

# Pioneer Trail Pipeline and Pump Station

Draft Initial Study/Mitigated Negative Declaration

Prepared by:

**Truckee Donner Public Utility District**  
11570 Donner Pass Road  
Truckee, CA 96161

*With technical support from:*

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March 2022

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## ABBREVIATIONS AND ACRONYMS

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amsl	above mean sea level
APE	Area of Potential Effect
APN	Assessors Parcel Number
AB	Assembly Bill
ANFO	Ammonium nitrate/ fuel oil
BMP	Best Management Practices
BRE	Biological Resources Evaluation
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emission Estimator Model
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCAPCD	Calaveras County Air Pollution Control District
CCIC	Central California Information Center
CCR	California Code of Regulations
CDC	California Department of Conservation
CDF	California Department of Forestry and Fire Protection
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geologic Survey
CH <sub>4</sub>	Methane
CIPP	Cured-In-Place Pipe
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO <sub>2</sub>	Carbon Dioxide
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CWA	Clean Water Act
CY	Cubic Yards
dB	Decibels

dba	Decibels with A weighting
TDRPD	Truckee Donner Recreation and Park District
DPM	Diesel Particulate Matter
DTSC	California Department of Toxic Substances Control
DU	Dwelling Unit
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
°F	Fahrenheit (degrees)
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FMMP	Farmland Mapping and Monitoring Program
FPC	Fire Plan Committee
FYLF	Foothill Yellow-legged Frog
GHG	Greenhouse Gas
GWh	Gigawatt Hours
HFC	Hydrofluorocarbons
HR	House of Representatives Bill
IS/MND	Initial Study/Mitigated Negative Declaration
kWh	Kilowatt Hours
L <sub>DN</sub>	Day Night noise level
LRA	Local Responsibility Area
LWRWQB	Lahontan Regional Water Quality Control Board
M	Manufacturing
MCAB	Mountain Counties Air Basin
MLD	Most Likely Descendant
MM	Mitigation Measure
mPa	Micro-Pascals
MRF	Material Recovery Facility
MT CO <sub>2</sub> e	Metric Tons of Carbon Dioxide Equivalent
N <sub>2</sub> O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards

NCFP	Nevada County Fire Plan
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NOA	Naturally Occurring Asbestos
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
NRCS	Natural Resources Conservation Service
NSAQMD	Northern Sierra Air Quality Management District
OSHA	Occupational Safety and Health Administration
PFC	Perfluorocarbons
PM <sub>10</sub>	Coarse Particulate Matter
PPV	Peak Particle Velocity
PRC	Public Resources Code
RCNM	Road Construction Noise Model
RMS	Root Mean Square
ROW	Right-of-Way
RS 0.5	Single Family Residential 0.5 du/acre
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SB	Senate Bill
SDR	Standard Dimension Ratio
SF	Square feet
SF <sub>6</sub>	Sulfur hexafluoride
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SPL	Sound Pressure Level
SR	State Route
SRA	State Responsibility Area
SSC	Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TCR	Tribal Cultural Resource
TDBH	Trunk Diameter at Breast Height
TTSA	Tahoe-Truckee Sanitation Agency
TTSD	Tahoe-Truckee Sierra Disposal

USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Services
USGS	United States Geological Survey
VHFHSZ	Very High Fire Hazard Severity Zone

## INITIAL STUDY

1. Project title: Pioneer Trail Pipeline and Pump Station
2. Lead agency name and address: Truckee Donner Public Utility District (District)  
11570 Donner Pass Road  
Truckee, CA 96161
3. Contact person and phone number: Neil Kaufman, Water System Engineer  
(530) 587-3896  
neilkaufman@tdpud.org
4. Project location: Town of Truckee, Nevada County, California
5. General plan designation: Residential 0.5 du/acre; Industrial
6. Zoning: Single Family Residential 0.5 du/acre (RS 0.5);  
Manufacturing (M)

## 1.0 INTRODUCTION

Truckee Donner Public Utility District (District) proposes to construct and operation of a single pump station and an approximately 1.7-mile-long pipeline alignment between Northwoods Boulevard and the intersection of Pioneer Trail and Comstock Drive in the Town of Truckee. The project study area included land approximately 25-feet either side of the proposed pipeline alignment. The proposed project includes a 6-foot-wide and 6-foot-deep excavated trench within the pipeline alignment. During construction, approximately 20-feet on either side of the excavated trench may be temporarily disturbed by construction equipment and materials staging. Following construction, erosion controls measures and limited revegetation would be implemented, as needed, to assist in the rehabilitation of the disturbed construction area.

This Initial Study addresses the proposed project and whether it may cause significant effects on the environment. These potential environmental effects are further evaluated to determine whether they were examined in the Town of Truckee General Plan 2025 Environmental Impact Report (Town 2006b). In particular, consistent with Public Resources Code (PRC) §21083.3, this Initial Study focuses on any effects on the environment which are specific to the proposed project, or to the parcels on which the project would be located, which were not analyzed as potentially significant effects in the General Plan EIR, or for which substantial new information shows that identified effects would be more significant than described in the previous EIRs.

The Initial Study is also intended to assess whether any environmental effects of the project are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or by other means [§15152(b)(2)] of the California Environmental Quality Act (CEQA) Guidelines. If such revisions, conditions, or other means are identified, they will be identified as mitigation measures.

This Initial Study relies on CEQA Guidelines §15064 and 15064.4 in its determination of the significance of environmental effects. According to §15064, the finding as to whether a project may have one or

more significant effects shall be based on substantial evidence in the record, and that controversy alone, without substantial evidence of a significant effect, does not trigger the need for an EIR.

## 2.0 PROJECT BACKGROUND

The following studies applicable to the proposed project are hereby incorporated by reference. These studies are included as appendices to the Initial Study, and copies of these studies, unless identified as confidential, may be viewed at the Truckee Donner Public Utility District, 11570 Donner Pass Road, Truckee, CA 96161, during regular business hours.

- Air Quality and Greenhouse Gas Emissions Impact Assessment for the Pioneer Trail Pipeline and Pump Station Project, HELIX Environmental Planning, Inc. (HELIX).
- Biological Resources Technical Report for the Pioneer Trail Pipeline and Pump Station Project, prepared by HELIX.
- Cultural Resources Assessment for the Pioneer Trail Pipeline and Pump Station Project, prepared by HELIX.

## 3.0 PROJECT AND SETTING

### 3.1 Project Location

The proposed project is located in the Town of Truckee in Nevada County, California, north of U.S. Interstate 80. The proposed project is located within Township 17 North, Range 16 East, Section 9,10 of the U.S. Geological Survey 7.5 Truckee, California quadrangle topological map. The proposed project would pass through five Assessor's Parcel Numbers (APN) including: 019-400-028; 019-400-029; 019-400-031; 018-010-051; and 018-010-052. Refer to **Figure 1** for a Vicinity Map and **Figure 2** for a Site Plan. All figures are presented in **Appendix A**.

### 3.2 Project Purpose

The Tahoe Donner Subdivision is currently served by a single 14-inch welded steel pipeline with two pump stations and two storage tanks that essentially serve as forebays. These facilities were constructed in the early 1970s and are approaching the end of their useful life. The District has identified the need to construct a second pipeline to provide water to the subdivision. The purpose of the proposed project is to construct a 16-inch pipeline and a single pump station to transport potable water to the Tahoe Donner Subdivision to provide for system redundancy and fire flows in cases of emergency. The project also proposes to construct additional conduits for electrical and communication services.

### 3.3 Project Description

#### 3.3.1 Project Components

The project is proposing an approximately 1.7-mile-long pipeline alignment corridor running from Northwoods Boulevard and terminating at the intersection of Comstock Drive and Pioneer Trail. The project study area included land approximately 25-feet either side of the proposed pipeline alignment. The proposed project includes a 6-foot-wide and 6-foot-deep excavated trench within the pipeline alignment. During construction, approximately 20-feet on either side of the excavated trench may be

temporarily disturbed by construction equipment and materials staging. Following construction, erosion controls measures and limited revegetation would be implemented, as needed, to assist in the rehabilitation of the disturbed construction area. The proposed project would supply water, electrical and communications utilities to the Truckee Donner Subdivision. The proposed pipelines' western terminus would be on Northwoods Boulevard and the pipelines' eastern terminus would be at the intersection of Comstock Drive and Pioneer Trail.

In addition to the water pipeline, the District intends to install underground electrical and communications conduits in the pipeline trench. These conduits would provide for additional connections within the District's electrical distribution system, increasing the reliability and redundancy.

### **3.3.2 Pipeline Route Options**

The pipeline would begin on Northwoods Boulevard and move east towards the Comstock Drive and Pioneer Trail. There are two pipeline alignment options for the proposed project, Alignment A and Alignment B. Both alignments are included in the impact analysis throughout the remaining sections of this document to allow for flexibility with final design and permitting. Each alignment option is described below and depicted on **Figure 2**.

#### **Alignment A**

Alignment A would begin on Northwoods Boulevard and move north on Northwoods Boulevard for approximately 0.05-mile before turning east on the paved Trout Creek Trail. The alignment would continue east along Trout Creek Trail for approximately 0.35-mile until it would reach the existing pedestrian bridge that crosses over Trout Creek. Trout Creek Trail, a Class I Bike Trail, is a 12-foot-wide paved trail and is lined with trees and large boulders and used by cyclists and pedestrians primarily during the warmer months.

#### **Alignment B**

Alignment B would begin on Northwoods Boulevard and move north on Northwoods Boulevard for approximately 0.05-mile before turning east on the existing overhead utility corridor. After moving approximately 0.23-mile along the utility corridor, the alignment would move northeast for approximately 0.04-mile through disturbed habitat with no jurisdictional features before reaching the paved Trout Creek Trail. The alignment would then move east along Trout Creek Trail for an estimated 0.09-mile until it would reach the existing pedestrian bridge the crosses over Trout Creek.

The remaining description of the pipeline would reflect both Alignment A and Alignment B.

When the pipeline alignment would reach the pedestrian bridge crossing, the pipeline would be attached to the 0.02-mile bridge to avoid impacts to Trout Creek. After crossing Trout Creek, the pipeline alignment would continue along the paved Trout Creek Trail for approximately 0.47-mile before making a slight turn northwards to join an existing dirt utility access road for approximately 0.31-mile. From the dirt road, the alignment would re-enter the existing overhead utility corridor for 0.3-mile. From the end of the utility corridor, the alignment would join an existing paved driveway that travels 0.17-mile to the intersection of Comstock Drive and Pioneer Trail, the eastern terminus of the pipeline alignment. Both Alignment A and Alignment B would be the same width (6-feet) and would be excavated to approximately the same depth (6-feet).

Total length of Alignment A and Alignment B would each be approximately 1.7-miles in length.

### **3.3.3 Pump Station Components**

Two pump station locations are proposed for the construction of a single pump station. The proposed sites are located at the end of the eastern existing overhead electrical transmission utility corridor near the eastern terminus, on District owned property.

### **3.3.4 Construction Staging Area and Equipment**

The total size of the proposed staging areas would be approximately the length of the pipeline, 1.7-miles, and the width of the pipeline, and potential impacts from the proposed staging areas have been evaluated as part of this environmental analysis. Anticipated construction equipment to be used includes excavators, haul trucks, backhoes, and mini excavators.

