding or other similar measure). Compliance with NCRWQCB waste discharge requirements would ensure potential impacts to water quality are less than significant.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The proposed project would not require groundwater supplies for construction or operation. No impervious surfaces would be installed as part of the project. On-site drainage would be maintained through culverts, open constructed channels, or other means to convey surface flows. Flows would discharge to the proposed standpipe, and ultimately to the south side of the highway. Culvert installation would facilitate surface flows south of SR 299, which may result in a minor decrease in groundwater recharge. However, a minor decrease would not interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Thus, there would be no impact.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on- or off-site?

On-site vegetation would be preserved until disposal activities warrant removal. Additionally, as discussed in Section 1.4, Standard Measure WQ-1 and WQ-2 would be implemented (e.g., silt fencing, straw wattles, gravel berms, rock check dams, and revegetating disturbed areas through hydroseeding or other similar measure) during construction and active disposal activities. Because BMPs for erosion and sediment control would be implemented in accordance with standard practices, the potential for substantial erosion or siltation on-or off-site would be less than significant.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

No impervious surfaces would be installed as part of the project. Surface runoff would be managed through culverts or open constructed channels. Culvert installation would facilitate surface flows south of SR 299, which may result in a minor increase in surface runoff. However, a minor increase would not result in flooding on- or off-site; thus, there would be no impact.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

As the project site is hydrologically isolated from downstream waters, runoff would not discharge to existing or planned stormwater facilities. Disposal activities would be limited to clean earthen fill material from the surrounding area. The project would not provide substantial additional sources of polluted runoff; thus, there would be no impact.

(iv) impede or redirect flood flows?

Surface runoff would be managed through culverts or open constructed channels. Standpipe and culvert installation would serve to convey flows south of the highway. The project would not impede or redirect flood flows; thus, there would be no impact.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

A tsunami is a wave generated in a large body of water (typically the ocean) by fault displacement or major ground movement. The project site is located over 60 miles east of the Pacific Ocean and is not in a tsunami zone (California Department of Conservation, 2021f). A seiche is a large wave generated in an enclosed body of water in response to ground shaking. The closest large body of water to the project site is Trinity Lake, approximately 11 miles to the northeast. Seiches could potentially be generated in Trinity Lake due to very strong ground shaking; however, due to topography and distance from the project site, the project site has no potential for inundation by seiches. According to the FEMA Flood Map Service Center (Panel 06105C1007F), effective July 20, 2016, the project site is not located within a designated flood hazard zone. Therefore, there is no potential for release of pollutants due to inundation by seiche, tsunami, or flood.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The proposed project would result in the permanent fill of State waters, which is subject to NCRWQCB waste discharge requirements. Compliance with NCRWQCB permit conditions ensures that the project would not violate a water quality control plan or sustainable groundwater management plan. Thus, there would be no impact.

2.10.4 Mitigation Measures

2.11 Land Use and Planning

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				√
Would the project:				
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

2.11.1 Regulatory Setting

The primary law governing land use and planning is CEQA.

2.11.2 Environmental Setting

The project is located in a rural part of Trinity County. Land use in the project vicinity is primarily rural residential, mining, recreational, and timber production. The nearest community is Junction City (unincorporated) to the west.

2.11.3 Discussion of CEQA Question 2.11—Land Use and Planning

a) Would the project physically divide an established community?

Land use impacts are considered significant if a proposed project would physically divide an existing community (a physical change that interrupts the cohesiveness of the neighborhood). The proposed project is not located within an established community, nor would it create a barrier for existing or planned development. Therefore, there would be no impact.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

As discussed in each resource section of this Initial Study, the proposed project is consistent with applicable laws and regulations. Therefore, the proposed project would not conflict with any plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

2.11.4 Mitigation Measures

2.12 Mineral Resources

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
Would the project: 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?				✓

2.12.1 Regulatory Setting

The primary laws governing mineral resources are CEQA and the Surface Mining and Reclamation Act (PRC, Sections 2710-2796).

2.12.2 Environmental Setting

Historically, mining has played a major role in the development and economy of Trinity County. Gold mining and sand/gravel extraction were the primary mining activities occurring in the project area. Sand and gravel extraction operations continue today.

2.12.3 Discussion of CEQA Question 2.12—Mineral Resources

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

According to the Department of Conservation (Department of Conservation, 2021g), one active mine, the La Grange Mine, occurs within a two-mile radius of the project site. The La Grange Mine, located south of SR 299, is a tailings

processing facility. Disposal site development would have no impact on existing mining operations. Further, according to the California Geologic Survey, there are no designated Mineral Resource Zones in Trinity County (Department of Conservation, 2021h). Based on the above information, the proposed project would not result in the loss of availability of a known mineral resource. Thus, there would be no impact.

b) Would the project 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?

According to the Junction City Community Plan (Trinity County General Plan, 1987), no locally-important mineral resource recovery sites are delineated in the project vicinity. Thus, there would be no impact.

2.12.4 Mitigation Measures

2.13 Noise

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

2.13.1 Regulatory Setting

The primary laws governing noise are CEQA and NEPA.

2.13.2 Environmental Setting

The project site is located in a rural part of Trinity County and is bisected by SR 299 to the south. SR 299 is the principal highway between the northern Sacramento Valley (City of Redding) and the northern California coast (City of Arcata). Lands located immediately south of the site support an active

tailings processing operation. Based on surrounding land uses, the project site is exposed to moderate background noise levels.

2.13.3 Discussion of CEQA Question 2.13—Noise

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The project would not involve the introduction of permanent noise-producing activities. According to the Noise Study (Caltrans, 2021j), temporary noise impacts would occur from the use of mobile construction equipment and vehicles during construction. Construction vehicles and equipment could include excavators, compressors, generators, haul trucks, pavers, and material loaders. Project construction noise levels would fluctuate depending on the construction phase, equipment type, and quantity and duration of use. Project construction and active disposal activities would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project. As discussed in Section 1.4, Standard Measure N-1 would be implemented to control and monitor noise from work activities. Although the proposed project would result in elevated noise levels during construction and disposal activities, such noise levels would not be in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Thus, there would be no impact.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Once built, the project would not be a source of permanent groundborne vibrations. Although groundborne vibrations may occur during construction (i.e., jack and bore culvert installation), they would be temporary in duration and minimal in magnitude and would not be considered excessive. Thus, there would be no impact.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The nearest airport is Lonnie Pool Field, approximately 4.5 miles east of the project site. Due to the distance between the airport and the project site, the project would not expose people residing or working in the project area to excessive noise levels. Thus, there would be no impact.

2.13.4 Mitigation Measures

2.14 Population and Housing

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

2.14.1 Regulatory Setting

The primary law governing population and housing is CEQA.

2.14.2 Environmental Setting

Based on 2020 census (U.S. Census Bureau, 2021), Trinity County supports a population of 16,112. Based on 2019 census data, the number of housing units was 9,013. Housing throughout the area is primarily individual rural residences on larger parcels of land.

2.14.3 Discussion of CEQA Question 2.14—Population and Housing

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? Because the proposed project does not involve construction of residences or businesses, nor does it include infrastructure improvements, the project would not induce population growth. Therefore, there would be no impact.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Project activities are primarily comprised of culvert replacement, access road construction, and subsequent soil disposal. Project activities would not displace existing people or housing, necessitating the construction of replacement housing elsewhere. Further, the project site is located on lands managed by BLM and does contain housing. Therefore, there would be no impact.

2.14.4 Mitigation Measures

2.15 Public Services

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

2.15.1 Regulatory Setting

The primary law governing public services is CEQA.

2.15.2 Environmental Setting

The Project site is located on SR 299, which facilitates public services for surrounding residential, commercial, and industrial users. Fire protection in the project vicinity is provided by the Weaverville Fire Department and CALFIRE. Law enforcement is provided by the Trinity County Sheriff's Department and the California Highway Patrol (CHP). The nearest medical facility is the Trinity

Hospital in Weaverville, located approximately 6 road miles east of the proposed project site. The nearest schools are located in Junction City and Weaverville.

2.15.3 Discussion of CEQA Question 2.15—Public Services

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, or other public facilities.

Project implementation is limited to the disposal of earthen material, culvert installation, and guardrail replacement. These activities would not result in the need for new or physically altered facilities, including fire or police protection services, schools, parks, or other public facilities. Therefore, there would be no impact.

2.15.4 Mitigation Measures

2.16 Recreation

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

2.16.1 Regulatory Setting

The primary law governing recreation is CEQA.

2.16.2 Environmental Setting

The project site occurs along an undeveloped portion of SR 299. There are no developed recreation specific parks or facilities in the project vicinity.

2.16.3 Discussion of CEQA Question 2.16—Recreation

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Disposal activities would not increase the use of existing neighborhood and regional parks or other recreation facilities. Therefore, there would be no impact.

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?

Site development does not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, there would be no impact.

2.16.4 Mitigation Measures

2.17 Transportation

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				✓
Would the project: b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?				√
Would the project: c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				√
Would the project: d) Result in inadequate emergency access?			✓	

2.17.1 Regulatory Setting

The primary laws and regulations governing transportation and traffic are CEQA, 23 CFR 652, 49 CFR 27, 29 USC 794, and the Americans with Disabilities Act (42 USC § 12101).

2.17.2 Environmental Setting

SR 299 is the principal highway between the northern Sacramento Valley (City of Redding) and the northern California coast (City of Arcata). There are two major communities along the subject route: Willow Creek (western portion of the route) and Weaverville (eastern portion of the route). The

project site occurs approximately five miles west of the community of Weaverville.

Within the project area, SR 299 consists of two 12-foot-wide paved lanes each with a paved shoulder up to two feet wide, has a posted speed limit of 55 miles per hour, and has an annual average daily traffic of 2,950 vehicles (Caltrans, 2021k).

2.17.3 Discussion of CEQA Question 2.17—Transportation

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

With the exception of culvert installation and guardrail replacement activities on SR 299, which would be subject to a TMP (Standard Measure TT-1) (Section 1.4), construction activities would occur on lands outside the road right-of-way. Given the limited scope of work and no proposed changes to highway operations, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system. Thus, there would be no impact.

b) Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Section 15064.3 of the CEQA Guidelines describes the specific considerations for evaluating a project's transportation impacts. Generally, VMT is the most appropriate measure of transportation impacts. For the purposes of this section, VMT refers to the amount and distance of automobile travel attributable to a project. The project would not result in an increase in VMT. Thus, there would be no impact.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? The proposed project would not result in the geometric alteration of SR 299 and, therefore, would not substantially increase hazards to the traveling public. Thus, there would be no impact.

d) Would the project result in inadequate emergency access?

Emergency access would be maintained throughout construction. Further, all emergency response agencies in the project area would be notified of the project construction schedule and would have access to SR 299 throughout the construction period (Standard Measure UE-1) (Section 1.4). Although emergency personnel would be subject to traffic-control related measures, impacts would be less than significant.

2.17.4 Mitigation Measures

2.18 Tribal Cultural Resources

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

2.18.1 Regulatory Setting

In addition to the laws identified in Section 2.5 (Cultural Resources), the primary law governing tribal cultural resources is AB 52 (Chapter 532, Statutes of 2014) (Public Resources Code [PRC] §21084.2).

2.18.2 Environmental Setting

The entire project area occurs within the aboriginal territory of the Wintu Indians. The Wintu territory extended into parts of Trinity, Shasta, Siskiyou, and Tehama Counties. The project area falls in the westernmost reaches of Wintu territory, an area inhabited by the Nor-Rel-Muk, or South Hill People, one of the nine major Wintu groups.

2.18.3 Discussion of CEQA Question 2.18—Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in the Public Resources Code § 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1(k).

On June 16, 2021, Caltrans contacted Tracy Foster-Olstad, Nor-Rel-Muk Wintu representative, providing detailed information on the proposed project and describing the AB 52 consultation process. During the November 29, 2021, meeting, Ms. Foster-Olstad did not describe any known cultural sites within the project area. Further, as referenced in Section 2.5, no prehistoric resources are known to occur on the project site. Through consultation with the Nor-Rel-Muk Wintu, the requirements for AB 52 have been satisfied. Thus, there would be no impact.

b) Determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Caltrans, as lead agency, has not identified any resources in the project area that would be significant to a California Native American tribe. Therefore, the project does not have the potential to cause a substantial adverse change in the significance of a tribal cultural resource. Thus, there would be no impact.

2.18.4 Mitigation Measures

2.19 Utilities and Service Systems

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

statutes and regulations related to solid waste?		

2.19.1 Regulatory Setting

The primary law governing utilities and service systems is CEQA.

2.19.2 Environmental Setting

The project site occurs in a rural part of Trinity County. The SR 299 corridor and proposed disposal site do not support utilities or other service systems.

2.19.3 Discussion of CEQA Question 2.19—Utilities and Service Systems

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities—the construction or relocation of which could cause significant environmental effects?

Project implementation would include construction of two culverts (one jack and bore installation; the other using the cut and cover method) to convey flow under SR 299. Culvert installation would serve to improve area drainage and would not cause significant environmental effects. The project would not result in the relocation or construction of new or expanded water, wastewater treatment, electric power, natural gas, or telecommunications facilities. Stormwater drainage improvements would convey on-site flows through the transportation facility; however, such improvements are not expected to cause significant environmental effects. Therefore, impacts would be less than significant.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? As a disposal site, the project does not require a water supply. Thus, there would be no impact.

c) Would the project 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?

As a disposal site, the project does not require wastewater treatment facilities. Thus, there would be no impact.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The proposed project would generate a minimal amount of solid waste, mainly from removal of pavement on SR 299 to accommodate the new culvert. The construction contractor would be responsible for disposing of all construction waste in accordance with all federal, State, and local statutes related to solid waste disposal. Thus, there would be no impact.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Caltrans would ensure through contractual obligations that the contractor complies with all federal, State, and local statutes related to solid waste disposal. Thus, there would be no impact.

2.19.4 Mitigation Measures

2.20 Wildfire

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project:			√	
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				√
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or may result in temporary or ongoing impacts to the environment?				√
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				√

SB 1241 required the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection to develop amendments to the "CEQA Checklist" for the inclusion of questions related to fire hazard impacts for projects located on lands classified as "very high" fire hazard severity zones. The 2018 updates to the CEQA Guidelines expanded this to include projects "near" these very high fire hazard severity zones.

2.20.1 Regulatory Setting

The primary law governing wildfire is CEQA.