### **3.3.5 Construction Schedule**

The District plans to initiate project construction in July 2022 and construction is anticipated to be completed by October 2023. Temporary disruptions to the existing steel pipeline and pump stations service during project construction are not anticipated. Portions of the Class I trail on which the proposed pipeline would be constructed would be temporarily closed to pedestrian and bicycle traffic during construction.

## **3.4 Site Description**

The Town of Truckee is located in the Lake Tahoe region of north-eastern California. Truckee is in the eastern part of Nevada County, approximately 12-miles north of Lake Tahoe, 30-miles west of Reno, Nevada and 100-miles east of Sacramento. The Town of Truckee lies just east of the Sierra Nevada's crest at Donner Pass, within the valley of the Truckee River and surrounding upland areas. The project site is approximately 6,235-feet above mean sea level at the western end of the alignment and approximately 5,980-feet above mean sea level near the eastern end of the alignment. The entire length of the proposed pipeline alignment and pump station are contained within the boundary of the project area, as is any construction disturbance or necessary grading for the pipeline options and pump station.

The project consists of an approximately 1.7-mile-long pipeline alignment, much of it running along the paved Trout Creek Trail, that was constructed in 2014, or through existing overhead utility corridors or existing dirt paths. The project would be routed through previously disturbed, mostly undeveloped terrain and would require the above ground crossing of Trout Creek, that runs northwest to southeast through the project site. In addition to the pipeline, the project proposes to install one pump station on District-owned property near the eastern terminus of the pipeline alignment. The project site is bounded by residential parcels and forested land to the north and west, industrial land uses to the east, and the Coyote Moon Golf Course to the south.

## **3.5 CEQA Process**

This document has been prepared to satisfy the requirements of CEQA (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). CEQA



requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before they approve or implement those projects. The Initial Study is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. In the case of the proposed project, the District is the Lead Agency and will use the Initial Study to determine whether the proposed project has a significant effect on the environment.

If the Lead Agency finds substantial evidence that any aspect of the proposed project, either alone or in combination with other projects, may have a significant effect on the environment, that agency is required to prepare an Environmental Impact Report (EIR), a supplement to a previously prepared EIR, or a subsequent EIR to analyze the proposed project at hand. If the agency finds no substantial evidence that the proposed project or any of its aspects may cause a significant impact on the environment, then a negative declaration may be prepared. If, over the course of the analysis, the proposed project is found to have a significant impact on the environment that, with specific mitigation measures, can be reduced to a less than significant level, then a supplemental mitigated negative declaration may be prepared. In the case of this proposed project, all significant or potentially significant impacts on the environment would be reduced to less-than-significant levels with incorporation of specific mitigation measures. Therefore, this document supports the adoption of a mitigated negative declaration.

## **3.6 Regulation of Urban Development**

### **3.6.1 General Plan**

The site is designated as Residential 0.5 dwelling unit (du)/ acre and Industrial in the Town of Truckee 2025 General Plan.

Residential uses comprise about 25 percent of land within the Town limits and accommodate about 10,800 housing units. Of this, the vast majority is single-family housing. Housing areas are spread throughout the Town of Truckee, in Downtown Truckee, and the Donner Lake and Gateway areas, and in a series of residential subdivisions that include Tahoe Donner, Glenshire, Devonshire, the Prosser Lake neighborhoods, Olympic Heights, and Sierra Meadows. Multi-family housing comprises about three percent of residential land use in terms of area but represents about 13 percent of the total housing stock in Truckee. Multi-family residential development is concentrated in locations closer to the Town of Truckee center, primarily in southeast Truckee neighborhoods along the Brockway Road corridor, and in Gateway. Several, primarily condominium projects, are located in the Donner Lake area and along Northwoods Boulevard in Tahoe Donner.

Commercial uses, including both retail and office development comprise approximately four percent of all developed land in Truckee. The majority of commercial uses in Truckee are concentrated in the Downtown area, and in the Gateway commercial district. Smaller retail commercial centers are located elsewhere in the Town of Truckee, including the Crossroads Plaza south of the Interstate-80/State Route 89 South intersection, and neighborhood centers along Donner Pass Road in Donner Lake, on Dorchester Drive on the west side of the Glenshire neighborhood, and along Northwoods Boulevard in Tahoe Donner. Brockway Road has an assortment of commercial uses, including both retail and office use, along its length. Larger commercial developments in this area include the Martis Village commercial center at the intersection of Palisades Drive and a cluster of office development located near the airport, just north of the Placer County line. The Pioneer Commerce Center, located at the east end of Pioneer trail, houses a number of professional offices and service commercial uses.

### 3.6.2 Zoning Ordinance

The zoning designation of the site is in the Single Family Residential (RS 0.5) District and the Manufacturing (M) District. According to the Town of Truckee Municipal Code, the RS zoning district applies to parcels with existing residential development and areas appropriate for new clustered development. Allowable densities range from 0.5 to 4.0 dwelling units per acre. The RS zoning district is consistent with the Residential, Residential Cluster, Open Space Recreation, Public and Tahoe Donner PC land use classifications of the General Plan.

The M zoning district is applied to areas appropriate for manufacturing/industrial uses including processing, distributions, and storage. The floor area ratio for industrial development in the M zoning district is 0.20. The M zoning district is consistent with the Industrial land use classification of the General Plan. The Residential land use designation overlays with the RS Zoning District and the Industrial land use designation overlays with the M Zoning District.

**Table 1** outlines the land use designation and zoning district for the five APN's that pass through the proposed project.

**Table 1. Land Use Designation and Zoning Districts Overview**

Assessor's Parcel Number (APN)	2025 General Plan Land Use Designation	Zoning District	Current Use
019-400-028	Residential and Commercial	RS 0.5	Undeveloped
019-400-029	Commercial	RS 0.5 and M	Undeveloped
019-400-031	Residential and Commercial	RS 0.5	Undeveloped
018-010-051	Residential	RS 0.5	Golf Course
018-010-052	Residential	RS 0.5	Golf Course

## 4.0 REQUIRED APPROVALS

A listing and brief description of the regulatory permits and approvals required to implement the proposed project are provided below. This Initial Study is intended to address the environmental impacts associated with all of the following decision action and approval:

- Encroachment Permit from the Town of Truckee.

## **4.1 Other Agency Approvals**

This Initial Study has been prepared by the Lead Agency in recognition of its duty to minimize environmental impacts while balancing potentially competing public objectives. Per Section 15021(a) of the CEQA Guidelines, the Lead Agency is required to avoid or minimize environmental impact where feasible. In meeting both the spirit and intent of this requirement, the Lead Agency has identified project alignment options (Alignment A and Alignment B) that purposely avoid impact to jurisdictional features and sensitive resources that may be present within the project study area. Accordingly, the Lead Agency has effectively avoided the need or requirement to seek project approval from outside agencies, including but not limited to: U.S. Army Corps of Engineers; California Department of Fish and Wildlife; Lahontan Regional Water Quality Control Board; Nevada Energy; Town of Truckee (minus the proposed encroachment permit); Truckee Sanitation District; and/or the Washoe Tribe of Nevada and California.

## 5.0 ENVIRONMENTAL EVALUATION

The lead agency has defined the column headings in the environmental checklist as follows:

- A. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- B. “Less Than Significant with Mitigation Incorporated” applies where the inclusion of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” All mitigation measures are described, including a brief explanation of how the measures reduce the effect to a less than significant level. Mitigation measures from earlier analyses may be cross-referenced.
- C. “Less Than Significant Impact” applies where the project does not create an impact that exceeds a stated significance threshold.
- D. “No Impact” applies where a project does not create an impact in that category. “No Impact” answers do not require an explanation if they are adequately supported by the information sources cited by the lead agency which show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone).

### 5.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED


The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture/Forestry Resources	<input checked="" type="checkbox"/> Air Quality
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Energy
<input checked="" type="checkbox"/> Geology/Soils	<input type="checkbox"/> Greenhouse Gas Emissions	<input checked="" type="checkbox"/> Hazards/Hazardous Materials
<input type="checkbox"/> Hydrology/Water Quality	<input type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Mineral Resources
<input checked="" type="checkbox"/> Noise	<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Public Services
<input type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation	<input checked="" type="checkbox"/> Tribal Cultural Resources
<input type="checkbox"/> Utilities/Service Systems	<input checked="" type="checkbox"/> Wildfire	<input type="checkbox"/> Mandatory Findings of Significance

## 5.2 DETERMINATION

On the basis of this initial evaluation:

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

  
 Brian C. Wright, General Manager  
 Truckee Donner Public Utility District

Date 3-10-2022

### 5.3 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 5.3.1 Background and Setting

Aesthetic or visual resources include the “scenic character” of a particular region and site. Scenic features can include both natural features, such as vegetation and topography, and manmade features (e.g., historic structures). Areas that are more sensitive to potential effects are usually readily observable by many people, such as land found adjacent to major roadways and hilltops.

The scenic character of the project area includes natural features and manmade features. The Tahoe Donner subdivision was constructed in the early 1970s and the Trout Creek Recreational Trail was constructed in 2014. Much of the area is surrounded by the Tahoe National Forest and the project area and its generally vicinity is a mosaic of forested lands, residential areas, and commercial and industrial development. The project area consists of a 1.7-mile-long corridor with a 6-foot-wide and 6-foot-deep excavated trench with 20-feet of temporarily disturbed area due to construction on either side of the excavated trench. The corridor follows previously disturbed, undeveloped areas along most of its length and is generally characterized by a moderate level of human disturbance. The recreational trail and dirt roads in the project area are subject to regular recreational uses including walking, jogging, bicycling, and cross-country skiing. The utility corridor contains overhead utility lines and utility poles and the vegetation is regularly maintained to prevent interference with the power lines.

Scenic vistas within the Town of Truckee limits are identified in the *Town of Truckee 2025 General Plan* (Town, 2006a). According to the plan, the project area is not a scenic vista or part of any larger land area that is designated as scenic vista. A review of the current Caltrans Map of Designated Scenic Routes (2011) indicates that there are no officially designated state scenic highways with the Town of Truckee limits, including within the project area. Northwoods Boulevard, Comstock Drive, and Pioneer Trail, the roadways within the project area, are not identified as scenic corridors in the *Town of Truckee 2025 General Plan*. The portion of the project area east of Trout Creek is identified in the *Town of Truckee*

2025 *General Plan* as a prominent slope or hillside. The scenic character of this hillside within the project area is pine forest, as described above. However, clearings are also visible on the hillside due to disturbed areas from overhead electrical transmission lines.

### 5.3.2 Analysis

a) Have a substantial adverse effect on a scenic vista?

**Less than significant impact.** A scenic vista is defined as a viewpoint that provides an expansive view of a highly valued landscape for the benefit of the general public. The project area is not designated as a scenic vista in the *Town of Truckee 2025 General Plan* (Town 2006a). The proposed Alignment A and Alignment B would run east from Northwoods Boulevard to the intersection of Comstock Drive and Pioneer Trail and would be majority subterranean. A single pump station would be constructed near the intersection of Comstock Drive and Pioneer Trail. Construction of the proposed project would be temporary, and the improvements would not permanently change any scenic vistas in the vicinity of the proposed project. Therefore, the proposed project would have a less than significant impact, and no mitigation would be necessary.