2.20.2 Environmental Setting

The project site occurs in a rural part of Tehama County. With the exception of SR 299, which bisects the southern portion of the site, the site is undeveloped. The site is bound by expanses of vegetated open space to the east, west, and north, which increases the risk of wildfire. When fires do occur in the region, poor access, steep topography, and strong canyon inversions, present challenges for emergency fire personnel.

2.20.3 Discussion of CEQA Question 2.20—Wildfire

If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

According to CalFire's Fire Hazard Severity Zone mapping tool (CalFire, 2021), the project site is located within a Federal Responsibility Area. Lands to the east, west, and south occur within State Responsibility Areas with a "very high" hazard severity zone designation.

As part of the proposed project, the contractor would prepare an Emergency Evacuation Plan (EEP) for work activities that restrict passage through the work zone. The EEP would outline protocol for ensuring safe evacuation of local residents and the traveling public in the event of a fire or other natural disaster. The project would not substantially impair an adopted emergency response or evacuation plan. Thus, there would be no impact.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? Project activities are limited to earthen material disposal; site occupancy is not applicable. Therefore, project implementation would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Thus, there would be no impact.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or may result in temporary or ongoing impacts to the environment?

Project activities are primarily comprised of culvert replacement, access road construction, and subsequent earthen material disposal. The project does not include fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk or result in temporary or ongoing impacts to the environment. Thus, there would be no impact.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Upon full build-out, the site would support a 3:1 fill slope. As the site is filled, the disposal material would be compacted to improve slope stability. Further, the final grade would include constructed channels that match the surrounding topography, resulting in similar drainage patterns to preconstruction conditions. The above construction methodology would minimize post-fire erosion, landslides, or other slope instability. Thus, there would be no impact.

2.20.4 Mitigation Measures

2.21 Mandatory Findings of Significance

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Does the project: a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of		√		
California history or prehistory? b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means 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) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			√	

2.21.1 Discussion of CEQA Question 2.21—Mandatory Findings of Significance

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

As discussed in Section 2.4, the proposed project would result in the loss of streams. However, with implementation of the proposed mitigation measure, potential impacts would be less-than-significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means 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.)

Although the project would result in a significant impact to streams, said impacts would be mitigated to result in no-net-loss of waters. Therefore, the project would not contribute to any potential cumulatively considerable impacts to waters. Project-related impacts to other resources referenced in this document would have a negligible contribution to any potential cumulatively considerable impacts. Thus, impacts would be less than significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

As discussed in the applicable environmental resource sections above, the proposed project is expected to result in environmental effects. However, these effects would not cause substantial adverse effects on human beings, either directly or indirectly. Thus, impacts would be less than significant.

2.22 Cumulative Impacts

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this proposed project. A cumulative impact assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time (CEQA,§ 15355).

Cumulative impacts to resources may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

Per Section 15130 of CEQA, a Cumulative Impact Analysis (CIA) discussion is only required in "... situations where the cumulative effects are found to be significant." An EIR is required in all situations when a project might result in a "significant" direct, indirect, or cumulative impact on any resource. As discussed in the applicable environmental resource sections above, the project would not result in a significant impact to environmental resources. As such, an EIR and CIA were not required for this project.

Chapter 3 Agency and Public Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization and/or mitigation measures, and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team meetings and interagency coordination meetings. This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

The following agencies, organizations, and individuals were consulted in the preparation of this environmental document:

Coordination with Resource Agencies

See Table 5 below.

Coordination with Property Owners

As documented in Table 5, Caltrans met with BLM staff to discuss the project proposal.

Circulation

Following circulation of this draft document, including review and response to any public comments received, the project development team will decide how to move forward with the proposed alternatives.

Table 5. Agency Coordination and Professional Contacts

Date	Personnel	Notes
December 1, 2020	Caltrans Environmental Team; Gil Falcone, North Coast RWQCB	Meeting with Regional Board staff to discuss project proposal.
April 21, 2021	Caltrans Environmental Team; Katie Shaw and Laura Brodhead, BLM	Meeting with BLM staff to discuss project scope and NEPA document.
May 25, 2021	Russell Adamson, Caltrans Archaeologist; NEIC/CHRIS	NEIC/CHRIS provided results of requested records search.
September 9, 2021	Caltrans Project Development Team; Gil Falcone, North Coast RWQCB	Meeting with RWQCB to discuss project alternatives.
November 1, 2021	Caltrans Project Development Team; Gil Falcone, Terri Cia, Brendan Thompson, North Coast RWQCB	Meeting with RWQCB to discuss slope construction, stormwater compliance, and mitigation.
November 29, 2021	Russell Adamson, Caltrans Archaeologist; Tracy Foster-Olstad, Nor-Rel-Muk Wintu	Poison Pond 2 Disposal Site - Field Meeting.

Chapter 4 List of Preparers

The following individuals performed the environmental work on the project:

California Department of Transportation, District 2

Name	Title	Contribution
Russell Adamson	Archaeologist	Archaeological Survey Report
Alex Arevalo	Water Quality Specialist	Water Quality Assessment Report
John Crowe	Engineer	Project Design and Floodplain Evaluation Report Summary
Christian Figueroa	Hazardous Waste Specialist	Initial Site Assessment Report
Jason Lee	Transportation Engineer	Air Quality, Greenhouse Gas, Noise, and Energy Analyses
John Luper	Associate Environmental Planner	Document Writer
Julia Prince-Buitenhuys	Archaeologist	Archaeological Survey Report
Kelly Timmons	Project Manager	Project Management
Michael Oguro	Landscape Architect	Visual Impact Assessment
Emiliano Pro	Senior Environmental Planner	Document Oversight
Wesley Stroud	Environmental Office Chief	Document Oversight
Chelsea Tran-Wong	Biologist	Natural Environmental Study- Minimal Impact



Chapter 5 Distribution List

Federal and State Agencies

California Department of Fish and Wildlife 601 Locust Street Redding, CA 96001

North Coast Regional Water Quality Control Board 5550 Skylane Boulevard Suite A Santa Rosa, CA 95403-1072

California State Clearinghouse P.O Box 3044 Sacramento CA 95812

Regional/County/Local Agencies

Lisa Lozier Trinity County Planning Department 530 Main Street Weaverville, CA 96093

Shanna S. White Trinity County Clerk Recorder 11 Court Street P.O. Box 1215 Weaverville, CA 96093

Trinity County Library 351 Main Street Weaverville, CA 96093

Local Elected Officials

Jeremy Brown Trinity County Supervisor District 4 11 Court Street, Room 230 P.O. Box 1613 Weaverville, CA 96093



Chapter 6 References

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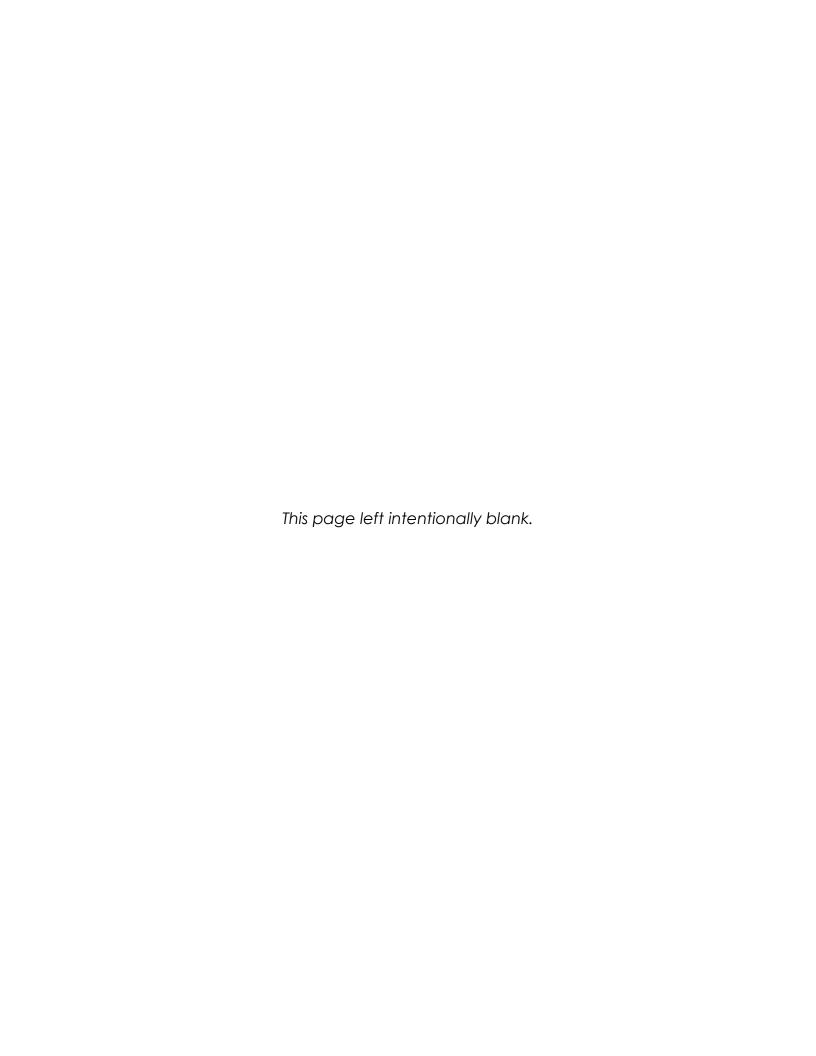
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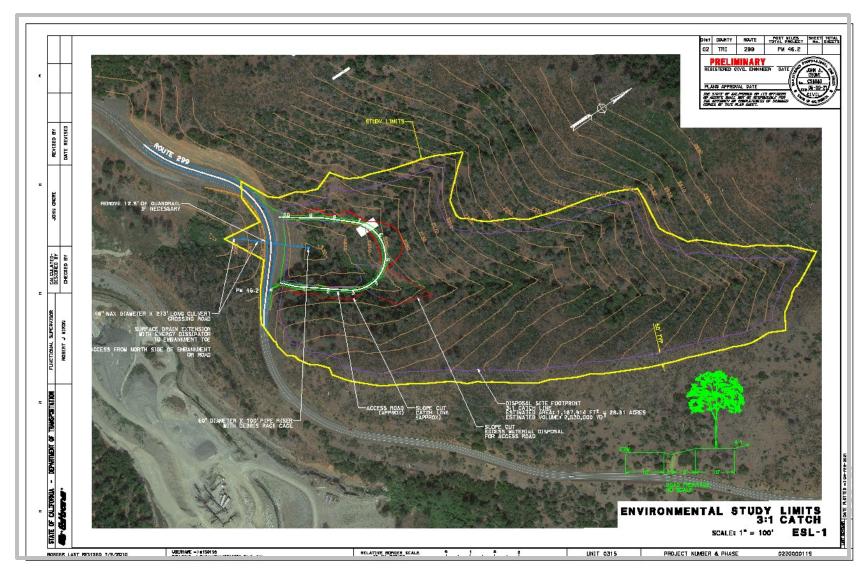
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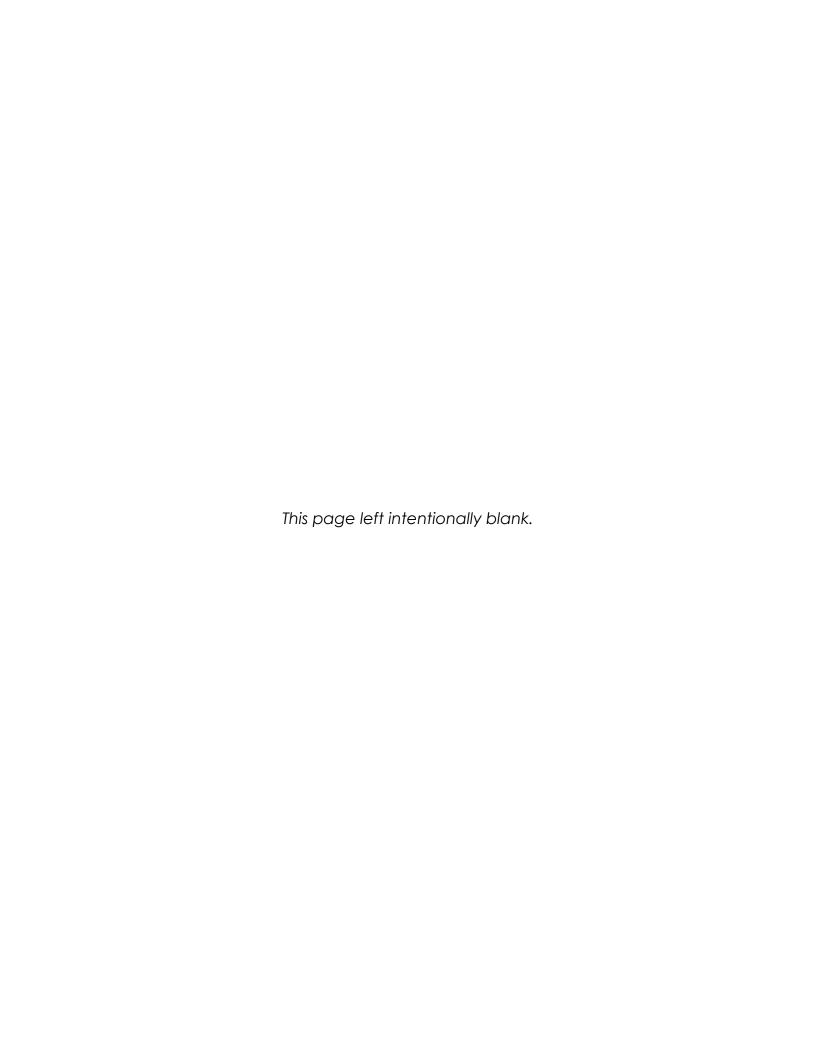


Appendix A Project Layouts

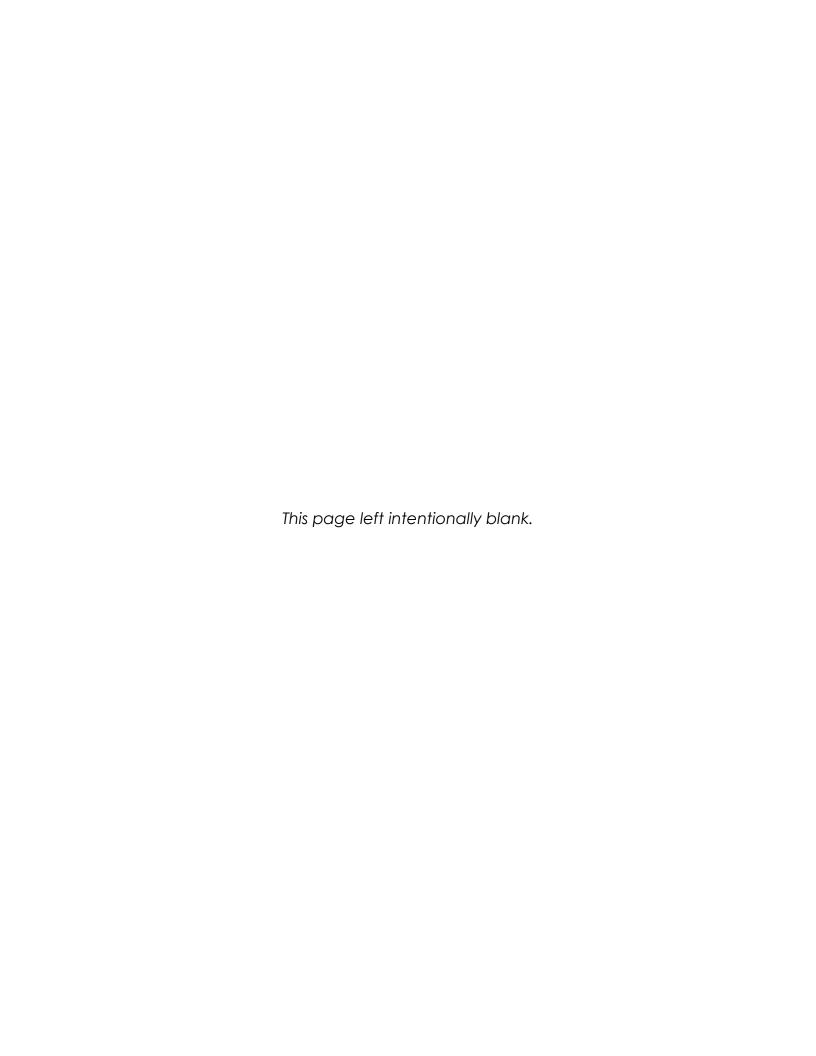




Appx. A Figure 1







STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY.