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

**No impact.** A review of the current Caltrans Map of Designated Scenic Routes (2011) indicates that there are no officially designated state scenic highways with the Town of Truckee limits. Interstate 80, which is partially within the Town of Truckee limits, is eligible but not officially designated as a state scenic highway. Accordingly, the proposed project would have no impact on aesthetic resources associated a designated state scenic highway.

c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning, and other regulations governing scenic quality?

**Less than significant impact.** The proposed project would construct a pipeline alignment for water, electrical, and communications utilities for the Tahoe Donner Subdivision. Alignment A and Alignment B would be majority subterranean and would have no permanent impact on the visual character or quality of the site and surrounding areas. Construction of the project would occur in the warmer months (Summer - early Fall) to avoid snow conditions and comply with Lahontan Regional Water Quality Control Board regulations. The project would temporarily degrade the existing paved Trout Creek Trail during construction of the pipeline alignment, which would restrict pedestrians from using the path during this period of time. The pump station, as included in both alignment options, would be above ground and may be visible from Pioneer Trail and Comstock Drive. Staging of construction equipment would temporarily alter the visual character of the site and surrounding areas; however, the staging areas are located in previously disturbed areas, and equipment staging would be limited to the short-term construction period.

The project area would be zoned Single Family Residential 0.5 du/acre and Manufacturing and would have a Rural Residential 0.5 du/acre and Industrial Land Use Designation. The proposed project would have a less than significant impact on the existing visual character of the site and surrounding areas, and no mitigation would be necessary.

- d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

**Less than significant impact.** The proposed project would not introduce any new lighting or create a new source of glare. Majority of Alignment A and Alignment B would be placed underground, and a short segment of the pipeline would be located above ground and attached to a bridge crossing. A pump station would be located above ground on the eastern terminus of the pipeline alignment. The segment of the pipeline above ground, as well as the pump station, would be made of material that would not produce glare. Some artificial lighting may be needed during construction activities where portions of the pipeline alignment would be constructed in dark areas; however, lighting for project construction would be temporary and short term. Therefore, the proposed project would have a less than significant impact, and no mitigation would be necessary.



## 5.4 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined 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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non- forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 5.4.1 Background and Setting

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. No portion of the proposed project is under a Williamson Act Land Conservation Contract, within an agricultural preserve, and/or timber management area. Alignment A and Alignment B, as well as the pump station, are surrounded by residential parcels and forested land to the north and west, industrial land uses to the east, and the Coyote Moon Golf Course to the south.

According to the California Important Farmland Finder (2019), areas of Prime Farmland, Unique Farmland, or farmland of Statewide Importance do not occur within eastern Nevada County, including within the entire project area boundary.

Much of the area within the northern boundary of the project area is characterized by pine forest vegetation cover. However, the project area is not zoned as 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)).

#### 5.4.2 Analysis

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

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

**No Impact.** The proposed project involves the construction of a new pipeline alignment to provide water, electrical, and communications utilities to the Tahoe Donner Subdivision. Alignment A and Alignment B would mainly run along the existing paved Trout Creek Trail, that was constructed in 2014, and through existing overhead utility corridors and dirt paths. Prime Farmland, Unique Farmland, or Farmland of Statewide Importance does not occur within the project area (California Important Farmland Finder, 2019). Accordingly, the proposed project would not result in converting any of these types of farmlands to a non-agricultural use. Additionally, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract because the project area does not contain any areas currently zoned for agricultural use and is not associated with any known Williamson Act contract. The proposed project would have no impact and mitigation is not required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

**No impact.** The proposed project would not traverse lands zoned as forest land, timberland, and/or Timberland Production. Therefore, the proposed project would have no impact.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

**Less than significant impact.** The proposed project would not require to be constructed in forested areas. The entire 1.7-mile-long pipeline corridor of Alignment A and Alignment B would utilize either the road, a cleared recreational trail, disturbed areas, or utility corridors. The pipeline alignment would have a 6-foot-wide and 6-foot-deep excavated trench. During construction, approximately 20-feet on either side of the excavated trench would be temporarily disturbed by the construction area. Following construction, erosion controls measures, and limited revegetation would be implemented, as needed, to assist with rehabilitation of the disturbed construction area. Thus, the proposed project is not anticipated to result in the conversion of forest land to a non-forest use. Impacts would be less than significant.

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?

**Less than significant.** Farmland does not occur within the project area boundary, and agricultural use is not a current use of the project area. Environmental impacts from the proposed project are anticipated

to be minimal and not result in the conversion of forest land to non-forest use. Impacts would therefore be less than significant.

## 5.5 AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or result in a cumulatively considerable net increase in an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in substantial emissions (such as odors or dust) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 5.5.1 Environmental Setting

The Town of Truckee and the project site is located in the Nevada County portion of the Mountain Counties Air Basin (MCAB), which encompasses all of Amador, Calaveras, Mariposa, Nevada, Plumas, Sierra, and Tuolumne Counties, as well as portions of El Dorado and Placer Counties. The Northern Sierra Air Quality Management District (NSAQMD) is responsible for implementing emissions standards and other requirements of federal and state laws in the Nevada, Sierra, and Plumas County portions of the MCAB.

Ambient air quality is described in terms of compliance with state and national standards, and the levels of air pollutant concentrations considered safe, to protect the public health and welfare. The U.S. Environmental Protection Agency (USEPA) is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several criteria pollutants. As permitted by the CAA, California has adopted more stringent air emissions standards (California Ambient Air Quality Standards, or CAAQS) and expanded the number of regulated air constituents.

The California Air Resources Board (CARB) is required to designate areas of the state as attainment, nonattainment, or unclassified for any state standard. An “attainment” designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area. A “nonattainment” designation indicates that a pollutant concentration violated the standard at least once. The air quality attainment status of the Nevada County portion of MCAB, including the Town of Truckee, is shown in **Table 2**.

**Table 2. Nevada County Attainment Status**

Pollutant	State of California Status	Federal Status
Ozone (1-hour)	Nonattainment	No Federal Standard
Ozone (8-hour)	Nonattainment	Nonattainment
Coarse Particulate Matter (PM <sub>10</sub> )	Nonattainment	Unclassified
Fine Particulate Matter (PM <sub>2.5</sub> )	Unclassified	Unclassified
Carbon Monoxide (CO)	Unclassified	Unclassified/Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Unclassified/Attainment
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Visibility Reducing Particles	Unclassified	No Federal Standard

Source: CARB 2020

The Nevada County portion of the MCAB is designated as nonattainment for the State and federal ozone standards, and the State PM<sub>10</sub> standard.

The NSAQMD prepares plans for meeting the federal air quality standards which are incorporated into the State Implementation Plan (SIP), which is subsequently submitted to the U.S. Environmental Protection Agency (USEPA), the federal agency that administrates the Federal Clean Air Act of 1970 (CAA), as amended in 1990. The CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The SIP is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The USEPA has the responsibility to review all SIPs to determine whether they conform to the requirements of the CAA.

Ozone is not emitted directly into the environment, but is generated from complex chemical reactions between ROG, or non-methane hydrocarbons, and NO<sub>x</sub> that occur in the presence of sunlight. ROG and NO<sub>x</sub> generators in Nevada County include motor vehicles, other transportation sources, industrial processes, and agriculture. However, most of the ozone affecting Nevada County is the result of pollutants transported in the atmosphere from the more heavily developed urban and agricultural areas in the Sacramento Valley and Bay Area. PM<sub>10</sub> and PM<sub>2.5</sub> arise from a variety of sources, including road dust, diesel exhaust, fuel combustion, tire and brake wear, construction operations and windblown dust, and can also be formed from chemical reactions in the atmosphere.

### Toxic Air Contaminants

Toxic air contaminants (TAC) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness or that may pose a present or potential hazard to human health. TACs can cause long-term chronic health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation (a cough), runny nose, throat pain, and headaches. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For

carcinogenic TACs, there is no level of exposure that is considered safe and impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

The Health and Safety Code (§39655[a]) defines TAC as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health.” All substances that are listed as hazardous air pollutants pursuant to subsection (b) of Section 112 of the CAA (42 United States Code Sec. 7412[b]) are designated as TACs. Under State law, the California Environmental Protection Agency (CalEPA), acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is referred to as diesel particulate matter (DPM). Almost all DPM is 10 microns or less in diameter, and 90 percent of DPM is less than 2.5 microns in diameter (CARB 2022). Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, CARB identified DPM as a TAC based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM has a notable effect on California’s population—it is estimated that about 70 percent of total known cancer risk related to air toxics in California is attributable to DPM (CARB 2022).

### 5.5.2 Analysis

While the final determination of whether a project has a significant effect is within the purview of the lead agency pursuant to CEQA Guidelines Section 15064(b), NSAQMD recommends that its air pollution thresholds be used to determine the significance of project emissions. The criteria pollutant thresholds and various assessment recommendations are contained in NSAQMD’s Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects (Guidelines) and are discussed under the checklist questions below (NSAQMD 2009).

a) Conflict with or obstruct implementation of the applicable air quality plan?

**Less than significant impact.** As discussed above, the Nevada County portion of the MCAB is designated as nonattainment for the State and federal ozone standards, and the State PM<sub>10</sub> standard. The controls developed by NSAQMD and CARB, and implemented into the SIP, to bring air quality in the state and the Nevada County portion of the MCAB into attainment are based on local and state growth assumptions. The project would replace/upgrade existing aging water and utilities infrastructure and would not result in population or employment growth in the region or state. In addition, as discussed in criterion b), below, the project’s construction and operational emissions would be below the NSAQMD Level B thresholds, and the project would not result in a cumulatively considerable net increase in criteria pollutants. Therefore, the project would not conflict with or obstruct implementation of the SIP, and the impact would be less than significant.

- 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?

**Less than significant impact with mitigation.** By its very nature, air pollution is largely a cumulative impact. No single project is of sufficient size to, by itself, result in the nonattainment of ambient air quality standards. Instead, the potential for a project's individual emissions to contribute to existing cumulatively significant adverse air quality impacts is evaluated.

NSAQMD thresholds have been used to determine air quality impacts in this analysis. Thresholds of significance are based on a source's projected impacts and are a basis from which to apply mitigation measures (NSAQMD 2016). The NSAQMD has developed a tiered approach to significance levels:

- A project with emissions meeting Level A thresholds will require the most basic mitigations;
- Projects with projected emissions in the Level B range will require more extensive mitigations; and
- Those projects which exceed Level C thresholds will require the most extensive mitigations.

The NSAQMD-recommended thresholds are shown in **Table 3**.

**Table 3. NSAQMD Air Pollutant Threshold**

Significance Level	Project-Generated Emissions (pounds/day)		
	NO <sub>x</sub>	ROG	PM <sub>10</sub>
Level A	<24	<24	<79
Level B	24-136	24-136	79-136
Level C	>136	>136	>136

Source: NSAQMD 2016.

According to the NSAQMD, these thresholds are recommended for use by lead agencies when preparing initial studies. If, during the preparation of the initial study, the lead agency finds that any of the following thresholds may be exceeded and cannot be mitigated down to Level B, then a determination of significant air quality impact must be made (NSAQMD 2016). In cases when predicted emissions are projected to be below the Level C thresholds but exceeding the Level A thresholds (thereby placing project-related air quality impacts at Level B), the project impacts would be considered potentially significant. Implementation of the applicable NSAQMD *Mitigation for Use During Design and Construction Phases for Classifications as Level B Threshold* measures would reduce Level B air quality impacts to a less than significant level (NSAQMD 2016).

The project's emissions of criteria pollutants and precursors were modeled using California Emissions Estimator Model (CalEEMod) version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The calculation methodology and default data used in the model are available in the CalEEMod User's Guide, Appendices A, D, and E (CAPCOA 2021). The CalEEMod output files are included in **Appendix B** to this Initial Study.

## Construction Emissions

The anticipated construction schedule and construction equipment was provided by the project engineer. Project construction is anticipated to start in June 2022 and would require approximately 7-16 months to complete. Construction activities would include site preparation (clearing and grubbing), grading/excavation, pump station construction, paving (new pump station driveway and replacing pavement in the pipeline alignment), and architectural coating (e.g., painting the pump station). Construction equipment would include excavators, backhoes, loaders, dump trucks, forklifts, cranes, generators, air compressors, pavers, and rollers. The complete equipment assumptions are included in Appendix B. During site preparation, approximately 2,000-cubic yards (CY) of vegetation and old asphalt would be hauled to the nearest processing site/landfill (7-miles). During grading/excavation, approximately 1,600 CY of sand would be hauled to the project site for use in the utilities trench. Because a portion of the proposed project alignment is not paved, 0.25-mile of each haul trip was assumed to be over unpaved roads.

Grading/excavation may require the use of blasting if rock is encountered that cannot be removed with conventional excavation equipment. Blasting operations could be conducted using drilling and explosive detonation to fracture rocks. As of this analysis, the area and depth of potential blasting has not been determined. Due to the linear nature of the project site, blasting would occur in small areas as excavations progresses along the alignment and rock is encountered. This analysis assumes up to two blast events (shots) per month during grading/excavation, for a total of up to 12 shots. Based on the footprint of the proposed alignment, each shot was assumed to be an area up to 500-square feet (SF). Blasting operations would be conducted by a licensed blasting contractor, in strict compliance with applicable federal and state regulations. All blasting materials would be transported to the site for each blasting sequence and no explosives would be stored at the site. For typical blasting to fracture rock, drill rigs are used to drill a pattern of boreholes each with a diameter of 3- to 6-inches, spaced 5- to 20-feet apart. For this analysis, 3-inch diameter boreholes by 7-feet deep were assumed with a grid spacing of 5-feet, resulting in approximately 20 boreholes per shot. Each borehole would be loaded with carefully metered explosives. The shot would be timed to detonate each hole(s) in sequence. This minimizes the ground vibration and noise of the blast, while maximizing fracture of the rock.

Fugitive dust emissions associated with blasting were estimated based on the USEPA's emission factor for blasting for coal mining to remove overburden (which is a similar process) from AP-42, Section 11.9, Table 11.9-1 (USEPA 1998a). Fugitive dust emissions from drilling boreholes was based on a similar mechanical process for aggregate rock crushing. The emission factors for tertiary rock crushing were estimated based on the USEPA's AP-42 Section 11.19.2, Table 11.19.2-2 9 (USEPA 1998b). Exhaust emissions from the use of drill rigs, estimated to be one drill rig used for 8 hours per day for 24 total workdays, are included in the CalEEMod emissions estimates. The use of drill rigs is assumed to occur concurrently with grading/excavation operations.

The explosive to be used has not been determined at the time of this analysis. The most common commercial explosive, ammonium nitrate/fuel oil (ANFO), is assumed in this analysis. Based on the USEPA's AP-42 Section 13.3 emission factors, emissions from use of ANFO are estimated to be 67 pounds of CO per ton of ANFO, and 17 pounds of NOX per ton of ANFO (USEPA 1980). Based on the assumed area and boreholes, up to 352 pounds (0.18 tons) of ANFO could be used per shot. The complete blasting and drilling emissions calculations are included in **Appendix B**.



In accordance with NSAQMD Rule 226, *Dust Control*; a Dust Control Plan is required to be submitted to the NSAQMD for approval prior to any surface disturbance, including clearing of vegetation. The modeling accounts for dust best management practices (BMP) to meet the requirements of Rule 226, specifically: watering exposed areas a minimum of twice per day; maintain a 12 percent moisture content on unpaved access roads; and enforcing a 25 mile per hour speed limit on unpaved access road.

The project's estimated construction emissions of criteria pollutants and precursors are shown below in **Table 4**.

**Table 4. Construction Criteria Pollutant and Precursor Emissions**

Activity	Emissions (pounds per day)					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Site Preparation	0.4	3.7	4.6	<0.1	1.6	0.3
Grading/Excavation	1.3	12.0	12.0	<0.1	0.9	0.5
Blasting Drilling	0.2	2.3	2.2	<0.1	0.1	0.1
Building Construction	1.0	9.4	9.4	<0.1	0.7	0.5
Paving	1.0	9.3	12.5	<0.1	0.7	0.5
Architectural Coatings	21.2	1.5	2.3	<0.1	0.2	0.1
Blasting	<0.1	3.0	11.8	0.4	0.2	<0.1
<b>Maximum Daily Emissions<sup>1</sup></b>	<b>22.6</b>	<b>33.7</b>	<b>45.6</b>	<b>0.4</b>	<b>2.5</b>	<b>1.5</b>
NSAQMD Level A Threshold	<24	<24	None	None	<79	None
NSAQMD Level B Threshold	24 to 136	24 to 136	None	None	79 to 136	None
NSAQMD Level C Threshold	>136	>136	None	None	>136	None
<i>Project Emission Level</i>	<i>A</i>	<i>B</i>	<i>N/A</i>	<i>N/A</i>	<i>A</i>	<i>N/A</i>

Source: CalEEMod; Thresholds – NSAQMD 2016

<sup>1</sup> Maximum emissions for NO<sub>x</sub> would be from concurrent grading/excavation, architectural coating and blasting; maximum daily emissions of all other pollutants would be from concurrent grading/excavation, building construction, paving and blasting.

The project's construction emissions of NO<sub>x</sub> would be in the Level B tier and the impact would be potentially significant.

The NSAQMD recommends all projects implement the Level A mitigation measures (NSAQMD 2016) during design and construction phases:

- Alternatives to open burning of vegetative material will be used unless otherwise deemed infeasible by the District. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel.
- Grid power shall be used (as opposed to diesel generators) for job site power needs where feasible during construction.

In addition, because the project construction emissions are classified as Level B, the NSAQMD recommends the following applicable measures:

- Temporary traffic control shall be provided during all phases of the construction to improve traffic flow as deemed appropriate by local transportation agencies and/or Caltrans.

- Construction activities shall be scheduled to direct traffic flow to off-peak hours as much as practicable.

Mitigation Measure AQ-1 would require the above measures to be specified on construction contracts. With implementation of Mitigation Measure AQ-1, project construction activities would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment. The impact would be less than significant with mitigation incorporated.

#### Operational Emissions

Long-term operation of the project would result in emissions of pollutants resulting from regular operation of the proposed emergency generator for maintenance and testing. Other project operational emissions resulting from maintenance activities would not increase compared to existing operations. According to the project engineer, a 500-kW diesel-powered generator (with an approximately 750 horsepower engine) is planned, and the generator would be run for maintenance/testing approximately 1 hour per month (12 hours per year). Emissions from operation of the generator were calculated using CalEEMod version 2020.4.0, described above, and are compared to the NSAQMD thresholds in **Table 5**.

**Table 5. Operational Criteria Pollutant and Precursor Emissions**

Source	Emissions (pounds per day)					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Emergency Generator	1.2	5.5	3.1	<0.1	0.2	0.2
NSAQMD Level A Threshold	<24	<24	None	None	<79	None
NSAQMD Level B Threshold	24 to 136	24 to 136	None	None	79 to 136	None
NSAQMD Level C Threshold	>136	>136	None	None	>136	None
<i>Project Emission Level</i>	<i>A</i>	<i>A</i>	<i>N/A</i>	<i>N/A</i>	<i>A</i>	<i>N/A</i>

Source: CalEEMod; Thresholds – NSAQMD 2016

The project operational emissions would be classified as Level A. The NSAQMD does not have recommended mitigation for Level A that would be applicable to project operations. Therefore, long-term operation of the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment, and the impact would be less than significant.

#### **Mitigation Measure AQ-1: Accordance with the Northern Sierra Air Quality Management's Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects**

The following restrictions shall be noted on all project construction contracts in accordance with the Northern Sierra Air Quality Management's *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects*:

- No open burning of vegetation shall be permitted. All vegetation cleared from the project site during construction shall be transported to a suitable local landfill, recycle/composting facility, or biomass facility.
- Where sufficient grid electrical power is available, internal combustion engine generators shall not be used for any project construction activity.

- The construction contractor shall coordinate with the Town of Truckee and/or Caltrans to implement traffic control whenever project construction work occurs within, or would affect the flow of traffic on, a public road right-of-way.
- Construction activity within a public ROW, or activity requiring a high volume of haul trucks shall be scheduled to occur outside of peak traffic hours (work commute or school traffic) for the roadways affected whenever possible.

c) Expose sensitive receptors to substantial pollutant concentrations?

**Less than significant impact.**

Diesel Particulate Matter

Construction of the project would result in emissions of diesel particulate matter (DPM) from the use of construction equipment. In 1998, the CARB identified DPM as a toxic air contaminant (TAC) based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. The amount to which the receptors could be exposed, which is a function of concentration and duration of exposure, is the primary factor used to determine health risk. Current models and methodologies for conducting cancer health risk assessments are associated with longer-term exposure periods (typically 30 years for individual residents) and are best suited for evaluation of long duration TAC emissions with predictable schedules and locations. These assessment models and methodologies do not correlate well with the temporary and highly variable nature of construction activities.

The project may require the use of diesel-powered equipment near residences adjacent to the project alignment. The total construction period is anticipated to last approximately seven months. Due to the linear nature of pipeline construction, the use of heavy diesel-powered equipment during construction near any individual residence would be limited to a few days before progressing on.

Once operational, the project's proposed emergency backup generator would be considered a stationary source of DPM. However, the exposure period resulting from generator maintenance/testing would be very low—approximately 1 hour per month and 12 hours per year. In addition, the closest sensitive receptor locations to the proposed pump station (including the generator) locations are single-family residences approximately 1,700-feet to the northeast.

Due to the variable and sporadic nature of construction activity, the anticipated short construction schedule in any one area, the limited time of generator operation, and the distance between sensitive receptor locations and the proposed pump station, project construction or operation would not expose sensitive receptors to substantial DPM emissions.

The project would not be a significant source of other TACs or localized concentrations of pollutants (such as CO hotspots). Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations, and the impact would be less than significant.

d) Result in substantial emissions (such as odors) adversely affecting a substantial number of people?

**Less than significant impact.** Heavy diesel equipment could generate odors during construction activities. The generation of odors during the construction period would be temporary and would tend

to be dispersed within a short distance from the active work area. Once operational, the project would not result in any increase in odors compared to existing conditions. Therefore, due to the short duration of construction activity near any individual residence, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people and the impact would be less than significant.

## 5.6 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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 or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 5.6.1 Background and Setting

The analysis for the project is based on the Biological Resources Evaluation (BRE) prepared by HELIX Environmental Planning, which is included as **Appendix C** to this Initial Study.