EDMUND G. BROWN Jr. Governor

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR P.O. BOX 942873, MS-49 SACRAMENTO, CA 94273-0031 PHONE (916) 654-5266 FAX (916) 654-6608 TTY 711 www.dot.ca.gov



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The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, please visit the following web page: http://www.dot.ca.gov/hq/bcp/title_vi/t6_violated.htm.

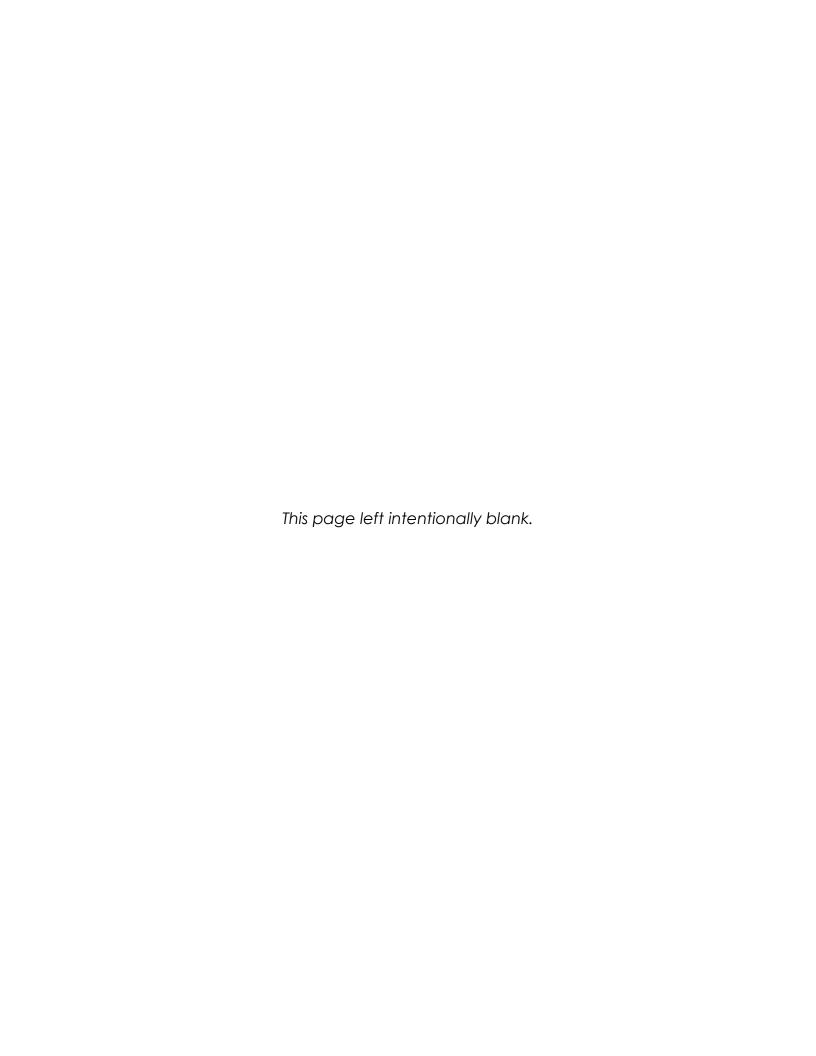
Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone: (916) 324-0449, TTY: 711, or via Fax: (916) 324-1949.

MALCOLM DOUGHERTY

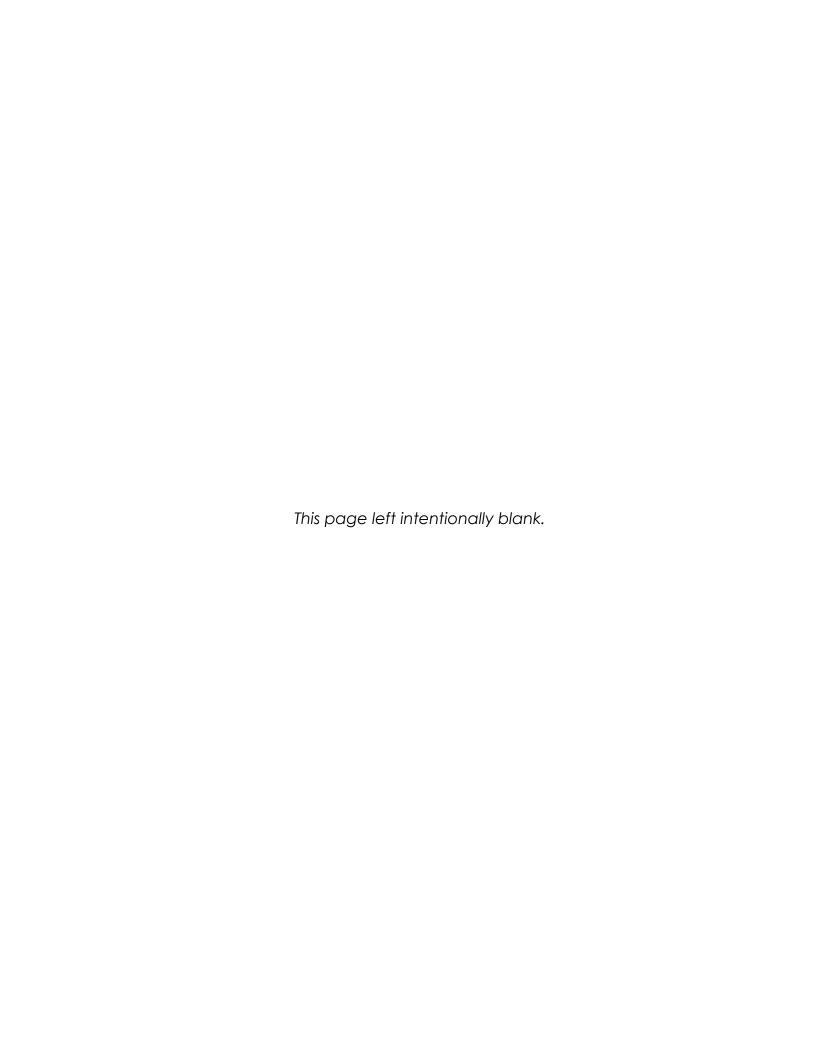
Director

"Calwans improves mobility across California"

Appx. B Figure 1



Appendix C USFWS, NMFS, CNDDB, CNPS **Species Lists**



Luper, John@DOT

 From:
 Tran-Wong, Chelsea@DOT

 Sent:
 Tuesday, December 21, 2021 4:14 PM

 To:
 nmfs.wcrca.specieslist@noaa.gov

Subject: Official NMFS Species List For Poison Pond 2 Disposal Site (02-1J700)

Federal agency: Federal Highway Administration - California Division

Federal agency address: 650 Capitol Mall, Suite 4-100, Sacramento, CA 95814-4708 Non-federal agency representative (if any): California Department of Transportation

Non-federal agency representative (if any) address: 1031 Butte Street, MS 30, Redding, CA 96001

Project title: Poison Pond 2 Disposal Site

Point-of-Contact: Chelsea Tran-Wong, chelsea.tran-wong@dot.ca.gov, (530) 759-3405

Quad Name Junction City
Quad Number 40123-F1

ESA Anadromous Fish

SONCC Coho ESU (T) -



CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -



CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

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CCV Steelhead Critical Habitat -Eulachon Critical Habitat sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -Olive Ridley Sea Turtle (T/E) -Leatherback Sea Turtle (E) -North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -Fin Whale (E) -Humpback Whale (E) -Southern Resident Killer Whale (E) -North Pacific Right Whale (E) -Sei Whale (E) -Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Essential Fish Habitat

Coho EFH -Chinook Salmon EFH -

Groundfish EFH -Coastal Pelagics EFH -Highly Migratory Species EFH -

MMPA Species (See list at left)

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ESA and MMPA Cetaceans/Pinnipeds See list at left and consult Monica DeAngelis monica.deangelis@noaa.gov 562-980-3232

MMPA Cetaceans - MMPA Pinnipeds -

Chelsea Tran-Wong

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Mon.-Fri. 0700 to 1700, 1hr lunch, approx. 12 hrs.

Monday A-RDO

Arianna Huffington, "We think, mistakenly, that success is the result of the amount of time we put in at work, instead of the quality of time we put in."

Luper, John@DOT

From: NMFS SpeciesList - NOAA Service Account <nmfs.wcrca.specieslist@noaa.gov>

Sent: Tuesday, December 21, 2021 4:14 PM

To: Tran-Wong, Chelsea@DOT

Subject: Federal ESA - - NOAA Fisheries Species List Re: Official NMFS Species List For Poison Pond 2 Disposal

Site (02-1J700)

EXTERNAL EMAIL. Links/attachments may not be safe.

Please retain a copy of each email request that you send to NOAA at nmfs.wcrca.specieslist@noaa.gov as proof of your official Endangered Species Act SPECIES LIST. The email you send to NOAA should include the following information: your first and last name; email address; phone number; federal agency name (or delegated state agency such as Caltrans); mailing address; project title; brief description of the project; and a copy of a list of threatened or endangered species identified within specified geographic areas derived from the NOAA Fisheries, West Coast Region, California Species List Tool. You may only receive this instruction once per week. If you have questions, contact your local NOAA Fisheries liaison.

Appx. C Table 1

Scientific Name	Common Name	Status Federal/ State/ CNPS	Other Status	Habitat	Habitat Present (HP)/ Absent (A)	Potential to Occur
Acmispon rubriflorus	red- flowered bird's-foot- trefoil	//1B.1	BLM_S- Sensitive	Valley and foothill grassland, cismontane woodland. Most recent sighting from sterile, red soils-volcanic mudflow deposits. 195-490 m.	Α	The project site is well above the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, red-flowered bird's-foottrefoil has not been reported from Trinity County and is therefore not expected to be present on the project site.
Allium jepsonii	Jepson's onion	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Chapparal, cismontane woodland, lower montane coniferous forest. On serpentine soils in Sierra foothills, volcanic soil on Table Mtn. On slopes and flats; usually in an open area. 355-1130 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not

						present, and Jepson's onion is not expected to be present on the project site.
Allium siskiyouense	Siskiyou onion	//4.3	SB_CalBG/ RSABG- California/ Rancho Santa Ana Botanic Garden	Siskiyou onion is a perennial bulbiferous herb that occurs in rocky areas, occasionally on serpentine soils, within lower and upper montane coniferous forests in the Klamath Mountains. 850-2,500 m. The flowering period is May through July.	Α	The project site is well below the reported elevation range of the species. The project site's elevation is from 579-823m. Also, the stream draws support a marginal amount of exposed rock. Therefore, Siskiyou onion is not expected to be present on the project site.
Amsinckia lunaris	bent- flowered fiddleneck	//1B.2	BLM_S- Sensitive	Cismontane woodland, valley and foothill grassland, coastal bluff scrub.3-795 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat required by this species. Also, this species is known to occur only from South San Francisco and south. Therefore, potential suitable habitat is not present, and bent-flowered fiddleneck is not expected to be

						present on the project site.
Anisocarpus scabridus	scabrid alpine tarplant	//1B.3	BLM_S- Sensitive USFS_S- Sensitive	Upper montane coniferous forest. Open stony ridges, metamorphic scree slopes of mountain peaks, and cliffs in or near red fir forest. 1550-2350 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, scabrid alpine tarplant is not expected to be present on the project site.
Arabis modesta	modest rockcress	//4.3	_	Chaparral, lower montane coniferous forest. Intergrades with A. oregana in Siskiyou County; may be a variety of that plant. 120-800m.		Although the project site falls within the elevational range of the species, the project site does not contain the soil characteristics and microhabitat (i.e., deep soil on steep slopes, cliffs, shaded canyon ledges) required by this species. Therefore, potential suitable habitat is not present, and modest rockcress is not expected to be

						present on the project site.
Arctostaphylos klamathensis	Klamath manzanita	//1B.2	BLM_S- Sensitive SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral (montane), lower montane coniferous forest, upper montane coniferous forest, subalpine coniferous forest. Rocky outcrops and slopes, sometimes on serpentine. 1430-2250 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, Klamath manzanita is not expected to be present on the project site.
Astragalus rattanii var. jepsonianus	Jepson's milk-vetch	//1B.2	BLM_S- Sensitive	Cismontane woodland, valley and foothill grassland, chaparral. Commonly on serpentine in grassland or openings in chaparral. 175-1005 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Jepson's milk-vetch is not expected to be present on the project site.

Astragalus tener var. ferrisiae	Ferris' milk- vetch	//1B.1	BLM_S- Sensitive	Meadows and seeps, valley and foothill grassland. Subalkaline flats on overflow land in the Central Valley; usually seen in dry, adobe soil. 5-75 m.	Α	The project site is well above the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, Ferris' milk-vetch has not been reported from Trinity County and is therefore not expected to be present on the project site.
Balsamorhiza Ianata	woolly balsamroot	//1B.2	BLM_S- Sensitive	Cismontane woodland. Open woods, grassy slopes. Volcanic substrates. 800-1895 m.	А	Woolly balsamroot is known only to occur in Siskiyou County. Woolly balsamroot was not observed during the botanical surveys and is not expected to be present.
Balsamorhiza macrolepis	big-scale balsamroot	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Chaparral, valley and foothill grassland, cismontane woodland. Sometimes on serpentine. 35-1465 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and big-scale

						balsamroot is not expected to be present on the project site.
Balsamorhiza sericea	silky balsamroot	//1B.3	BLM_S- Sensitive	Lower montane coniferous forest. Collections from Douglas-fir forest and Jeffrey pine forest. Can be on serpentine. 850-2135 m.	A	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, silky balsamroot is not expected to be present on the project site.
Boechera serpenticola	serpentine rockcress	//1B.2	BLM_S- Sensitive	Lower montane coniferous forest, upper montane coniferous forest. Serpentine ridges and talus. 1125-2090 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, serpentine rockcress is not expected to be present on the project site.
Botrypus virginianus	rattlesnake fern	//2B.2	_	Bogs and fens, lower montane coniferous forest, meadows and seeps, riparian forest. 710-1405 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat (i.e., moist shaded valleys

						along small streams) required by this species. Therefore, potential suitable habitat is not present, and rattlesnake fern is not expected to be present on the project site.
Brodiaea matsonii	Sulphur Creek brodiaea	//1B.1	BLM_S- Sensitive SB_BerrySB- Berry Seed Bank	Cismontane woodland, meadows and seeps. Streambanks. In cracks and crevices of metamorphic amphibolite schist. 195-220 m.	A	The project site is well above the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, Sulphur Creek brodiaea has not been reported from Trinity County and is therefore not expected to be present on the project site.
Brodiaea rosea	Indian Valley brodiaea	/E/1B.1	BLM_S- Sensitive USFS_S- Sensitive	Closed-cone coniferous forest, chaparral, cismontane woodland, valley and foothill grassland. Serpentine gravelly creek bottoms, and in meadows and swales. 340-1130 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Indian Valley brodiaea is not expected to be

						present on the project site.
Bryoria tortuosa	yellow-twist horsehair	//	BLM_S- Sensitive BLM_S&M- Survey and Manage	Grows on trees in well-lit, open stands, most frequently on oaks and pines, although it has been collected on a variety of trees and shrubs. In Oregon and Washington, it is most common east of the Cascade crest in the Douglas-fir Zone and Ponderosa Pine Zone. In northern California, the habitat of B. tortuosa is poorly known; existing records are geographically widespread, collected from ponderosa pine forests, mixed conifer-Douglas-fir forests and oak woodlands.	Α	A common characteristic of all known occurrences is the presence of at least some mature or old-growth trees on the site, usually more than 120 years old. Given the lack of old-growth trees, and that yellow-twist horsehair was not observed during the botanical survey, the species is not expected to be present.
Buxbaumia viridis	buxbaumia moss	//2B.2	BLM_S- Sensitive BLM_S&M- Survey and Manage USFS_S- Sensitive	Well-rotted logs and in peaty soil and humus. 975-2200 m.	А	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, buxbaumia moss is not expected to be present on the project site.

Calochortus greenei	Greene's mariposa-lily	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Meadows and seeps, cismontane woodland, pinyon and juniper woodland, upper montane coniferous forest. On volcanic outcrops and open, dry, gravelly soils. 230-1895 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Greene's mariposa-lily is not expected to be present on the project site.
Calochortus longebarbatus var. longebarbatus	long-haired star-tulip	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Meadows and seeps, lower montane coniferous forest, Great Basin scrub, vernal pools. In wet meadows or grassy areas along drainages within forest. Clay soils. 975-2865 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, longhaired star tulip has not been reported from Trinity County and is therefore not expected to be present on the project site.
Calochortus monanthus	single- flowered mariposa-lily	//1A	BLM_S- Sensitive	Meadows and seeps. Known only from the type locality in a riparian meadow along the Shasta River. 745-800 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and

						microhabitat required by this species. Also, this species is known to occur only along the Shasta River within the Montague and Hawkinsville quadrangles. Therefore, potential suitable habitat is not present, and single-flowered mariposa-lily is not expected to be present on the project site.
Calochortus persistens	Siskiyou mariposa-lily	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Lower montane coniferous forest, North Coast coniferous forest. On dry shallow soils of metavolcanic origin. 1310-1735 m.	А	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, Siskiyou mariposa-lily has not been reported from Trinity County and is therefore not expected to be present on the project site.
Campanula shetleri	Castle Crags harebell	//1B.3	BLM_S- Sensitive SB_BerrySB- Berry Seed Bank USFS_S- Sensitive	Lower montane coniferous forest. In protected rock crevices in granite. 1215-1830 m.	А	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, Castle Crags harebell has not

						been reported from Trinity County and is therefore not expected to be present on the project site.
Carex klamathensis	Klamath sedge	//1B.2	BLM_S- Sensitive	Meadows and seeps, chaparral, cismontane woodland. Serpentine, fens and seeps. 910-1045 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, Klamath sedge is not expected to be present on the project site.
Castilleja rubicundula var. rubicundula	pink creamsacs	//1B.2	BLM_S- Sensitive	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland. Openings in chaparral or grasslands. On serpentine. 20-915 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species is known to occur only from the Shasta/Tehama Counties line and south. Therefore, potential suitable habitat is not present, and pink creamsacs is not expected to be present on the project site.

Chaenactis suffrutescens	Shasta chaenactis	//1B.3	BLM_S- Sensitive SB_BerrySB- Berry Seed Bank USFS_S- Sensitive	Lower montane coniferous forest, upper montane coniferous forest. Sandy or serpentine soils. 750-2800 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Shasta chaenactis is not expected to be present on the project site.
Chlorogalum pomeridianum var. minus	dwarf soaproot	//1B.2	BLM_S- Sensitive SB_SBBG- Santa Barbara Botanic Garden USFS_S- Sensitive	Chaparral. Serpentine. 120-1220 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and dwarf soaproot is not expected to be present on the project site.

Cirsium ciliolatum	Ashland thistle	/E/2B.1	BLM_S- Sensitive	Cismontane woodland, valley and foothill grassland. Dry, grassy, south-facing slopes. 790- 1220m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Ashland thistle is not expected to be present on the project site.
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	//4.2	BLM_S- Sensitive	Chaparral, cismontane woodland, lower montane coniferous forest. Often in roadcuts. 75-915 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Brandegee's clarkia is not expected to be present on the project site.

Clarkia borealis ssp. arida	Shasta clarkia	//1B.1	BLM_S- Sensitive	Cismontane woodland, lower montane coniferous forest. Openings. 425-595 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat required by this species. Therefore, potential suitable habitat is not present, and Shasta clarkia is not expected to be present at the project site.
Clarkia borealis ssp. borealis	northern clarkia	//1B.3	BLM_S- Sensitive USFS_S- Sensitive	Chaparral, cismontane woodland, lower montane coniferous forest. Often seen in roadcuts. 345-1540 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat required by this species. Therefore, potential suitable habitat is not present, and northern clarkia is not expected to be present at the project site.

Clarkia gracilis ssp. albicaulis	white- stemmed clarkia	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Chaparral, cismontane woodland. Dry, grassy openings in chaparral or foothill woodland. Sometimes on serpentine. 210-1100 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and whitestemmed clarkia is not expected to be present on the project site.
Clarkia mildrediae ssp. mildrediae	Mildred's clarkia	//1B.3	BLM_S- Sensitive USFS_S- Sensitive	Cismontane woodland, lower montane coniferous forest. On decomposed granite; sometimes on roadsides. 245- 1710 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Mildred's clarkia is not expected

						to be present on the project site.
Clarkia mosquinii	Mosquin's clarkia	//1B.1	BLM_S- Sensitive SB_RSABG- Rancho Santa Ana Botanic Garden USFS_S- Sensitive	Cismontane woodland, lower montane coniferous forest. Usually on steep, rocky cutbanks and slopes. 185-1220 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Mosquin's clarkia is not expected to be present on the project site.
Collomia tracyi	Tracy's collomia	//4.3	_	Lower montane coniferous forest, broadleaved upland forest. On rock outcrops. On serpentine at least sometimes. 300-2,100 meters.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the soil characteristics (i.e., rocky, gravelly, or sandy area) required by this species. Therefore, potential suitable habitat is not present, and Tracy's collomia is not expected to be

						present on the project site.
Cordylanthus tenuis ssp. pallescens	pallid bird's- beak	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Lower montane coniferous forest. Gravelly openings in brush patches next to coniferous forest; on volcanic alluvium. 1070-1615 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, pallid bird's-beak is not expected to be present on the project site.
Cryptantha crinita	silky cryptantha	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Cismontane woodland, valley foothill grassland, lower montane coniferous forest, riparian forest, riparian woodland. In gravelly streambeds. 35-1220 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species occurs along low-gradient seasonal streams with broad floodplains and in vernally moist uplands. Therefore, potential suitable habitat is not present, and silky cryptantha is not expected to be

						present on the project site.
Cypripedium californicum	California lady's- slipper	//4.2	IUCN_EN- Endangere d	Lower montane coniferous forest, bogs and fens. In perennial seepages on serpentine substrate and in gravel along creek margins. 30-2750 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the soil characteristics and microhabitat (i.e., serpentine, moist streambanks or slopes, fens) required by this species. Therefore, potential suitable habitat is not present, and California lady's-slipper is not expected to be present on the project site.
Cypripedium fasciculatum	clustered lady's- slipper	//4.2	BLM_S- Sensitive BLM_S&M- Survey and Manage USFS_S- Sensitive	North coast coniferous forest, lower montane coniferous forest. In serpentine seeps and on moist streambanks. 100-2435 m.	А	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species.

						Therefore, potential suitable habitat is not present, and clustered lady's-slipper is not expected to be present at the project site.
Cypripedium montanum	mountain lady's- slipper	//4.2	BLM_S- Sensitive BLM_S&M- Survey and Manage USFS_S- Sensitive	Lower montane coniferous forest, broadleafed upland forest, cismontane woodland, north coast coniferous forest. On dry, undisturbed slopes. 185-2225 m.	HP	Potentially suitable habitat for the species is present within and adjacent to the project site. However, mountain lady's-slipper was not observed during the botanical surveys and is not expected to be present.
Darlingtonia californica	California pitcherplant	//4.2	IUCN_LC- Least Concern SB_CalBG/ RSABG- California/ Rancho Santa Ana Botanic Garden	Bogs and fens, meadows and seeps. On ultramafic soils.	A	Although the project site falls within the elevational range of the species, the project site does not contain the soil characteristics and microhabitat (i.e., seeps, boggy places with running water, generally serpentine;) required by this species. Therefore, potential suitable habitat is not present, and California pitcherplant is not expected to be

						present on the project site.
Dendriscocaulon intricatulum	northern moon shrub	//	BLM_S- Sensitive BLM_S&M- Survey and Manage	Most commonly occur in areas associated with open-grown conifer and mixed conifer/deciduous stands. It is extremely sensitive to air moisture and needs high humidity. It is commonly found in areas with mesic to moist soil. 9-661 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and northern moon shrub is not expected to be present on the project site.
Dendrocollybia racemosa	branched collybia	//	BLM_S- Sensitive BLM_S&M- Survey and Manage USFS_S- Sensitive	Solitary or in small groups growing from a grain-like sclerotium on the decayed remains of decayed mushrooms, or in duff of mixed hardwood-conifer woods; fruiting from late fall to midwinter.	НР	Potentially suitable habitat for the species is present within and adjacent to the project site. However, branched collybia was not observed during the botanical survey and is not expected to be present.

Draba howellii	Howell's draba	//4.3	SB_BerrySB- Berry Seed Bank	Subalpine coniferous forest. Rocky habitats. 1370-3000 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, Howell's draba is not expected to be present on the project site.
Epilobium oreganum	Oregon fireweed	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Bogs and fens, meadows and seeps, lower montane coniferous forest, upper montane coniferous forest. In and near springs and bogs; at least sometimes on serpentine. 575-2075 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Oregon fireweed is not expected to be present on the project site.
Epilobium siskiyouense	Siskiyou fireweed	//1B.3	BLM_S- Sensitive SB_BerrySB- Berry Seed Bank	Alpine boulder and rock field, subalpine coniferous forest, upper montane coniferous forest. On slopes in gravelly, serpentine soils. 1675-2440 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579–823 m. Therefore, Siskiyou fireweed is not expected to be

						present on the project site.
Eriastrum brandegeeae	Brandegee's eriastrum	//1B.1	BLM_S- Sensitive	Chaparral, cismontane woodland. On barren volcanic soils; often in open areas. 410- 845 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Brandegee's eriastrum is not expected to be present on the project site.
Erigeron cervinus	Siskiyou daisy	//4.3	_	Lower montane coniferous forest, meadows and seeps. On granitic rock outcrops, near streams, and in meadows and seeps, often in cracks in boulders. 25-1900 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat (i.e., open, rocky slopes, meadows) required by this species. Therefore, potential suitable habitat is not present, and Siskiyou daisy is not expected to be

						present on the project site.
Erigeron petrophilus var. viscidulus	Klamath rock daisy	//4.3	_	Chaparral, lower montane coniferous forest, upper montane coniferous forest, meadows and seeps. Rocky foothills to montane forest, sometimes on serpentine. 1500-2,700 m.	A	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, Klamath rock daisy is not expected to be present on the project site.
Eriogonum umbellatum var. ahartii	Ahart's buckwheat	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Cismontane woodland, chaparral. Serpentinite. On slopes, in openings. 275-1480 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Ahart's buckwheat is not expected to be

						present on the project site.
Eriogonum ursinum var. erubescens	blushing wild buckwheat	//1B.3	BLM_S- Sensitive USFS_S- Sensitive	Lower montane coniferous forest, montane chaparral. Rocky sites including scree and talus. 790-2120 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and blushing wild buckwheat is not expected to be present on the project site.
Erythranthe inflatula	ephemeral monkeyflow er	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Great Basin scrub, lower montane coniferous forest, pinyon and juniper woodland. Gravelly or rocky sites; vernally mesic. 1245-1770 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, ephemeral monkeyflower has not been reported from Trinity County and is therefore not expected