### 5.6.2 Regulatory Framework Related to Biological Resources

#### Federal Endangered Species Act

The USFWS enforces the provisions stipulated within the Federal Endangered Species Act of 1973 (FESA; 16 USC 1531 *et seq.*). Species identified as federally threatened or endangered (50 CFR 17.11, and 17.12) are protected from take, defined as direct or indirect harm, unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a

federal lead agency via a Section 7 consultation. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the study area and determine whether the proposed project will jeopardize the continued existence of or result in the destruction or adverse modification of critical habitat of such species (16 USC 1536 (a)[3], [4]). Other federal agencies designate species of concern (species that have the potential to become listed), which are evaluated during environmental review under the National Environmental Protection Act (NEPA) or CEQA although they are not otherwise protected under FESA.

#### California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050 to 2097) is similar to the FESA. The California Fish and Wildlife Commission is responsible for maintaining lists of threatened and endangered species under CESA. CESA prohibits the take of listed and candidate (petitioned to be listed) species. "Take" under California law means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch capture, or kill (California Fish and Game Code, Section 86). CDFW can authorize take of a state-listed species under Section 2081 of the California Fish and Game Code if the take is incidental to an otherwise lawful activity, the impacts are minimized and fully mitigated, funding is ensured to implement and monitor mitigation measures, and CDFW determines that issuance would not jeopardize the continued existence of the species. A CESA permit must be obtained if a project will result in the "take" of listed species, either during construction or over the life of the project. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

#### California Code of Regulations Title 14 and California Fish and Game Code

The official listing of endangered and threatened animals and plants is contained in the California Code of Regulations Title 14 §670.5. A state candidate species is one that the California Fish and Game Code has formally noticed as being under review by CDFW to include in the state list pursuant to Sections 2074.2 and 2075.5 of the California Fish and Game Code.

Legal protection is also provided for wildlife species in California that are identified as "fully protected animals." These species are protected under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species at any time. CDFW is unable to authorize incidental take of fully protected species unless any such take authorization is issued in conjunction with the approval of a Natural Community Conservation Plan that covers the fully protected species (California Fish and Game Code Section 2835).

#### California Native Plant Protection Act

The California Native Plant Protection Act of 1977 (California Fish and Game Code Sections 1900-1913) requires all state agencies to use their authority to carry out programs to conserve endangered and otherwise rare species of native plants. Provisions of the act prohibit the taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use (other than changing from one agricultural use to another), which allows CDFW to salvage listed plants that would otherwise be destroyed.

### Nesting and Migratory Birds

Nesting birds are protected by state and federal laws. California Fish and Game Code (§3503, 3503.5, and 3800) prohibits the possession, incidental take, or needless destruction of any bird nests or eggs; Fish and Game Code §3511 designates certain bird species “fully protected” (including all raptors), making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. Under the Migratory Bird Treaty Act of 1918 (16 USF §703-711), migratory bird species and their nests and eggs that are on the federal list (50 CFR §10.13) are protected from injury or death, and project-related disturbance must be reduced or eliminated during the nesting cycle.

### California Food and Agriculture Code Section 403

This section directs the California Department of Food and Agriculture (CDFA) to prevent the introduction and spread of injurious pests including noxious weeds.

CDFA Code Section 7271 designates the CDFA as the lead department in noxious weed management responsible for implementing state laws concerning noxious weeds. Representing a statewide program, noxious weed management laws and regulations are enforced locally in cooperation with the County Agricultural Commissioner.

Under state law, noxious weeds include any species of plant that is, or is liable to be, troublesome, aggressive, intrusive, detrimental, or destructive to agriculture, silviculture, or important native species, and difficult to control or eradicate, which the director, by regulation, designates to be a noxious weed (CDFA Code Section 5004).

### Jurisdictional Waters

Any person, firm, or agency planning to alter or work in “waters of the U.S.,” including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403).

Waters of the U.S. include navigable waters, tidal waters, interstate waters, tributaries to such waters, and wetlands. Wetlands are defined under the CFR Part 328.3 as those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Federal and state regulations pertaining to waters of the U.S., including wetlands, are discussed below.

Clean Water Act (33 USC 1251-1376). The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. must obtain a state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there is no practicable alternative that would have less adverse impacts.

#### Porter-Cologne Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the State Water Resources Control Board (SWRCB) and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals.

#### California Fish and Game Code Section 1602 – Lake and Streambed Alteration Program

Diversions or obstructions of the natural flow of, or substantial changes or use of material from the bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW, pursuant to Section 1602 of the California Fish and Game Code. The CDFW requires notification prior to commencement of any such activities, and a Streambed Alteration Agreement (SAA) pursuant to Fish and Game Code Sections 1601-1603, if the activity may substantially adversely affect an existing fish and wildlife resource.

### **5.6.3 Methods**

Biological studies conducted in support of this report included a special-status species evaluation and a biological reconnaissance survey. A wetland delineation was conducted for the Tahoe Donner to Downtown Recreational Trail Project in 2012 (JBR 2012) that covered the entire Study Area evaluated for this project. The results of the 2012 wetland delineation were incorporated into this report; additional wetland delineation work was not deemed necessary and was not conducted by HELIX.

#### Special-Status Species Evaluation

Regulations pertaining to the protection of biological resources at the project site are summarized in Attachment B of the BRE. For the purposes of this report, special-status species are those that fall into one or more of the following categories, including those:

- listed as endangered or threatened under the Federal Endangered Species Act (FESA; including candidates and species proposed for listing);



- listed as endangered or threatened under the California Endangered Species Act (CESA; including candidates and species proposed for listing);
- designated as rare, protected, or fully protected pursuant to California Fish and Game Code;
- designated a Species of Special Concern (SSC) by the California Department of Fish and Wildlife (CDFW);
- considered by CDFW to be a Watch List species with potential to become an SSC;
- defined as rare or endangered under Section 15380 of the California Environmental Quality Act (CEQA); or,
- Having a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, 2B, or 3.

In order to evaluate special-status species and/or their habitats with the potential to occur in the Study Area and/or be impacted by the proposed project, HELIX obtained lists of special-status species known to occur and/or having the potential to occur in the Study Area and vicinity from the U.S. Fish and Wildlife Service (USFWS; USFWS 2022), the California Native Plant Society (CNPS; CNPS 2022), and the California Natural Diversity Database (CNDDDB; CDFW 2022). **Appendix C** includes these lists of special-status plant and animal species occurring in the project region. The potential for these regionally occurring special-status species to occur in the Study Area is analyzed in Attachment D of the BRE.

#### Biological Reconnaissance Survey

A biological reconnaissance survey was conducted on October 20, 2021, by HELIX Principal Biologist Stephen Stringer, M.S. and HELIX Biologist Stephanie McLaughlin, M.S. between approximately 1100 and 1430 hours. The Study Area was systematically surveyed on foot to ensure total search coverage. All plant and animal species observed onsite during the surveys were recorded, and all biological communities occurring onsite were characterized. Following the field survey, the potential for each species identified in the database query to occur within the Study Area was determined based on the site survey, soils, habitats present within the Study Area, and species-specific information, as shown in **Appendix C**.

#### Delineation of Aquatic Resources

The Study Area was delineated in 2012 by JBR Environmental Consultants when the trail was constructed. The wetland delineation map from the report, "Town of Truckee, Tahoe Donner to Downtown Recreational Trail Wetland Delineation", is included as Attachment E in the BRE. HELIX biologists reviewed the site for any potential wetlands or other waters of the U.S. or waters of the State during the biological reconnaissance and to verify site conditions had not changed in the Study Area since the wetland delineation was conducted, with the exception of trail construction. National Wetland Inventory (NWI) mapping was also reviewed for the Study Area to see if any wetlands have been mapped in the Study Area in the database.

#### 5.6.4 Habitat Types/ Vegetation Communities

Habitat types/vegetation communities in the Study Area consist of Disturbed Jeffrey Pine Forest Alliance, Developed, and Riparian habitat. Habitats and land covers are depicted on **Figure 3**. A list of species observed during the biological reconnaissance survey is included in Attachment F of the BRE. Representative site photographs are included as Attachment G of the BRE.

##### Developed

Developed habitat totals approximately 3.23-acres in the Study Area and consists of a segment of Northwoods Blvd at the western end of the alignment, the Trout Creek trailhead parking lot, a segment of the existing paved Trout Creek Trail and pedestrian bridge crossing over Trout Creek, and paved driveways/roadways at the eastern end of the alignment.

##### Disturbed Jeffrey Pine Forest Alliance

Disturbed Jeffrey Pine Forest Alliance totals an estimated 10.95-acres in the Study Area. This habitat is characterized by pine forest with a mostly closed canopy, sparse to intermittent shrub stratum, and a relatively sparse, grassy herbaceous layer. The tree layer in the Study Area was dominated by Jeffrey pine (*Pinus jeffreyi*), with white fir (*Abies concolor*) and lodgepole pine (*Pinus contorta*) scattered throughout. Greenleaf manzanita (*Arctostaphylos patula*), snowbush ceanothus (*Ceanothus velutinus*), and Utah serviceberry (*Amelanchier utahensis*) were observed in the shrub layer. Successional clearings and herbaceous understory were dominated by mahala mat (*Ceanothus prostratus*), big sagebrush (*Artemisia tridentata*), and creeping snowberry (*Gaultheria hispidula*). This habitat in the Study Area is heavily disturbed by recreational and industrial uses. The paved Trout Creek Recreational Trail, dirt utility access road, and overhead utility corridors all cross through this habitat type. The recreational trail is heavily used by hikers, cyclists, and dogwalkers; the utility access road is rutted and contains a staging area with equipment and materials; the utility corridors are regularly clear cut for fire abatement purposes and utility access.

##### Riparian (Trout Creek)

Trout Creek runs northwest to southeast through a small section of the alignment. A metal pedestrian bridge spans the creek and allows for foot and bicycle traffic over the creek along the Trout Creek Trail. Trout Creek has a gravel bottom and is surrounded by fairly sparse riparian habitat dominated by mountain alder (*Alnus incana*), quaking aspen (*Populus tremuloides*), red willow (*Salix laevigata*), Scouler's willow (*Salix scouleriana*), and California corn lily (*Veratrum californicum*). The project proposes to attach the pipeline to the bridge to avoid impacts to Trout Creek. Trout Creek comprises approximately 0.06-acre within the Study Area.

#### 5.6.5 Special-Status Species and Protected Habitats with the Potential to Occur in the Project Site

A total of 35 regionally occurring special-status plant species and 24 regionally occurring special-status wildlife species were identified during the database queries and desktop review and are evaluated in Attachment D of the BRE.

### Special-Status Plant Species

There are no reported occurrences of special-status plant species on or adjacent to the site and none were observed during the biological reconnaissance. A total of 35 regionally occurring special-status plant species were identified during the database queries and desktop review. The Study Area does not provide suitable habitat for the majority of the special-status plant species identified in the database queries. Many of the special-status plant species in the database queries are associated with mesic habitats, including meadows, seeps, bogs, fens and marshes. The remaining species are associated with granite outcrops, rocky slopes, scrub, pinyon-juniper woodlands, sandy beaches, or are found outside the elevation range of the Study Area.