						to be present on the project site.
Erythronium citrinum var. roderickii	Scott Mountains fawn lily	//1B.3	BLM_S- Sensitive	Lower montane coniferous forest. Serpentine; rocky sites. 545-1435 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Scott Mountain fawn lily is not expected to be present on the project site.
Euphorbia ocellata ssp. rattanii	Stony Creek spurge	//1B.2	BLM_S- Sensitive	Valley and foothill grassland, chaparral. Sandy or rocky soils. 85-800 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Stony Creek spurge is not expected to be

						present on the project site.
Fritillaria gentneri	Gentner's fritillary	E//1B.1	_	Cismontane woodland, chaparral. Open sites at edge of woodland or chaparral (in Oregon); sometimes on serpentine. 1005-1120 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, Gentner's fritillary has not been reported from Trinity County and is therefore not expected to be present on the project site.
Fritillaria pluriflora	adobe-lily	//1B.2	BLM_S- Sensitive SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral, cismontane woodland, foothill grassland. Usually on clay soils; sometimes serpentine. 45-945 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and adobe-lily is not expected to be present on the project site.
Fritillaria purdyi	Purdy's fritillary	//4.3	SB_UCSC- UC Santa Cruz	Chaparral, cismontane woodland, lower montane coniferous forest. Usually on serpentine. 175-2255 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain

						the soil characteristics and microhabitat (i.e., dry ridges, generally on serpentine) required by this species. Therefore, potential suitable habitat is not present, and Purdy's fritillary is not expected to be present on the project site.
Galium serpenticum ssp. scotticum	Scott Mountain bedstraw	//1B.2	BLM_S- Sensitive	Lower montane coniferous forest. Generally on north-facing slopes on serpentine in mixed conifer forest. 950-2225 m.	A	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, Scott Mountain bedstraw is not expected to be present on the project site.
Gratiola heterosepala	Boggs Lake hedge- hyssop	/E/1B.2	BLM_S- Sensitive	Marshes and swamps (freshwater), vernal pools. Clay soils; usually in vernal pools, sometimes on lake margins. 4- 2410 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Boggs Lake hedge-hyssop is

						not expected to be present on the project site.
Harmonia doris- nilesiae	Niles' harmonia	//1B.1	BLM_S- Sensitive USFS_S- Sensitive	Lower montane coniferous forest, chaparral, cismontane woodland. Serpentine barrens. 650-1660 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Niles' harmonia is not expected to be present on the project site.
Harmonia stebbinsii	Stebbins' harmonia	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Chaparral, lower montane coniferous forest. Serpentine soils; often along roads. 120- 1585 m.	А	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not

						present, and Stebbins' harmonia is not expected to be present on the project site.
Hesperolinon tehamense	Tehama County western flax	//1B.3	BLM_S- Sensitive	Chaparral, cismontane woodland. Serpentine barrens in chaparral. 100-1250 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Tehama County western flax is not expected to be present on the project site.
Horkelia hendersonii	Henderson's horkelia	//1B.1	BLM_S- Sensitive SB_BerrySB- Berry Seed Bank USFS_S- Sensitive	Upper montane coniferous forest. Granitic peaks and talus slopes at high elevations. 2000-2300 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, Henderson's horkelia has not been reported from Trinity County and is therefore not expected to be present on the project site.

Ivesia Iongibracteata	Castle Crags ivesia	//1B.3	BLM_S- Sensitive SB_BerrySB- Berry Seed Bank USFS_S- Sensitive	Lower montane coniferous forest. Crevices in granitic cliffs. About 1200-1400 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, Castle Crags ivesia has not been reported from Trinity County and is therefore not expected to be present on the project site.
Ivesia pickeringii	Pickering's ivesia	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Lower montane coniferous forest, meadows and seeps. Mesic clay; usually serpentine seeps. 850-1525 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Pickering's ivesia is not expected to be present on the project site.
Juncus dudleyi	Dudley's rush	//2B.3	_	Dudley's rush is a perennial herb that occurs in moist areas within lower montane coniferous forest. The species is found between 1,400 and 6,600 feet in elevation. The flowering period is July and August.	А	No perennially moist areas are present in the study site. Further, the nearest mapped occurrence of Dudley's rush corresponds to a collection dated 1879. Given the lack of

						suitable habitat and the age of the nearest mapped occurrence, the species would not be present.
Juncus leiospermus var. leiospermus	Red Bluff dwarf rush	//1B.1	BLM_S- Sensitive USFS_S- Sensitive	Chaparral, valley and foothill grassland, cismontane woodland, vernal pools, meadows and seeps. Vernally mesic sites. Sometimes on edges of vernal pools. 30-1025 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Red Bluff dwarf rush is not expected to be present on the project site.
Juncus regelii	Regel's rush	//2.3	_	Regel's rush is a perennial rhizomatous herb that occurs in meadows and seeps between 2,500 and 6,200 feet in elevation. The flowering period is typically August.	A	No meadows, seeps or other potentially suitable habitats for Regel's rush are present on the study site. Thus, the species would not be present.

Layia septentrionalis	Colusa layia	//1B.2	BLM_S- Sensitive	Chaparral, cismontane woodland, valley and foothill grassland. Scattered colonies in fields and grassy slopes in sandy or serpentine soil. 15-1100 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Colusa layia is not expected to be present on the project site.
Legenere limosa	legenere	//1B.1	BLM_S- Sensitive	Vernal pools. In beds of vernal pools. 1-1005 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and legenere is not expected to be present on the project site.
Leptosiphon nuttallii ssp. howellii	Mt. Tedoc leptosiphon	//1B.3	BLM_S- Sensitive SB_BerrySB- Berry Seed Bank	Lower montane coniferous forest. Serpentine soil. 1220-2800 m.	А	The project site is well below the reported elevational range of the species. The project site's elevation is from

			USFS_S- Sensitive			579-823 m. Also, Mt. Tedoc leptosiphon has not been reported from Trinity County and is therefore not expected to be present on the project site.
Lewisia cantelovii	Cantelow's lewisia	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Broadfleafed upland forest, lower montane coniferous forest, cismontane woodland, chaparral. Mesic rock outcrops and wet cliffs, usually in moss or clubmoss; on granitics or sometimes on serpentine. 330- 1370 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Cantelow's lewisia is not expected to be present on the project site.
Lewisia cotyledon var. heckneri	Heckner's lewisia	//1B.2	BLM_S- Sensitive	Lower montane coniferous forest. Rocky places. Affinity to serpentine soil. 225-2100 m.	HP	Although the project site falls within the elevational range of the species, the project site does contain marginal habitat for this species. Heckner's lewisia was not observed during the botanical survey and is not expected to be

						present on the project site.
Lilium bolanderi	Bolander's lily	//4.2	_	Lower montane coniferous forest, chaparral. Dry clayey ultramafic soils; growing in the open, on stony ground. 30-1,600 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the soil characteristics and microhabitat (i.e., serpentine soil in chaparral) required by this species. Therefore, potential suitable habitat is not present, and Bolander's lily is not expected to be present on the project site.
Limnanthes floccosa ssp. Bellingeriana	Bellinger's meadowfoa m	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Meadows and seeps, cismontane woodland. Vernally wet sites including wet edges of meadows, and damp, stony flats. 300-1100 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Bellinger's meadowfoam is not expected to be

						present at the project site.
Limnanthes floccosa ssp. californica	Butte County meadowfoa m	E/E/1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden	Vernal pools, valley and foothill grassland. Wet or flowing drainages & depressions; often not in discrete vernal pools; soils are usually Redding clay with rocks. 35-370 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Butte County meadowfoam is not expected to be present on the project site.
Mielichhoferia elongata	elongate copper moss	//4.3	USFS_S- Sensitive	Cismontane woodland. Moss growing on very acidic, metamorphic rock or substrate; usually in higher portions in fens. Often on substrates naturally enriched with heavy metals (e.g., copper) such as mine tailings. 5-1085 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the soil characteristics required by this species. Therefore, potential suitable habitat is not present,

						and elongate copper moss is not expected to be present on the project site.
Monardella venosa	veiny monardella	//1B.1	BLM_S- Sensitive SB_RSABG- Rancho Santa Ana Botanic Garden	Valley and foothill grassland, cismontane woodland. In heavy clay; mostly with grassland associates. Rediscovered in 1992. 30-405 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and veiny monardella is not expected to be present on the project site.
Navarretia leucocephala ssp. bakeri	Baker's navarretia	//1B.1	BLM_S- Sensitive	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest. Vernal pools and swales; adobe or alkaline soils. 3-1680 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Baker's

						navarretia is not expected to be present on the project site.
Neviusia cliftonii	Shasta snow- wreath	//1B.2	BLM_S- Sensitive SB_RSABG- Rancho Santa Ana Botanic Garden USFS_S- Sensitive	Cismontane woodland, lower montane coniferous forest, riparian woodland. Shaded, north-facing, or sheltered canyons. Sometimes on limestone. Mesic areas. 330-540 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Shasta snowwreath is not expected to be present on the project site.
Orcuttia pilosa	hairy Orcutt grass	E/E/1B.1	BLM_S- Sensitive	Vernal pools. 25-125 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County.

						Therefore, potential suitable habitat is not present, and hairy Orcutt grass is not expected to be present on the project site.
Orcuttia tenuis	slender Orcutt grass	T/E/1B.1	SB_UCBBG- UC Berkeley Botanical Garden	Vernal pools. Often in gravelly substrate. 25-1755 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and slender Orcutt grass is not expected to be present on the project site.
Orthocarpus pachystachyus	Shasta orthocarpus	//1B.1	BLM_S- Sensitive	Great Basin scrub, meadows and seeps, valley and foothill grassland. Alluvial plains, hillsides. 835-1525 m.	А	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required

						by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Shasta orthocarpus is not expected to be present on the project site.
Packera eurycephala var. lewisrosei	Lewis Rose's ragwort	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Cismontane woodland, lower montane coniferous forest, chaparral. Steep slopes and in canyons in serpentine soil, often along or near roads. 285-1890 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Lewis Rose's ragwort is not expected to be present on the project site.
Packera layneae	Layne's ragwort	//1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral, cismontane woodland. Ultramafic soil (serpentine or gabbro); occasionally along streams. 200-1085 m.	А	Although the project site falls within the elevational range of the species, the project site does not contain

						the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Layne's ragwort is not expected to be present on the project site.
Paronychia ahartii	Ahart's paronychia	//1B.1	BLM_S- Sensitive	Valley and foothill grassland, vernal pools, cismontane woodland. Stony, nearly barren clay of swales and higher ground around vernal pools. 30-510 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Ahart's paronychia is not expected to be present on the project site.

Penstemon filiformis	thread- leaved beardtongue	//1B.3	BLM_S- Sensitive	Cismontane woodland, lower montane coniferous forest. Dry stony sites, grassy openings, & meadows, often along trails & logging roads; sometimes on serpentine. 180-2135 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and threadleaved beardtongue is not expected to be present on the project site.
Penstemon personatus	closed- throated beardtongue	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Lower montane coniferous forest, upper montane coniferous forest, chaparral. Usually on north-facing slopes in metavolcanic soils. 1340-2125 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, closed-throated beardtongue has not been reported from Trinity County and is therefore not expected to be present at the project site.
Penstemon tracyi	Tracy's beardtongue	//1B.3	_	Tracy's beardtongue is a perennial herb that occurs in rocky areas in upper montane coniferous forest between 6,550 and 7,250 feet. This plant is typically found on exposed	А	The study site is well outside the reported elevation range of Tracy's beardtongue; therefore, the species would not be present.

				rocky outcrops and barren talus slopes. The flowering period is June through August.		
Phacelia cookei	Cooke's phacelia	//1B.1	BLM_S- Sensitive SB_BerrySB- Berry Seed Bank USFS_S- Sensitive	Great Basin scrub, lower montane coniferous forest. Disturbed areas of loose, ashy volcanic sand at the edges of old roads. 1095–1700 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, Cooke's phacelia has not been reported from Trinity County and is therefore not expected to be present on the project site.
Phacelia greenei	Scott Valley phacelia	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Closed-cone coniferous forest, lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest. Bare serpentine ridges and openings in yellow pine and red fir forest communities. 850-2380 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Scott Valley phacelia is not expected to be present on the project site.

Phacelia leonis	Siskiyou phacelia	//1B.3	BLM_S- Sensitive	Upper montane coniferous forest, meadows and seeps. Sandy, moist soil, sometimes on serpentine. 1085-2195 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, Siskiyou phacelia is not expected to be present on the project site.
Phaeocollybia californica	California phaeocollybi a	//	BLM_S- Sensitive BLM_S&M- Survey and Manage	It grows in clusters at the roosts of trees, often forming arcs or fairy rings in humic soils of moist coniferous (firs, hemlock, Douglas) and mixed (firs, madrones, oaks, Douglas, hemlock) coastal and coastal montane forests. It has been observed associated with the roots of Pacific silver fir, sitka spruce, Douglas firs, and hemlock. 63-1175 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and California phaeocollybia is not expected to be present on the project site.
Phaeocollybia olivacea	olive phaeocolly bia	//	BLM_S- Sensitive BLM_S&M- Survey and Manage USFS_S- Sensitive	Generally found in complex mid to late-successional/old growth coniferous rainforests. Generally occurs in the more southern part of the northern spotted owl region. Fruits on soil in early to late autumn.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat required by this species. Therefore, potential suitable

						habitat is not present, and olive phaeocollybia is not expected to be present on the project site.
Phaeocollybia spadicea	spadicea phaecollybia	//	BLM_S- Sensitive BLM_S&M- Survey and Manage	Solitary to scattered to closely clustered in mature sitka spruce stands in coastal lowland regions.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat required by this species. Therefore, potential suitable habitat is not present, and spadicea phaecollybia is not expected to be present on the project site.
Phlox hirsuta	Yreka phlox	E/E/1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden	Lower montane coniferous forest, upper montane coniferous forest. Open slopes and grasslands, on serpentine gravel. 830-1280 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not

						present, and Yreka phlox is not expected to be present on the project site.
Ptilidium californicum	Pacific fuzzwort	//4.3	BLM_S- Sensitive BLM_S&M- Survey and Manage	Lower montane coniferous forest, upper montane coniferous forest. Epiphytic on fallen and decaying logs and stumps. Rarely on boulders over humus. 340-1860 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat required by this species. Therefore, potential suitable habitat is not present, and Pacific fuzzwort is not expected to be present on the project site.
Puccinellia howellii	Howell's alkali grass	//1B.1	BLM_S- Sensitive SB BerrySB- Berry Seed Bank	Meadows and seeps. Mineralized soils around mineral springs and seeps. One site known: 485 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Therefore, potential suitable habitat is not present, and Howell's alkali grass is not

						expected to be present on the project site.
Raillardella pringlei	showy raillardella	//1B.2	BLM_S- Sensitive SB_RSABG- Rancho Santa Ana Botanic Garden USFS_S- Sensitive	Bogs and fens, meadows and seeps, upper montane coniferous forest. Streambanks, wet meadows, and bogs in areas of serpentinized rock. 1295-2135 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, showy raillardella is not expected to be present on the project site.
Rhynchospora californica	California beaked-rush	//1B.1	BLM_S- Sensitive	Bogs and fens, marshes and swamps, lower montane coniferous forest, meadows and seeps. Freshwater seeps and open marshy areas. 45-270 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and California beaked-rush is not expected to be present on the project site.

Rorippa columbiae	Columbia yellow cress	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Meadows and seeps, playas, vernal pools, lower montane coniferous forest. Moist sandy soil, low gravelly river banks, basaltic lava slopes. 120-1810 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Columbia yellow cress is not expected to be present at the project site.
Rupertia hallii	Hall's rupertia	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Cismontane woodland, lower montane coniferous forest. On disturbed soils of roadsides and logged forests. 545-1450 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Hall's rupertia is not

						expected to be present on the project site.
Sabulina howellii	Howell's sandwort	//1B.3	BLM_S- Sensitive	Lower montane coniferous forest, chaparral. Dry open places, often on serpentine hillsides and ridges, near Jeffrey pines. 550-1000 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Howell's sandwort is not expected to be present on the project site.
Sabulina stolonifera	Scott Mountain sandwort	//1B.3	BLM_S- Sensitive USFS_S- Sensitive	Lower montane coniferous forest. Serpentine soils, Jeffrey pine forest. 1125-2020 m.	A	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Therefore, Scott Mountain sandwort is not

						expected to be present on the project site.
Sagittaria sanfordii	Sanford's arrowhead	//1B.2	BLM_S- Sensitive	Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0-605 m.	A	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Sanford's arrowhead is not expected to be present on the project site.
Sedum albomarginatum	Feather River stonecrop	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Chaparral, lower montane coniferous forest. In crevices and on ledges of serpentine outcrops and slopes. 455-1850 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from

						Trinity County. Therefore, potential suitable habitat is not present, and Feather River stonecrop is not expected to be present on the project site.
Sedum obtusatum ssp. paradisum	Canyon Creek stonecrop	//1B.3	BLM_S- Sensitive USFS_S- Sensitive	Chaparral, lower montane coniferous forest, subalpine coniferous forest, broadleafed upland forest. Rock faces, in crevices of exposed granite. 850-1890 m.	HP	Potentially suitable habitat for the species is present within and adjacent to the project site. However, Canyon Creek stonecrop was not observed during the botanical survey and is not expected to be present.
Sidalcea robusta	Butte County checkerblo om	//1B.2	BLM_S- Sensitive	Chaparral, cismontane woodland. Small draws and rocky crevices. 75-400 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Butte County checkerbloom is not expected to be

						present on the project site.
Silene occidentalis ssp. longistipitata	long-stiped campion	//1B.2	BLM_S- Sensitive USFS_S- Sensitive	Chaparral, lower montane coniferous forest, upper montane coniferous forest.1000- 2000 m.	Α	The project site is well below the reported elevational range of the species. The project site's elevation is from 579-823 m. Also, longstiped campion has not been reported from Trinity County and is therefore not expected to be present on the project site.
Silene salmonacea	Klamath Mountain catchfly	//1B.2	SB_UCSC- UC Santa Cruz USFS_S- Sensitive	Lower montane coniferous forest. Openings, usually serpentine. 775-1345 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the soil characteristics and microhabitat (i.e., serpentine and iron-rich soils in openings or mixed-evergreen forest) required by this species. Therefore, potential suitable habitat is not present,

						and Klamath Mountain catchfly is not expected to be present on the project site.
Smilax jamesii	English Peak greenbrier	//4.2	BLM_S- Sensitive	North coast coniferous forest, broadleafed upland forest, lower montane coniferous forest, upper montane coniferous forest, marshes and swamps. Along streams and lake margins, sometimes mesic depressions. 505-1975 m.	HP	Potentially suitable habitat for the species is present within and adjacent to the project site. However, English Peak greenbrier was not observed during the botanical survey and is not expected to be present.
Sowerbyella rhenana	stalked orange peel fungus	//	BLM_S- Sensitive BLM_S&M- Survey and Manage	Prefers wet mossy areas under conifers. Grows in clusters on the ground.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the microhabitat required by this species. Therefore, potential suitable habitat is not present, and stalked orange peel fungus is not expected to be present on the project site.
Spathularia flavida	fairy fan	//	BLM_S- Sensitive BLM_S&M-	Prefers wet mossy areas under conifers. Grows in clusters on the ground.	Α	Although the project site falls within the elevational range of the species, the project

			Survey and Manage			site does not contain the microhabitat required by this species. Therefore, potential suitable habitat is not present, and fairy fan is not expected to be present on the project site.
Tauschia glauca	glaucous tauschia	//4.3		Lower montane coniferous forest. Dry gravelly serpentine slopes and outcrops, usually with Douglas-fir and ponderosa one. 80-1,700 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the soil characteristics and microhabitat (i.e., gravelly, generally serpentine flats in conifer forest) required by this species. Therefore, potential suitable habitat is not present, and glaucous auschia is not expected to be present on the project site.

Trifolium jokerstii	Butte County golden clover	//1B.2	BLM_S- Sensitive SB_USDA- US Dept of Agriculture	Valley and foothill grassland, vernal pools. Mesic sites in grassland. 45-400 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Butte County golden clover is not expected to be present on the project site.
Trifolium siskiyouense	Siskiyou clover	//1B.1	BLM_S- Sensitive	Meadows and seeps. Mesic sites. 880-1500 m.	Α	Although the project site falls within the elevational range of the species, the project site does not contain the specific soil characteristics and microhabitat required by this species. Also, this species has not been reported from Trinity County. Therefore, potential suitable habitat is not present, and Siskiyou clover is not expected

						to be present on the project site.
Vaccinium shastense ssp. shastense	Shasta huckleberry	//1B.3	BLM_S- Sensitive	Chaparral, cismontane woodland, lower montane coniferous forest, riparian forest, subalpine coniferous forest. Acidic, mesic. Often on streambanks; sometimes on rocky outcrops, seeps, roadsides, and disturbed areas. 325-1220 m.	А	Although the project site falls within the elevational range of the species, Shasta huckleberry is known only to occur in Shasta County. Shasta huckleberry was not observed during the botanical surveys and is not expected to be present.

Appx. C Table 2

Scientific Name	Common Name	Status Federal/ State	Other Status	Habitat	Habitat 2 Present (HP)/ Absent (A)	Potential to Occur
Accipiter gentilis	northern goshawk	/	BLM_S- Sensitive CDF_S- Sensitive CDFW_SSC -Species of Special Concern IUCN_LC- Least Concern USFS_S- Sensitive	Within, and in vicinity of, coniferous forest. Uses old nests and maintains alternate sites. Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	A	The project site and adjacent lands are in the year-long range of the northern goshawk. However, mature or old-growth forest is not present in or adjacent to the project site. Northern goshawks or goshawk nests were not observed during field surveys; therefore, the species is not expected to nest in or directly adjacent to the project site. As such, the likelihood of the species to be present is unlikely.
Acipenser medirostris	green sturgeon (Southern DPS)	Т/	AFS_VU- Vulnerable CDFW_SSC -Species of Special Concern IUCN_NT- Near	These are the most marine species of sturgeon. Abundance increases northward of Point Conception. Spawns in the Sacramento, Klamath, & Trinity Rivers. Spawns at temps between 8-14 C. Preferred spawning substrate is	Α	The project site is outside the known range of the green sturgeon. Also, on-site streams do not provide suitable habitat for fish, as they are ephemeral and intermittent streams. Additionally,

			Threatened NMFS_SC- Species of Concern	large cobble, but can range from clean sand to bedrock.		there is no hydrologic connectivity with downstream waters. Therefore, green sturgeon is not expected to be present.
Agelaius tricolor	tricolored blackbird	/CE	BLM_S- Sensitive CDFW_SSC -Species of Special Concern IUCN_EN- Endangered NABCI_RW L-Red Watch List USFWS_BC C-Birds of Conservation Concern	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	A	The project site is outside the known range of the tricolored blackbird. These birds are common locally throughout the Central Valley and in the coastal districts from Sonoma County south. Therefore, the species is not expected to be present.
Ancotrema voyanum	hooded lancetooth	/	BLM_S- Sensitive BLM_S&M- Survey and Manage	Occurs mostly in the Shasta- Trinity National forests in the northern half of Trinity County. Associated with limestone substrates, mostly in an elevation range of 168-960 meters. All known occurrences are near streams or in draws (intermittent stream channel). Needs permanent dampness. Late successional conditions	Α	No suitable habitat occurs at the project site. The hooded lancetooth would thus not be present.

				provide suitable habitat conditions.		
Anodonta californiensis	California floater	/	USFS_S- Sensitive	Freshwater lakes and slow- moving streams and rivers. Generally in shallow muddy or sandy habitats in larger rivers, reservoirs, and lakes.	Α	No suitable habitat occurs at the project site. The California floater would thus not be present.
Anodonta oregonensis	Oregon floater	/	BLM_P- Priority	Low gradient and low elevation rivers, lakes, and reservoirs. They prefer shallow water in mud, sand, or fine gravel. They are long-term brooders that breed in late summer and spawn in the spring. Coho salmon may be a host.	Α	No suitable habitat occurs at the project site. The Oregon floater would thus not be present.
Antrozous pallidus	pallid bat	/	BLM_S- Sensitive CDFW_SSC -Species of Special Concern IUCN_LC- Least Concern USFS_S- Sensitive WBWG_H- High Priority	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Α	No suitable habitat occurs in the study site. The pallid bat would thus not be present.

Aquila chrysaetos	golden eagle	/	BLM_S- Sensitive CDF_S- Sensitive CDFW_FP- Fully Protected CDFW_WL- Watch List IUCN_LC- Least Concern USFWS_BC C-Birds of Conservation Concern	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Α	The project site and adjacent lands are in the year-long range of the golden eagle. However, suitable nesting sites do not exist at the project site, and golden eagles or eagle nests were not observed during field surveys; therefore, the species is not expected to nest in or directly adjacent to the project site. As such, the likelihood of the species to be present is unlikely.
Ascaphus truei	Pacific tailed-frog	/	CDFW SSC- Species of Special Concern	In California, the Pacific tailed frog occurs in permanent streams of low temperatures in conifer-dominated habitats, including coast redwood, Douglas-fir, Klamath mixed-conifer, and ponderosa pine habitats. This frog also occurs in montane hardwood-conifer habitats. Pacific tailed frogs occur more often in mature or late-successional stands than in younger stands. During the day, adults seek cover under submerged rocks and logs in the stream or occasionally under similar surface objects close to the stream.	Α	No suitable habitat for the Pacific tailed-frog is present in the study site. The frog would thus not be present.

Athene cunicularia	burrowing owl	/	BLM_S- Sensitive CDFW_SSC -Species of Special Concern IUCN_LC- Least Concern USFWS_BC C-Birds of Conservation Concern	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Α	The project site is outside the known range of the burrowing owl. These birds occur in pinyon-juniper and ponderosa pine habitats. The project site is comprised of open gray pine/oak woodland. Therefore, the species is not expected to be present.
Branchinecta conservatio	Conservancy fairy shrimp	E/	IUCN_EN- Endangered	Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	Α	The project site is outside the known range of the conservancy fairy shrimp. Potential suitable habitat is not present at the project site. Therefore, the species is not expected to be present.
Branchinecta Iynchi	vernal pool fairy shrimp	Т/	IUCN_VU- Vulnerable	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone- depression pools and grassed swale, earth slump, or basalt- flow depression pools.	Α	The project site is outside the known range of the vernal pool fairy shrimp. Potential suitable habitat is not present at the project site. Therefore, the species is not expected to be present.

Buteo swainsoni	Swainson's hawk	/T	BLM_S- Sensitive IUCN_LC- Least Concern USFWS_BC C-Birds of Conservatio n Concern	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Α	The project site is outside the known range of the Swainson's hawk. These birds require grain or alfalfa fields, or livestock pastures for foraging. This specific habitat type does not exist at the project site; therefore, the species is not expected to be present.
Canis Iupus	gray wolf	E/E	IUCN_LC- Least Concern	Habitat generalists, historically occupying diverse habitats including tundra, forests, grasslands, and deserts. Primary habitat requirements are the presence of adequate ungulate prey, water, and low human contact.	Α	No suitable habitat occurs in the study site. The gray wolf would thus not be present.
Catostomus rimiculus ssp. 1	Jenny Creek sucker	/	BLM_P- Priority AFS_VU- Vulnerable	Found only in the isolated upstream areas of Jenny Creek, a tributary to the Klamath River in Oregon. Most abundant in deep, quiet pools and slowermoving stretches.	Α	The project site is outside the known range of the Jenny Creek sucker. The species is found only within the Jenny Creek watershed, a Klamath River tributary, in southwestern Oregon and adjoining California. Also, on-site streams do not provide suitable habitat for fish, as they are ephemeral and intermittent

						streams. Additionally, there is no hydrologic connectivity with downstream waters. Therefore, Jenny Creek sucker is not expected to be present.
Chasmistes brevirostris	shortnose sucker	E/E	AFS_EN- Endangered CDFW_FP- Fully Protected IUCN_EN- Endangered	Native to the Klamath and Lost river systems in California and Oregon. Spend most of year in open waters of large lakes. They feed on plankton. Spawn in tributary streams.	A	The project site is outside the known range of the shortnose sucker. Also, on-site streams do not provide suitable habitat for fish, as they are ephemeral and intermittent streams. Additionally, there is no hydrologic connectivity with downstream waters. Therefore, shortnose is not expected to be present.
Coccyzus americanus occidentalis	western yellow-billed cuckoo	T/E	NABCI_RW L-Red Watch List USFS_S- Sensitive USFWS_BC C-Birds of Conservatio n Concern	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Α	No suitable habitat occurs on the study site. The yellow-billed cuckoo would thus not be present.