Based on the results of the desktop review and biological reconnaissance survey, the site provides suitable habitat for two special-status plant species: American manna grass (*Glyceria grandis*) and alder buckthorn (*Rhamnus alnifolia*). Both species have the potential to occur in the riparian habitat surrounding Trout Creek. These species are discussed briefly below. Species determined to have no potential to occur in the Study Area or be impacted by the proposed project (Attachment D of the BRE) are not discussed further in this report.

#### **American Manna Grass**

Federal status – none

State status – None

CNPS Rare Plant Rank – 2B.3

#### *Species Description*

American manna grass is a perennial rhizomatous herb found in bogs, fens, meadows, seeps, marshes, swamps, streambanks and lake margins at 49 – 6,496-foot elevation and is typically found in slower moving pools and backwater areas in streams. This species blooms June – August (CNPS 2022).

#### *Survey History*

American manna grass was not observed in the Study Area during the biological survey and there are no reported occurrences of this species on or adjacent to the Study Area in the CNDDDB. The nearest recorded occurrence is located 8-miles south of the Study Area along the Truckee River in an area dominated by grey alder and altered by beavers (CDFW 2022).

#### *Habitat Suitability*

The segment of Trout Creek in the Study Area provides suitable habitat for American manna grass.

#### **Alder Buckthorn**

Federal status – none

State status – None

CNPS Rare Plant Rank – 2B.2

### *Species Description*

Alder buckthorn is a perennial deciduous shrub found in lower and upper montane coniferous forest, meadows, seeps, and riparian scrub from 4,494 – 6,988-foot elevation. This species blooms May – July (CNPS 2022).

### *Survey History*

Alder buckthorn was not observed in the Study Area during the biological survey and there are no reported occurrences of this species on or adjacent to the Study Area in the CNDDDB. The nearest reported occurrence of the species is 0.9 miles south of the Study Area in a degraded riparian zone along Donner Creek where this species was documented as “common” in 2000 (CDFW 2022).

### *Habitat Suitability*

The riparian habitat along the banks of Trout Creek provides suitable habitat for alder buckthorn.

### Special-Status Wildlife Species

A total of 24 regionally occurring special-status wildlife species were identified during the database searches and desktop review. The Study Area does not provide habitat for the majority of the regionally occurring special-status wildlife species, which are associated with aquatic habitats such as lakes, ponds, wet meadows, and freshwater wetlands. The remaining species are associated with open areas, grasslands, rocky slopes, scrub, sagebrush, old-growth forest, and cliff habitat, have specific food species requirements that were not found in the Study Area, or have a narrow range of occurrence that is outside of the Study Area.

There are no reported occurrences of special-status animal species in the Study Area, and none were observed during the biological reconnaissance. However, based on the results of the desktop review and biological reconnaissance survey, the site provides suitable habitat for five special-status wildlife species: Lahontan mountain sucker (*Catostomus lahontan*), mountain whitefish (*Prosopium williamsoni*), Cooper’s hawk (*Accipiter cooperii*), northern goshawk (*Accipiter gentilis*) and yellow warbler (*Setophaga petechia*) as well as other nesting migratory birds. These species are discussed below. Species determined to have no potential to occur on the project site or be impacted by the proposed project (Attachment D of the BRE) are not discussed further in this report.

### **Lahontan Mountain Sucker**

Federal status – none

State status – None

Other – CDFW Species of Special Concern

### *Species Description*

The mountain sucker tends to favor clear water streams with a moderate gradient, with widths of 9.8 – 49-feet and depths of less than 6.5-feet, and rocky or gravelly bottoms. Although not exclusive to high elevations, they are frequently observed in cool mountain streams, being found as high as 9,186 feet, and in waters just above freezing temperatures. Found in pools or eddies behind or under rocks and logs (Moyle 2002).

### *Survey History*

Lahontan mountain sucker was not observed in the Study Area during biological surveys, however, focused surveys for fish were not conducted. The nearest reported occurrence of the species is in the Truckee River approximately 0.5-mile south of the Study Area (CDFW 2022). Trout Creek flows into the Truckee River approximately 1-mile southeast of the Study Area and this species could move upstream into Trout Creek, at least occasionally.

### *Habitat Suitability*

Although this species has not been documented in Trout Creek, the segment of Trout Creek within the Study Area provides suitable aquatic habitat for Lahontan mountain sucker.

### **Mountain Whitefish**

Federal status – none

State status – None

Other – CDFW Species of Special Concern

### *Species Description*

Mountain whitefish generally inhabit clear, cool waters (< 20° C) of high elevation streams, rivers, and lakes (Moyle 2002). Spawning occurs during late fall to early winter (October - December) in shallow areas of small tributaries or shoreline areas of lakes, primarily over gravel, rubble, or cobble bottoms.

### *Survey History*

Mountain whitefish was not observed in the Study Area during biological surveys, however, focused surveys for fish were not conducted. The nearest reported occurrence of the species is approximately 0.5-mile south of the Study Area in the Truckee River. Trout Creek flows into the Truckee River approximately 1-mile southeast of the Study Area and this species could move into Trout Creek at least occasionally. The species was also recorded 3.6-miles northwest of the Study Area in the south fork of Prosser Creek (CDFW 2022).

### *Habitat Suitability*

Although this species has not been documented in Trout Creek, the segment of Trout Creek within the Study Area may provide suitable aquatic habitat.

### **Cooper's Hawk**

Federal status – none

State status – None

Other – CDFW Watch List

### *Species Description*

Cooper's hawk nests in woodlands and is very tolerant of urban and suburban areas. Can be found in large urban parks with urban forests or in isolated trees in industrial strips and parks. Preys on medium-

sized birds and small mammals. Urban areas may provide increased access to prey species such as pigeons and doves (Stout and Rosenfield 2010). Forages in open woodland and habitat edges, often of an interrupted or marginal type (Zeiner et al. 1990). In wildland areas, primarily nests in riparian growths of deciduous trees, such as canyon bottoms on river flood plains. Prefers lives oaks.

#### *Survey History*

Cooper's hawk was not observed in the Study Area during biological surveys. The nearest recorded occurrence is located 9.2-miles southwest of the Study Area in a grove of white fir trees near Cedar Creek (CDFW 2022).

#### *Habitat Suitability*

Suitable nesting and foraging habitat for Cooper's hawk is present in the Study Area. The Jeffrey pine forest habitat on and adjacent to the Study Area provides nesting habitat. The Tahoe National Forest surrounding the Study Area provides suitable foraging habitat

### **Northern Goshawk**

Federal status – none

State status – None

Other – CDFW Species of Special Concern

#### *Species Description*

Northern goshawk nests and forages in mature and old-growth forest stands in a broad range of coniferous and coniferous-hardwood forest types, including ponderosa, Jeffrey and lodgepole pine, mixed conifer, firs, and pinyon-juniper with relatively dense canopies. Suitable habitat for northern goshawk is mixed conifer and montane hardwood forest types with overstory trees greater than 24-inches diameter and a canopy closure of greater than 60 percent (Keane 1999). Northern goshawk prefers relatively undisturbed forest stands, with low human disturbance, and dense canopies. The hawk forages in openings in the forest, meadow edges and open sagebrush. The nesting and fledgling period is March 1 – August 15 (Woodbridge and Hargis 2006) and northern goshawk typically nests in the larger tree within a stand.

#### *Survey History*

Northern goshawk was not observed in the Study Area during biological surveys. The closest reported occurrence of this species in the CNDDDB is approximately 3-miles southwest, where this species was documented nesting in red fir forest between 1995 and 1997 (CDFW 2022).

#### *Habitat Suitability*

Suitable nesting habitat and foraging for northern goshawk is present in the Study Area. The Jeffrey pine forest habitat on and adjacent to the Study Area provides nesting habitat. The Tahoe National Forest surrounding the Study Area provides suitable foraging habitat

## **Yellow Warbler**

Federal status – none

State status – None

Other – CDFW Species of Special Concern

### *Species Description*

Yellow warbler is found in riparian areas in close proximity to water, also nests in montane shrubbery in open conifer forests in the Cascades and Sierra Nevada. Nests and forages in willow (*Salix* sp.) shrubs and thickets and in other riparian plants including cottonwoods (*Populus* sp.), sycamores (*Platanus* sp.), ash (*Fraxinus* sp.), and alders (*Alnus* sp.) (Browning 1994).

### *Survey History*

Yellow warbler was not observed in the Study Area during biological surveys. Yellow warblers were documented in the immediate vicinity of the Study Area during surveys for the Trout Creek Trail (Town of Truckee 2014). The nearest reported occurrence in the CNDDDB is located 1.9-miles southwest of the Study Area in riparian habitat dominated by quaking aspen immediately east of Donner Lake (CDFW 2022).

### *Habitat Suitability*

Suitable nesting habitat and foraging for yellow warbler is present in the Study Area. The riparian habitat of Trout Creek in and adjacent to the Study Area provides moderate quality habitat for the species.

## **Migratory Birds and Raptors**

As noted in Attachment B of the BRE, migratory and non-game birds are protected during the nesting season by California Fish and Game Code. The project site and immediate vicinity provides nesting and foraging habitat for a variety of native birds common to urbanized areas, such as mourning dove (*Zenaida macroura*), house finch (*Haemorrhous mexicanus*), and California towhee (*Melospiza crissalis*). Nests were not observed during surveys; however, a variety of migratory birds have the potential to nest in and adjacent to the site, in trees, shrubs and on the ground in vegetation.

Project activities such as clearing and grubbing during the avian breeding season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance. Needless destruction of nests, eggs, and chicks would be a violation of the Fish and Game Code and a significant impact.

## **Sensitive Natural Communities**

Natural communities are defined by one or more characteristic plant species, and the species communities in the majority of the Study Area are not considered characteristic of a sensitive natural community. Due to the disturbed nature of the Trout Creek Trail and vicinity, there are no terrestrial sensitive natural communities in the Study Area. Trout Creek and its riparian corridor would be considered a sensitive natural community and is discussed below under aquatic resources.

## Aquatic Resources

A formal delineation of the Study Area and vicinity was performed on July 15, 2011, for the previous trail project, using the U.S. Army Corps of Engineers *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (USACE 2010) by JBR Environmental Consultants. The wetland delineation map from the report detailing their findings, “Town of Truckee, Tahoe Donner to Downtown Recreational Trail Wetland Delineation” is included as Attachment E of the BRE.

JBR Environmental Consultants identified Trout Creek as the one potentially jurisdictional feature within the Study Area. Trout Creek is a perennial waterway and totals to approximately 0.06-acre of potentially jurisdictional waters of the U.S. and state. Trout Creek is depicted on the Habitat Map, which is included in Attachment A of the BRE.

Trout Creek is a perennial stream with a narrow floodplain. The riparian habitat is dominated by mountain alder (*Alnus incana*), quaking aspen (*Populus tremuloides*), red willow (*Salix laevigata*), Scouler’s willow (*Salix scouleriana*), and California corn lily (*Veratrum californicum*).

The project has been designed to avoid impacts to aquatic resources. When the pipeline alignment would reach the pedestrian bridge crossing, the pipeline would be attached to the 0.02-mile bridge to avoid impacts to Trout Creek. There will be no direct impacts to aquatic resources (i.e., no placement of temporary or permanent fill within aquatic resources) and no mitigation is required.