Colligyrus convexus	canary dusky snail	/	BLM_S&M- Survey and Manage	Limnocrenes & hyporheic streams in the Pit River basin. Most abundant on the undersides of cobbles and boulders in shallow to moderate depths.	Α	No suitable habitat occurs on the project site. The canary dusky snail would thus not be present.
Corynorhinus townsendii	Townsend's big-eared bat	/	BLM_S- Sensitive CDFW_SSC -Species of Special Concern IUCN_LC- Least Concern USFS_S- Sensitive WBWG_H- High Priority	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Α	No suitable habitat occurs on the study site. The townsend's big-eared bat would thus not be present.
Cottus asperrimus	rough sculpin	/T	AFS_VU- Vulnerable BLM_S- Sensitive CDFW_FP- Fully Protected IUCN_VU- Vulnerable	Restricted to the Pit River above and below the falls at Burney, and the Hat Creek & Fall River subdrainages. Found mostly on the muddy bottoms of large streams.	Α	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, rough sculpin would not be present
Dannaus plexippus	monarch butterfly	C/	CDFW_SG CN- Species of Greatest Conservati on Need	Monarchs roost in eucalyptus, Monterey pines, and Monterey cypresses when overwintering along the Pacific coast near Santa Cruz and San Diego. During migration, they often use pine, fir, and cedar trees. Adult	HP	The project site and vicinity are in the summer breeding areas of the monarch butterfly. Because milkweed and flowering plants may

			USFS - Sensitive	monarchs feed on the nectar of many flowers, but they breed only where milkweeds are found.		be present that were not detected during field surveys, habitat is assumed to be present; as such, monarch butterfly may be presence.
Deltistes luxatus	Lost River sucker	E/E	AFS_EN- Endangered CDFW_FP- Fully Protected IUCN_EN- Endangered	Native to the Lost River system in California and Oregon. Primarily a lake species found in fairly deep water. Adults run up tributary streams to spawn in the spring.	Α	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, Lost River sucker would not be present.
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Т/	_	Occurs only in the Central Valley of California, in association with blue elderberry (Sambucus mexicana). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	Α	The project site is outside the known range of the valley elderberrry longhorn beetle. Potential suitable habitat is not present at the project site. Therefore, the valley elderberry longhorn beetle is not expected to be present.

Empidonax traillii	willow flycatcher	/E	IUCN_LC- Least Concern USFS_S- Sensitive USFWS_BC C-Birds of Conservation Concern	Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters; 2000-8000 ft elevation. Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches.	Α	The project site is outside the known range of the willow flycatcher. These birds inhabit extensive thickets of low, dense willows edge on wet meadows, ponds, or backwaters. This specific habitat type does not exist at the project site; therefore, the species is not expected to be present.
Emys marmorata	northwester n pond turtle	/	BLM_S- Sensitive CDFW_SSC- Species of Special Concem IUCN_VU- Vulnerable USFS_S- Sensitive	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Α	No suitable habitat occurs on the project site. The northwestern pond turtle would thus not be present.
Entosphenus tridentatus	Pacific lamprey	/	AFS_VU- Vulnerable BLM_S- Sensitive CDFW_SSC -Species of Special Concern USFS_S- Sensitive	Found in Pacific Coast streams north of San Luis Obispo County, however regular runs in Santa Clara River. Size of runs is declining. Swift-current gravel-bottomed areas for spawning with water temps between 12-18 C. Ammocoetes need soft sand or mud.	Α	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, Pacific lamprey would not be present

Erethizon dorsatum	North American porcupine	/	CDFW_SG CN- Species of Greatest Conservati on Need CDFW_SSC -Species of Special Concern IUCN_LC- Least Concern	Forested habitats in the Sierra Nevada, Cascade, and Coast ranges, with scattered observations from forested areas in the Transverse Ranges. Wide variety of coniferous and mixed woodland habitat.	A	Based on literatures search, porcupines are a riparian dependent species, and most docummented occurrences are near the Humboldt-Trinity county line. The closest documented sightings in Trinity County occurred north of the Coffee Creek area sometime in the 2000s. None has been documented near project area since the collection of data between 1908 and 2016. Because of this reason and the minimal riparian value on-site, North American porcupine is not expected to be present.
Euderma maculatum	spotted bat	/	BLM_S- Sensitive CDFW_SSC -Species of Special Concern IUCN_LC- Least Concern WBWG_H- High Priority	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	Α	No suitable habitat occurs in the study site. The spotted bat would thus not be present.

Eumops perotis californicus	western mastiff bat	/	BLM_S- Sensitive CDFW_SSC -Species of Special Concern WBWG_H- High Priority	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Α	No suitable habitat occurs in the study site. The western mastiff bat would thus not be present.
Falco peregrinus anatum	American peregrine falcon	D/D	CDF_S- Sensitive CDFW_FP- Fully Protected USFWS_BC C-Birds of Conservation Concern	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, humanmade structures. Nest consists of a scrape or a depression or ledge in an open site.	A	The project site and adjacent lands are in the year-long range of the American peregrine falcon. However, protected cliffs and ledges for cover is not present in or adjacent to the project site. American peregrine falcon or falcon nests were not observed during field surveys; therefore, the species is not expected to nest in or directly adjacent to the project site. As such, the likelihood of the species to be present is unlikely.
Fluminicola n. sp. 14	Potem pebblesnail	/	BLM_S&M- Survey and Manage	An exclusive spring dweller. Occurs on muddy-silty substrate in small cold springs and spring runs. Sites are often shaded. Most sites are small and shallow but perennial cold spring runs with silt substrate.	Α	No suitable habitat occurs on the project site. The Potem pebblesnail would thus not be present.

Fluminicola n. sp. 15	flat-top pebblesnail	/	BLM_S&M- Survey and Manage	An exclusive spiring dweller. Confined to small cold springs and spring sources; substrate ranges from sand to gravel (mostly gravel). The species is found in small but perennial cold springs or at spring sources, mostly on gravel substrate. Most sites have few to no larger aquatic plants in those areas inhabited by the species.	Α	No suitable habitat occurs at the project site. The flat-top pebblesnail would thus not be present.
Fluminicola n. sp. 16	Shasta Springs pebblesnail	/	BLM_S&M- Survey and Manage	An exclusive spring dweller. Occurs in lower portions of larger cold springs, among yellowcress beds and on cobbles and pebbles.	Α	No suitable habitat occurs on the project site. The Shasta Springs pebblesnail would thus not be present.
Fluminicola n. sp. 17	disjunct pebblesnail	/	BLM_\$&M- Survey and Manage	An exclusive spring dweller. Lower parts of larger cold springs, on yellowcress and large substrate particles. The species is found only in very large cold springs.	Α	No suitable habitat occurs on the project site. The disjunct pebblesnail would thus not be present.
Fluminicola n. sp. 18	globular pebblesnail	/	BLM_S&M- Survey and Manage	An exclusive spring dweller. Occurs in small springs and spring headwaters. It is found on the sides and underside of stones in shaded areas. Most sites have few to no larger aquatic plants in those areas inhabited by the species.	Α	No suitable habitat occurs on the project site. The globular pebblesnail would thus not be present.

Fluminicola seminalis	nugget pebblesnail	/	USFS_S- Sensitive	Originally from near mouth of the Sacramento River upstream into the Pit River. Now extirpated from the Sacramento River.	Α	No suitable habitat occurs on the project site. The nugget pebblesnail would thus not be present.
Gonidea angulata	western ridged mussel	/	_	Primarily creeks & rivers & less often lakes. Originally in most of state, now extirpated from Central & Southern Calif.	Α	No suitable habitat occurs on the project site. The western ridged mussel would thus not be present.
Grus canadensis tabida	greater sandhill crane	/T	BLM_S- Sensitive CDFW_FP- Fully Protected USFS_S- Sensitive	Nests in wetland habitats in northeastern California; winters in the Central Valley. Prefers grain fields within 4 miles of a shallow body of water used as a communal roost site; irrigated pasture used as loafing sites.	Α	The project site is outside the known range of the greater sandhill crane. These birds prefer to nest in open habitats with shallow lakes and fresh emergent wetlands. This specific habitat type does not exist at the project site; therefore, the species is not expected to be present.

Haliaeetus leucocephalus	bald eagle	D/E	BLM_S- Sensitive CDF_S- Sensitive CDFW_FP- Fully Protected IUCN_LC- Least Concern USFS_S- Sensitive USFWS_BC C-Birds of Conservation Concern	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Α	The project site and adjacent lands are in the year-long range of the bald eagle. However, suitable nesting sites do not exist at the project site, and bald eagles or eagle nests were not observed during field surveys; therefore, the species is not expected to nest in or directly adjacent to the project site. As such, the likelihood of the species to be present is unlikely.
Helminthoglypta hertleini	Oregon shoulderband	/	BLM_S- Sensitive BLM_S&M- Survey and Manage	Found on basaltic talus slopes; partial riparian associate. Found wherever permanent ground cover/moisture is available. Somewhat adapted to dry conditions during a portion of the year.	Α	No suitable habitat occurs on the project site. The Oregon shoulderband would thus not be present.
Helminthoglypta talmadgei	Trinity shoulderband	/	BLM_S- Sensitive BLM_S&M- Survey and Manage	Limestone rockslides, litter in coniferous forests, old mine tailings, and along shaded streams in the Klamath Mountains.	Α	No suitable habitat occurs on the project site. The Trinity shoulderband would thus not be present.

Hydromantes shastae	Shasta salamander	/T	BLM_S- Sensitive BLM_S&M -Survey and Manage IUCN_VU- Vulnerable USFS_S- Sensitive	Cool, wet ravines and valleys; dominant vegetation is oak woodland or chaparral, also pine and fir; 100 to 2550 ft elevation. Seeks cover under surface objects such as logs, rocks, and limestone slabs or talus, near limestone fissures or caves.	А	The project site is outside the known range of the Shasta salamander. The species occurs in limestone areas in the vicinity of Shasta Reservoir in Shasta County. Therefore, the species is not expected to be present.
Juga (Oreobasis) n. sp. 3	cinnamon juga	/	BLM_S&M- Survey and Manage	An exclusive spring dweller. Occurs in large cold springs and spring runs, with sand- cobble substrate or exposed basalt bedrock. Algae and larger aquatic plants are rare in areas inhabited by this species, although yellowcress may be locally abundant, and scattered monkey lowers common. Water is cold and generally very shallow; flow may be slow-moderate. The immediately surrounding vegetation is mixed pine- deciduous tree/shrub forest; springs with this species are generally well-shaded.	Α	No suitable habitat occurs on the project site. The cinnamon juga would thus not be present.

Lampropeltis zonata	California mountain Kingsnake	/	BLM_S- Sensitive	A habitat generalist, found in diverse habitats including coniferous forest, oak-pine woodlands, riparian woodland, chaparral, manzanita, and coastal sage scrub. Wooded areas near a stream with rock outcrops, talus or rotting logs that are exposed to the sun are good places to find this snake. From 457 - 2,440 m. Most common from 914 - 1,372 m.	Α	No suitable habitat occurs at the project site. The California mountain kingsnake would thus not be present.
Lepidurus packardi	vernal pool tadpole shrimp	E/	IUCN_EN- Endangered	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	Α	The project site is outside the known range of the vernal pool tadpole shrimp. Potential suitable habitat is not present at the project site. Therefore, the species is not expected to be present.
Lepus americanus klamathensis	Oregon snowshoe hare	/	CDFW SSC- Species of Special Concern	Oregon snowshoe hares inhabit alder and willow thickets and young conifer stands in upper montane coniferous forests and subalpine coniferous forests.	Α	No suitable habitat occurs in the study site for Oregon snowshoe hare. The hare would thus not be present.
Margaritifera falcata	western pearlshell mussel	/	_	Aquatic. Prefers lower velocity waters.	Α	No suitable habitat occurs on the project site. The western pearlshell mussel would thus not be present.

Martes caurina	Pacific marten	/	IUCN_LC- Least Concern USFS_S- Sensitive	Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest. Needs variety of different-aged stands, particularly old-growth conifers and snags, which provide cavities for dens/nests.	Α	No suitable habitat occurs on the project site. The Pacific marten would thus not be present.
Monadenia chaceana	Siskiyou shoulderband	/	BLM_S- Sensitive BLM_S&M- Survey and Manage	Lower reaches of major drainages. Found in talus and rock slides, under rocks and woody debris in moist conifer forests, caves, and riparian corridors in shrubby areas. Rocks and woody debris serve as refugia during the summer.	Α	No suitable habitat occurs on the project site. The Siskiyou shoulderband would thus not be present.
Monadenia churchi	Klamath sideband	/	BLM_S&M- Survey and Manage	Lives mostly in limestone outcrops, caves, talus slides, and lava rockslides, but also occurs under forest debris in heavy shade on wooded hillsides.	A	No suitable habitat occurs on the project site. The Klamath sideband would thus not be present.
Monadenia infumata setosa	Trinity bristle snail	/T	IUCN_VU- Vulnerable	Known only from along a few streams in the Trinity River drainage. Juveniles are found under bark of standing dead broadleaf trees, and the species may require this habitat.	А	No suitable habitat occurs on the project site. The Trinity bristle snail would thus not be present.
Monadenia troglodytes troglodytes	Shasta sideband	/	BLM_S&M- Survey and Manage IUCN_DD- Data Deficient	Associated with limestone terrain in Shasta and Siskiyou counties. Associated with pineoak woodlands.	А	No suitable habitat occurs on the project site. The Shasta sideband would thus not be present.

			USFS_S- Sensitive			
Monadenia troglodytes wintu	Wintu sideband	/	BLM_S&M- Survey and Manage IUCN_DD- Data Deficient USFS_S- Sensitive	Limestone areas, including caves, talus slopes, and other rocky areas which are open, brush-covered, or associated with pine-oak woodlands. Refuge sites do not need to have vegetative cover.	Α	No suitable habitat occurs at the project site. The Wintu sideband would thus not be present.
Myotis evotis	long-eared myotis	/	BLM_S- Sensitive IUCN_LC- Least Concern WBWG_M- Medium Priority	Found in all brush, woodland and forest habitats from sea level to about 9000 ft. Prefers coniferous woodlands and forests. Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.	Α	No suitable habitat occurs on the study site. The long-eared myotis would thus not be present.
Myotis thysanodes	fringed myotis	/	BLM_S- Sensitive IUCN_LC- Least Concern USFS_S- Sensitive WBWG_H- High Priority	In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood & hardwood-conifer. Uses caves, mines, buildings or crevices for maternity colonies and roosts.	Α	No suitable habitat occurs on the study site. The fringed myotis would thus not be present.
Myotis yumanensis	Yuma myotis	/	BLM_S- Sensitive IUCN_LC- Least Concem WBWG_LM-	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity	Α	No suitable habitat occurs on the study site. The Yuma myotis would thus not be present.