## Protected Trees

The Town of Truckee regulates the preservation of trees through Section 18.30.155 of the Town Development Code (Town 2012). The regulations require that a tree removal permit be obtained for tree removal unless one or more exemption criteria are applicable. Section 18.30.155.C.4 of the Town Development Code specifically exempts tree removal permit requirements for “Removal of trees within public rights-of-way or easements by the Town of Truckee or public or private utilities as necessary to perform maintenance, repairs, modifications and/or construct infrastructure, as well as to protect public health and safety”. Consequently, any tree impacts resulting from the proposed project are assumed to be exempt from the requirement to obtain a tree removal permit or mitigation.

### 5.6.6 Analysis

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

**Less than significant impact with mitigation.**

#### Potential Impact to American Manna Grass

Although American manna grass was not observed in the Study Area during the biological survey, focused surveys were not conducted for special-status plant species as part of the field assessment and the survey was conducted outside of the blooming period for this species. Therefore, this species could be present in the Study Area. If American manna grass is present within the segment of Trout Creek in the Study Area, it could potentially be adversely affected by construction activities as a result of access



by construction equipment or personnel when the pipe is hung on the Trout Creek bridge. In the absence of proposed mitigation measures, potential adverse effects could include crushing or trampling of the plant, which would be considered a potentially significant impact.

The recommended mitigation measures for special status plant species under Mitigation Measure BIO-1 would reduce potential impacts to this species to less than significant.

#### **Mitigation Measure BIO-1: Measures to Avoid Impacts to Special Status Plant Species**

- Floristically appropriate botanical surveys shall be conducted to determine the presence or absence of special-status plant species within the riparian habitat in the Study Area prior to commencement of construction. The surveys shall be floristic in nature and shall be seasonally timed to coincide with the blooming period of regionally occurring special-status plant species (generally May through August). Surveys shall be conducted to determine the status of these species in the Study Area. If special-status plants are not found during the focused surveys, then no further action is required.
- If special-status plants are documented in the Study Area, a report shall be submitted to CNDDDB to document the status of the species on the site. If the project is designed to avoid impacts to special-status plant individuals and habitat, no further mitigation for these species would be necessary.
  - If special-status plants are documented in the Study Area and project impacts to these species are anticipated, consultation with CDFW shall be conducted to develop a mitigation strategy. The proponent shall notify CDFW, providing a complete description of the location, size, and condition of the occurrence, and the extent of proposed direct and indirect impacts to it. The project proponent shall comply with any mitigation requirements imposed by CDFW. Mitigation requirements could include but are not limited to, development of a plan to relocate the special-status plants (seed) to a suitable location outside of the impact area and monitoring the relocated population to demonstrate transplant success or preservation of this species or its habitat at an on or offsite location.

#### Potential Impacts to Alder Buckhorn

Although alder buckthorn was not observed in the Study Area during the biological survey, focused surveys were not conducted for special-status plant species as part of the field assessment and the survey was conducted outside of the blooming period for this species. Therefore, this species could be present in the Study Area. If alder buckthorn is present within the segment of Trout Creek in the Study Area, it could potentially be adversely affected by construction activities as a result of access by construction equipment or personnel when the pipe is hung on the Trout Creek bridge. In the absence of proposed mitigation measures, potential adverse effects could include crushing or trampling of the plant, or other physical damage, which would be considered a potentially significant impact.

The recommended mitigation measures for special status plant species under Mitigation Measure BIO-1 would reduce potential impacts to this species to less than significant.

### Potential Impacts to Lahontan Mountain Sucker

No direct impacts to aquatic habitat within Trout Creek are anticipated. However, in the absence of proposed mitigation measures, potential adverse effects of the proposed project on this species could include harm to individual Lahontan mountain sucker as a result of indirect impacts due to water quality impacts. Construction activities adjacent to and over the wetted portion of Trout Creek during installation of the pipe to the bridge would have the potential to negatively impact water quality if construction materials, fuel, oil or grease from equipment, or debris were to enter the waterway. Water quality impacts could result in harm to individual Lahontan mountain sucker if present in Trout Creek, which would be a potentially significant impact.

The recommended mitigation measures for special status fish species under Mitigation Measure BIO-2 would reduce potential impacts to this species to less than significant.

#### **Mitigation Measure BIO-2: Measures to Avoid Impacts to Special Status Fish Species**

Lahontan mountain sucker and mountain whitefish have the potential to occur in Trout Creek. No direct impacts to Trout Creek would occur, however, potential indirect impacts were identified. The following mitigation shall be implemented for these special-status fish species:

- *Measures to Reduce Impacts to Water Quality*
  - Activities conducted in or near Trout Creek shall be limited to summer and fall months (generally June – November) when flows are lowest.
  - All disturbed soils will undergo erosion control treatment prior to October 15 and/or immediately after construction is terminated. Erosion control blankets will be installed on any disturbed soils on a 2:1 slope or steeper.
  - Standard construction BMPs will be implemented throughout construction to avoid and minimize adverse effects to water quality within Trout Creek in and adjacent to the project site. Appropriate erosion control measures will be used (e.g., hay bales, filter fences, vegetative buffer strips or other accepted equivalents) to reduce siltation and contaminated runoff from the project site. The integrity and effectiveness of the BMPs will be inspected daily. Corrective actions and repairs shall be carried out immediately.
  - No construction will occur within the wetted portion of Trout Creek, including access by construction equipment or personnel. If work in the wetted portion of Trout Creek is unavoidable, the work area would need to be dewatered and the flow diverted around the work area. The flow will be diverted only once the construction of the diversion is completed. The USACE, RWQCB, and CDFW would need to be consulted prior to any diversion of Trout Creek.
  - Construction activities and ground disturbance adjacent to Trout Creek will be confined to the minimal area necessary to facilitate construction activities. To ensure that construction equipment and personnel do not affect sensitive aquatic habitat in Trout Creek up and downstream of the project site, orange barrier fencing

will be erected to clearly define the habitat to be avoided. This will delineate the Environmentally Sensitive Area (ESA) on the project. The integrity and effectiveness of ESA fencing will be inspected daily. Corrective actions and repairs shall be carried out immediately for fence breaches.

- Construction by-products and pollutants such as petroleum products, chemicals, or other deleterious materials shall not be allowed to enter Trout Creek or riparian habitat. A plan for the emergency clean-up of any spills of fuel or other materials shall be available when construction equipment is in use.
- Construction vehicles and equipment will be maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease. Leaking vehicles and equipment shall be removed from the site.
- Equipment shall be re-fueled, washed, and serviced at the designated construction staging area or off-site. All construction and fill materials will be stored and contained in a designated area that is located away from Trout Creek to prevent transport of materials into the waterway. Equipment maintenance and storage, and materials storage will be 100 feet or more away from Trout Creek. In addition, a silt fence will be installed around the staging and materials storage areas to collect any discharge, and adequate materials should be available for spill clean-up and during storm events.
- No litter, debris, or sidecast shall be dumped or permitted to enter Trout Creek or riparian habitat. Trash and debris shall be removed from the site regularly. Following construction, all trash and construction debris shall be removed from work areas.
- Building materials storage areas containing hazardous or potentially toxic materials such as herbicides and petroleum products will be located outside of the 100-year flood zone, have an impermeable membrane between the ground and the hazardous material, and will be bermed to prevent the discharge of pollutants to ground water and runoff water.
- Worker education and awareness training regarding sensitive habitats (e.g., aquatic and riparian habitats) and special-status species will be conducted for all construction personnel. The contractor will ensure that all new personnel will receive the mandatory training before starting work.

#### Potential Impact to Mountain Whitefish

No direct impacts to aquatic habitat within Trout Creek are anticipated. However, in the absence of proposed mitigation measures, potential adverse effects of the proposed project on this species could include harm to individual mountain whitefish as a result of indirect impacts due to water quality impacts. Construction activities adjacent to and over the wetted portion of Trout Creek during installation of the pipe to the bridge would have the potential to negatively impact water quality if construction materials, fuel, oil or grease from equipment, or debris were to enter the waterway. Water quality impacts could result in harm to individual mountain whitefish if present in Trout Creek, which would be a potentially significant impact.

The recommended mitigation measures for special status fish species under Mitigation Measure BIO-2 would reduce potential impacts to this species to less than significant.

#### Potential Impact to Cooper's Hawk

If Cooper's hawk were to nest within or adjacent to the site prior to construction, impacts to nesting could occur through noise, vibration, and the presence of construction equipment and personnel. Project activities such as clearing and grubbing, grading or other earthwork, or tree removal during the breeding season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance, which would be a potentially significant impact.

The recommended mitigation measures for nesting birds under Mitigation Measure BIO-3 would reduce potential impacts to this species to less than significant.

#### **Mitigation Measure BIO-3: Measures to Avoid Impacts to Nesting Birds**

The project site and adjacent areas provide suitable nesting habitat for a variety of native birds including native songbirds and raptors. Removal of vegetation containing active nests would potentially result in destruction of eggs and/or chicks; noise, dust, and other anthropogenic stressors in the vicinity of an active nest could lead to forced nest abandonment and mortality of eggs and/or chicks. Needless destruction of eggs or chicks would be a violation of the Fish and Game Code. Pre-construction surveys should be conducted prior to project implementation to determine if nesting birds are present on or adjacent to the site, so that measures could be implemented if needed to avoid harming nesting birds.

The following mitigation is recommended to reduce potential project impacts to nesting birds:

- If project (construction) ground-disturbing or vegetation clearing and grubbing activities commence during the avian breeding season (March 1 through August 31), a qualified biologist should conduct a pre-construction nesting bird survey no more than 14 days prior to initiation of project activities and again immediately prior to construction. The survey area should include suitable raptor nesting habitat within 500-feet of the project boundary (inaccessible areas outside of the project site can be surveyed from the site or from public roads using binoculars or spotting scopes). Pre-construction surveys are not required in areas where project activities have been continuous since prior to March 1, as determined by a qualified biologist. Areas that have been inactive for more than 14 days during the avian breeding season should be re-surveyed prior to resumption of project activities. If no active nests are identified, no further mitigation is required. If active nests are identified, the following measure should be implemented: A suitable buffer (e.g., 500-feet for raptors; 100-feet for passerines) should be established by a qualified biologist around active nests and no construction activities within the buffer should be allowed until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest, or the nest has failed). Encroachment into the buffer may occur at the discretion of a qualified biologist. Any encroachment into the buffer should be monitored by a qualified biologist to determine whether nesting birds are being impacted.

### Potential Impact to Northern Goshawk

If northern goshawk were to nest within or adjacent to the site prior to construction, impacts to nesting could occur through noise, vibration, and the presence of construction equipment and personnel. Project activities such as clearing and grubbing, grading or other earthwork, or tree removal during the breeding season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance, which would be a potentially significant impact.

The recommended mitigation measures for nesting birds under Mitigation Measure BIO-3 would reduce potential impacts to this species to less than significant.

### Potential Impact to Yellow Warbler

If yellow warbler were to nest within or adjacent to the site prior to construction, impacts to nesting could occur through noise, vibration, and the presence of construction equipment and personnel. Project activities such as clearing and grubbing, grading or other earthwork, or tree removal during the breeding season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance, which would be a potentially significant impact.