			Low-Medium Priority	colonies in caves, mines, buildings or crevices.		
Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	Т/Т	AFS_TH- Threatened BLM_P- Priority	Require cool water for reproduction and growth and are reliant on small, cool coastal streams. Cool, clean water and shade are beneficial summer habitat for survival. Spawning habitat consists of gravel substrates free of excessive silt. Deep low-velocity pools are important wintering habitats.	Α	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, coho salmon would not be present.
Oncorhynchus mykiss irideus pop. 1	steelhead - Klamath Mountains Province DPS	/	BLM_P- Priority CDFW_SSC -Species of Special Concern USFS_S- Sensitive	Streams between Elk River, Oregon and the Klamath & Trinity rivers in California, inclusive. Minimum water depth for upstream migration is 18 cm. Water velocities > 3-4 m/sec may impede upstream progress.	Α	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, KMP steelhead would not be present.
Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	Т/	AFS_TH- Threatened BLM_P- Priority	Populations in the Sacramento and San Joaquin rivers and their tributaries. Can survive in a wide range of temperature conditions. Cool, clean water and shade are beneficial summer habitat for survival. Spawning habitat consists of gravel substrates free of excessive silt. Deep low-velocity pools are important wintering habitats.	Α	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, steelhead would not be present.

Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	/CE	CDFW_SSC -Species of Special Concern	No. Calif coastal streams south to Middle Fork Eel River. Within range of Klamath Mtns province DPS and No. Calif DPS. Cool, swift, shallow water and clean loose gravel for spawning, and suitably large pools in which to spend the summer	Α	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, steelhead trout would not be present.
Oncorhynchus mykiss ssp. 2	Interior redband trout	/	AFS_VU- Vulnerable BLM_P- Priority CDFW_SSC -Species of Special Concern USFS_S- Sensitive	Lives in small spring-fed tributaries of the McCloud River. Water temperatures are cold (<15 C), flow is 1-40 CFS.	Α	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, interior redband trout would not be present.
Oncorhynchus tshawytscha pop. 13	chinook salmon - Central Valley fall / late fall-run ESU	/	AFS_VU- Vulnerable BLM_P- Priority CDFW_SSC -Species of Special Concern NMFS_SC- Species of Concern USFS_S- Sensitive	Populations spawning in the Sacramento and San Joaquin rivers and their tributaries. Requires cool oxygenated water for reproduction and growth. Cool, clean, water and shade are beneficial summer habitat for survival. Spawning habitat consists of gravel substrates free of excessive silt and with water temperatures between 6 and 14 C for spawning. Deep low-velocity pools are important wintering habitats.	A	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, Chinook salmon would not be present

Oncorhynchus tshawytscha pop. 30	chinook salmon - upper Klamath and Trinity Rivers ESU.	/	BLM_P- Priority CDFW_SSC -Species of Special Concern USFS_S- Sensitive	The UKTR Chinook salmon population is composed of both ball- and spring-run types. Spring-run chinook in the Trinity River and the Klamath River upstream of the mouth of the Trinity River. Requires cool oxygenated water for reproduction and growth. Cool, clean, water and shade are beneficial summer habitat for survival. Spawning habitat consists of gravel substrates free of excessive silt and with water temperatures between 6 and 14 C for spawning. Deep low-velocity pools are important wintering habitats.	Α	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, UKTR Chinook salmon would not be present.
Oncorhynchus tshawytscha pop. 6	chinook salmon - Central Valley spring-run ESU	Т/Т	AFS_TH- Threatened BLM_P- Priority	Federal listing refers to populations spawning in Sacramento River and tributaries. Requires cool oxygenated water for reproduction and growth. Cool, clean, water and shade are beneficial summer habitat for survival. Spawning habitat consists of gravel substrates free of excessive silt and with water temperatures between 6 and 14 C for spawning. Deep low-velocity pools are important wintering habitats.	A	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, Chinook salmon would not be present.

Oncorhynchus tshawytscha pop. 7	chinook salmon - Sacramento River winter- run ESU	E/E	AFS_EN- Endangered BLM_P- Priority	Sacramento River below Keswick Dam. Spawns in the Sacramento River, but not in tributary streams. Requires cool oxygenated water for reproduction and growth. Cool, clean, water and shade are beneficial summer habitat for survival. Spawning habitat consists of gravel substrates free of excessive silt and with water temperatures between 6 and 14 C for spawning. Deep low- velocity pools are important wintering habitats.	Α	On-site streams do not provide suitable habitat for fish. Further, there is no hydrologic connectivity with downstream waters. Thus, Chinook salmon would not be present.
Pacifastacus fortis	Shasta crayfish	E/E	IUCN_CR- Critically Endangered	Found only in the Fall and Hat creek sub-drainages of the Pit River system. Inhabits cool, clear water with low gradient and temperature variability; substrate is volcanic rubble on sand/gravel; little vegetation.	Α	The project site is outside the known range of the Shasta crayfish. Potential suitable habitat is not present on the project site. Therefore, the species is not expected to be present.
Pekania pennanti	fisher - West Coast DPS	/CT	BLM_S- Sensitive CDFW_SSC -Species of Special Concern USFS_S- Sensitive	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	Α	No suitable habitat occurs in the study site. The fisher would thus not be present.

Prophysaon coeruleum	Blue-gray taildropper slug	/	BLM_S&M- Survey and Manage	Found in a wide range of moist and mixed pine forests. In open or dry areas, it is usually located in sites with relatively higher shade and moisture levels than those of the general forest habitat. It is typically found in moist plant communities, such as big-leaf maple and swordfern. This slug is usually associated with leaf and needle litter, wood chips from decomposing logs, and mosses.	Α	No suitable habitat occurs at the project site. The blue-gray taildropper slug would thus not be present.
Rana boylii	foothill yellow- legged frog	/T or E	BLM_S- Sensitive CDFW_SSC -Species of Special Concern IUCN_NT- Near Threatened USFS_S- Sensitive	Partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Α	No suitable habitat for the foothill yellow- legged frog is present on the study site. The foothill yellow-legged frog would thus not be present.

Riparia riparia	bank swallow	/T	BLM_S- Sensitive IUCN_LC- Least Concern	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	A	The project site and adjacent lands are in the summer range of the bank swallow. However, croplands, meadows, grasslands, or open brushy areas are not present on the project site. Also, mud and solid substrate for nest construction do not exist at the project site. Therefore, the species is not expected to be present.
Spea hammondii	western spadefoot/ Species of Special woodlands. Verne		Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egglaying.	Α	The project site is outside the known range of the western spadefoot. Grasslands with shallow temporary pools are optimal habitats for the species, which is absent at the project site. Therefore, the species is not expected to be present.	

Strix occidentalis caurina	northern spotted owl	Т/Т	BLM_S- Sensitive CDF_S- Sensitive CDFW_SSC -Species of Special Concern IUCN_NT- Near Threatened NABCI_YW L-Yellow Watch List	Old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests with patches of big trees. High, multistory canopy dominated by big trees, many trees with cavities or broken tops, woody debris, and space under canopy.	HP/A	The project site and adjacent lands are in the year-long range of the northern spotted owl. Though suitable nesting sites do not exist at the project site, and northern spotted owls or owl nests were not observed during field surveys, potential dispersal, foraging, and nesting/roosting habitat has been mapped by the Shasta T FS. An activity center and positive observation have also been mapped by SPI within 1.3 mile of the project site. As such, the likelihood of the species to be present on the project site is expected but low.
Strix occidentalis occidentalis	California spotted owl	/	BLM_S- Sensitive CDFW_SSC -Species of Special Concern IUCN_NT- Near Threatened USFS_S- Sensitive	Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure >40 percent. Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.	Α	The project site is outside the known range of the California spotted owl. The species occurs in the southern Cascade Range in northern California, through the Sierra Nevada, across the Transverse and Peninsular Ranges in

			USFWS_BC C-Birds of Conservation Concern			southern California, and up the Coast Range through Monterey County. Therefore, the species is not expected to be present.
Trilobopsis roperi	Shasta chaparral	/	BLM_S&M- Survey and Manage SFS_S- Sensitive	Occurs in open to dense chaparral, hardwood, hardwood-conifer, and riparian habitats with rocky, gravelly substrates, and within and in the vicinity of limestone outcrops.	Α	The project site is outside the known range of the Shasta chaparral. The species is endemic to Shasta County. Potential suitable habitat is not present on the project site. Therefore, the species is not expected to be present.
Trilobopsis tehamana	Tehama chaparral	/	BLM_S- Sensitive BLM_S&M- Survey and Manage USFS_S- Sensitive	Endemic to Butte, Tehama, and Siskiyou counties. Usually found in rocky talus, but has also been found under leaf litter or woody debris within 100 meters of limestone outcrops.	Α	The project site is outside the known range of the Tehama chaparral. Potential suitable habitat is not present at the project site. Therefore, the species is not expected to be present.
Vespericola pressleyi	Big Bar hesperian	/	BLM_S- Sensitive BLM_S&M- Survey and Manage USFS_S- Sensitive	Only found in Trinity County, within the boundaries of Shasta-Trinity National Forest. Found in conifer or hardwood forests in permanently damp areas within 200 meters of stable streams, seeps, and springs.	Α	The project site is outside the known range of the big bar hesperian. The species occurs within the boundaries of the Shasta-Trinity National Forest. Potential

						suitable habitat is not present on the project site. Therefore, the species is not expected to be present.
Vespericola shasta	Shasta hesperian	/	BLM_S&M- Survey and Manage USFS_S- Sensitive	Primarily found in the vicinity of Shasta Lake, up to 915 meters elevation. Moist bottom lands such as riparian areas, springs, seeps, marshes, and in the mouths of caves.	Α	The project site is outside the known range of the Shasta hesperian. The species is endemic to the Klamath Province, primarily in the vicinity of Shasta Lake. Potential suitable habitat is not present at the project site. Therefore, the species is not expected to be present.
Vorticifex n. sp. 1	knobby rams-horn	/	BLM_S&M- Survey and Manage	Found only at two sites in limited areas of a very large, pristine spring complex and its outflow, on rocky substrate; very cold and clear water with saturated dissolved oxygen and swift flow.	Α	The project site is outside the known range of the knobby rams-horn. The species is only known to occur in the Pit River area. Potential suitable habitat is not present on the project site. Therefore, the species is not expected to be present.

TABLE 3

California Native Plant Society
Inventory of Rare and Endangered Plants
U.S. Geological Survey's Dedrick, Junction City, Rush Creek Lakes, and Weaverville
7.5-minute Quadrangles

Common Name	Scientific Name	CA Rare Plant Rank	Blooming Period	State Listing Status	Federal Listing Status
Bolander's lily	Lilium bolanderi	4.2	June – July	-	_
California lady's-slipper	Cypripedium californicum	4.2	Apr - Aug (Sep)	-	_
California pitcherplant	Darlingtonia californica	4.2	Apr - Aug	-	-
Canyon Creek stonecrop	Sedum paradisum ssp. paradisum	1B.3	May – June	=	
clustered lady's-slipper	Cypripedium fasciculatum	4.2	Mar-Aug	_	1
Dudley's rush	Juncus dudleyi	2B.3	July – Aug	-	Ī
elongate copper moss	Mielichhoferia elongata	4.3	=	=	;=)
English Peak greenbrier	Smilax jamesii	4.2	May – July (Aug – Oct)	_	1
glaucous tauschia	Tauschia glauca	4.3	Apr – June	-	_
Heckner's lewisia	Lewisia cotyledon var. heckneri	1B.2	May - July	1	1
Howell's draba	Draba howellii	4.3	June – July	_	-
Klamath Mountain catchfly	Silene salmonacea	1B.2	(Apr) May – July		<u>12—1</u> 4
Klamath rock daisy	Erigeron petrophilus var. viscidulus	4.3	Jul – Sep	_	I
modest rockcress	Arabis modesta	4.3	Mar – July	=	I
mountain lady's-slipper	Cypripedium montanum	4.2	Mar-Aug	_	_
Oregon fireweed	Epilobium oreganum	1B.2	June – Sep	_	1
Purdy's fritillary	Fritillaria purdyi	4.3	Mar - June	-	
rattlesnake fern	Botrypus virginianus	2B.2	June – Sep	-	_
Regel's rush	Juncus regelii	2B.3	Aug	-	_
Siskiyou daisy	Erigeron cervinus	4.3	June – Aug	=	=
Siskiyou onion	Allium siskiyouense	4.3	(Apr) May - July	_	1
thread-leaved beardtongue	Penstemon filiformis	4.2	May – Aug (Sep)	_	
Tracy's beardtongue	Penstemon tracyi	1B.3	June – Aug	_	
Tracy's collomia	Collomia tracyi	4.3	June - July	_	_

Poison Pond 2 Disposal Site

Rare	Plant Rank
1A	Plants presumed extinct in California and either rare or extinct elsewhere
1B	Plants rare, threatened or endangered in California and elsewhere
2A	Plants presumed extinct in California but common elsewhere
2B	Plants rare, threatened, or endangered in California but common elsewhere
3	Review List: Plants about which more information is needed (generally not considered special-status, unless unusual circumstances warrant)
4	Watch List: Plants of limited distribution (generally not considered special-status, unless unusual circumstances warrant)
Rare	Plant Threat Rank
0.1	Seriously threatened in California
0.2	Moderately threatened in California
0.3	Not very threatened in California

Source: California Native Plant Society, Rare Plant Program. 2022. Inventory of Rare and Endangered Plants of California (online edition, v9-01 1.0)). http://www.rareplants.cnps.org. Accessed February 2022.

Poison Pond 2 Disposal Site

02/12/2022

Project Summary

Project Code: 2022-0006933

Event Code: None

Project Name: Poison Pond 2 Disposal Site
Project Type: Disposal - Beneficial Use
Project Description: Develop an earthen disposal site.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.7383672,-123.0097905919423,14z



Counties: Trinity County, California

02/12/2022

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an
office of the National Oceanic and Atmospheric Administration within the Department of
Commerce.

Birds

Northern Spotted Owl Strix occidentalis caurina
There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1123

Yellow-billed Cuckoo Coccyzus americanus
Population: Western U.S. DPS
There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911

Insects

NAME STATUS

Monarch Butterfly Danaus plexippus

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743

Candidate

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Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardi</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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