The recommended mitigation measures for nesting birds under Mitigation Measure BIO-3 would reduce potential impacts to this species to less than significant.

### Potential Impact to Migratory Birds and Raptors

As noted in Attachment B of the BRE, migratory and non-game birds are protected during the nesting season by California Fish and Game Code. The project site and immediate vicinity provides nesting and foraging habitat for a variety of native birds common to urbanized areas, such as mourning dove (*Zenaida macroura*), house finch (*Haemorrhous mexicanus*), and California towhee (*Melospiza crissalis*). Nests were not observed during surveys; however, a variety of migratory birds have the potential to nest in and adjacent to the site, in trees, shrubs and on the ground in vegetation.

Project activities such as clearing and grubbing during the avian breeding season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance. Needless destruction of nests, eggs, and chicks would be a violation of the Fish and Game Code and a significant impact.

The recommended mitigation measures for nesting birds under Mitigation Measure BIO-3 would reduce potential impacts to this species to less than significant

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

**Less than significant impact.** Natural communities are defined by one or more characteristic plant species, and the species communities in the majority of the Study Area are not considered characteristic of a sensitive natural community. Due to the disturbed nature of the Trout Creek Trail and vicinity, there

are no terrestrial sensitive natural communities in the Study Area. Trout Creek and its riparian corridor would be considered a sensitive natural community and is discussed below.

A formal delineation of the Study Area and vicinity was performed on July 15, 2011, for the previous trail project, using the U.S. Army Corps of Engineers *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (USACOE 2010) by JBR Environmental Consultants. The wetland delineation map from the report detailing their findings, "Town of Truckee, Tahoe Donner to Downtown Recreational Trail Wetland Delineation" is included as Attachment E of the BRE.

JBR Environmental Consultants identified Trout Creek as the one potentially jurisdictional feature within the Study Area. Trout Creek is a perennial waterway and totals to approximately 0.06-acre of potentially jurisdictional waters of the U.S. and state. Trout Creek is depicted on the Habitat Map, which is included as **Figure 3**.

Trout Creek is a perennial stream with a narrow floodplain. The riparian habitat is dominated by mountain alder, quaking aspen, red willow, Scouler's willow, and California corn lily.

The project has been designed to avoid impacts to aquatic resources. When the pipeline alignment would reach the pedestrian bridge crossing, the pipeline would be attached to the 0.02-mile bridge to avoid impacts to Trout Creek. There will be no direct impacts to aquatic resources (i.e., no placement of temporary or permanent fill within aquatic resources) and no mitigation is required.

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

**Less than significant impact.** As mentioned in Question b), a formal delineation of the Study Area and vicinity was performed on July 15, 2011, for the previous trail project, using the U.S. Army Corps of Engineers *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (USACOE 2010) by JBR Environmental Consultants (2012). JBR Environmental Consultants identified Trout Creek as the one potentially jurisdictional feature within the Study Area. Trout Creek is a perennial waterway and totals to approximately 0.06-acre of potentially jurisdictional waters of the U.S. and state. Trout Creek is a perennial stream with a narrow floodplain. The project has been designed to avoid impacts to aquatic resources. When the pipeline alignment would reach the pedestrian bridge crossing, the pipeline would be attached to the 0.02-mile bridge to avoid impacts to Trout Creek. There will be no direct impacts to aquatic resources (i.e., no placement of temporary or permanent fill within aquatic resources) and no mitigation is required.

- 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?

**Less than significant impact.** No terrestrial wildlife nurseries of significance were identified on the project site. Impacts to wildlife nurseries would be less than significant.

Trout Creek and its riparian corridor would be considered a sensitive natural community within the project site. However, as mentioned in Question b), the project has been designed to avoid impacts to Trout Creek and its riparian corridor. When the pipeline alignment would reach the pedestrian bridge crossing, the pipeline would be attached to the 0.02-mile bridge to avoid impacts to Trout Creek and there will be no direct impacts to aquatic resources (i.e., no placement of temporary or permanent fill within aquatic resources). Therefore, no permanent impacts to wildlife movement corridors would occur, and impacts would be less than significant.

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

**Less than significant impact.** The Town of Truckee regulates the preservation of trees through Section 18.30.155 of the Town Development Code. The regulations require that a tree removal permit be obtained for tree removal unless one or more exemption criteria are applicable. Section 18.30.155.C.4 of the Town Development Code specifically exempts tree removal permit requirements for “Removal of trees within public rights-of-way or easements by the Town of Truckee or public or private utilities as necessary to perform maintenance, repairs, modifications and/or construct infrastructure, as well as to protect public health and safety”.

Any tree impacts resulting from the proposed project are assumed to be exempt from the requirement to obtain a tree removal permit or mitigation. No mitigation is required.

- 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?

**No impact.** The project site is not within the boundaries of any adopted habitat conservation plan; therefore, the project would not conflict with the provisions of any adopted habitat conservation plan. No impact would occur.

## 5.7 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 5.7.1 Background and Setting

The analysis for the project is based on the Cultural Resources Assessment (CRA) prepared by HELIX Environmental Planning, which is included as **Appendix D** to this Initial Study.

### 5.7.2 Regulatory Setting

State and federal legislation require the protection of historical and cultural resources. In 1971, President’s Executive Order No. 11593 required that all federal agencies initiate procedures to preserve and maintain cultural resources by nomination and inclusion on the National Register of Historic Places. In 1980, the Governor’s Executive Order No. B-64-80 required that state agencies inventory all “significant historic and cultural sites, structures, and objects under their jurisdiction which are over 50 years of age and which may qualify for listing on the National Register of Historic Places.” Section 15064.5(b)(1) of the CEQA Guidelines specifies that projects that cause “...physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historic resource would be materially impaired” shall be found to have a significant impact on the environment.

For the purposes of CEQA, an *historical resource* is a prehistoric or historic-era resource listed in or determined eligible for listing in the California Register of Historical Resources (CRHR). When a project could impact a resource, it must be determined whether the resource is an historical resource, which is defined as a resource that:

(A) is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political or cultural annals of California; and,

(B) Meets any of the following criteria: 1) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; 2) is associated with the lives of persons important in our past; 3) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or 4) has yielded, or may be likely to yield, information important in prehistory or history.



CEQA applies to prehistoric or historic-era archaeological resources when (1) the archaeological resource satisfies the definition of a historical resource, or (2) the archaeological resource satisfies the definition of a *unique archaeological resource*. A unique archaeological resource is an archaeological artifact, object, or site that has a high probability of meeting any of the following criteria (PRC § 21083.2(g)):

1. The archaeological resource contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
2. The archaeological resource has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. The archaeological resource is directly associated with a scientifically recognized important prehistoric or historic event or person.

### 5.7.3 Data Source/Methodology

The letter report prepared by HELIX presents the results of a cultural resources assessment intended to evaluate the potential for the proposed project to significantly impact *historical resources* (i.e., archaeological or built-environment resources that qualify for listing in the California Register of Historical Resources) and/or historic properties (i.e., archaeological or built-environment resources that qualify for listing in the National Register of Historic Places). The conclusions and recommendations presented here are based on data from an archival records search, Native American outreach, and an intensive pedestrian survey of the project area.

### 5.7.4 Area of Potential Effects

The Area of Potential Effects (APE) is defined as the geographic area or areas within which a project may directly or indirectly cause alterations in the character or use of significant archaeological or architectural resources. The APE is influenced by the scale and nature of the project as well as by the types of cultural resources in the vicinity. For the purposes of this analysis, the APE is understood to be the area that would be subjected to ground disturbance during construction and implementation of the proposed project. The APE for the Pioneer Trail Pipeline and Pump Station Project measures approximately 1.7-miles long (**Figure 4**) and corresponds to the two pipeline alignment options described above, with a 25-foot buffer from the centerline on either side of the proposed alignments. The APE's vertical dimension may extend as much as eight feet below the current ground surface. Because the majority of the pipeline alignment alternatives along the paved Trout Creek Trail and existing overhead utility corridors, visual impacts are expected to be negligible and a separate APE to address secondary impacts was considered unnecessary.

### 5.7.5 Archival Records Search

On October 14, 2021, an archival records search in support of the proposed project was conducted at the North Central Information Center (NCIC) of the California Historical Resources Information System, located at California State University, Sacramento. The records searches addressed all portions of the APE and a 0.25-mile radius around the APE (hereafter referred to as the study area). Sources of information included previous survey and cultural resources files; the National Register of Historic Places (NRHP); the California Register of Historical Resources (CRHR); the Office of Historic Preservation (OHP)

Archaeological Determinations of Eligibility; the OHP Directory of Properties in the Historic Property Data File; historical topographic maps; and historical aerial photographs.

### Previous Studies

The records search identified 28 studies that have previously been conducted within the study area (**Table 6**). Six of these studies resulted in 100 percent survey coverage of the current APE; they are shown in bold and discussed briefly below.

**Table 6. Previous Studies Conducted within the Study Area**

<b>Report</b>	<b>Year</b>	<b>Author(s)</b>	<b>Title</b>	<b>Affiliation</b>
000544	2001	Jensen, Peter	Archaeological Inventory Survey: Proposed Boca Sierra Estates Residential Subdivision Project, c. 238 Acres on Alder Hill, above Truckee, Nevada County	Jensen & Associates
003380	2000	Jensen, Peter	Archaeological Survey, APN 19-42-34	Jensen & Associates
003385	1997	Banka, William J.	Confidential Archaeological Addendum For Timber Operations On Non-Federal Lands In California Marsh Conversion THP	None
003412	1991	Jensen, Sean	Archaeological Inventory Survey Of The Proposed Coachland Mobile Home Park, c. 30 acres near Truckee, Nevada County, California	None
003434	1993	Jensen, Sean	Archaeological Inventory Survey Proposed Subdivision of AP# 19-400-10 c. 110 ac on Lower Alder Mountain near Trout Creek, Truckee, Nevada County, California	None
003467	1979	Johnson, Gary	Archaeological Reconnaissance Report Land Exchange #1 Hopkins Land Exchange	USFS
<b>003503</b>	<b>2001</b>	<b>Lindström, Susan</b>	<b>Third Tahoe Donner Connection Project</b>	<b>None</b>
003579	2000	Lindström, Susan	Mancuso Commercial Project Heritage Resource Inventory	None
<b>003602</b>	<b>2001</b>	<b>Lindström, Susan</b>	<b>6160 Water Storage Tank Project, Heritage Resource Inventory, Truckee, California, Nevada County</b>	<b>None</b>
003657	1994	Lindström, Susan	Truckee Falls Golf Course Heritage Resource Evaluation of Significance 1865 Road (IF-1) and Elle Ellen's Lumber Flume (TF-1) Truckee, California, Nevada County	None
003662	1996	Lindström, Susan	Eighty-Nine Eighty TNT Building Center Project	None
003665	1991	Lindström, Susan	Ronald Grider Euer Valley Road Subdivision	None
004391	1997	Betts, John	Bullshead Analysis Area Archaeological Inventory 05-17-1038	USFS
003602	2002	Lindström, Susan	Tahoe Donner 32-Acre Project: Heritage Resource Inventory Truckee, California	None
005485	1996	Houdyschell, W. H.	Archaeological and Historical Survey for Tahoe Donner Thinning	None
008229	2004	Christensen, T. H., M. Hufstetler, R. Kautz, and M. Kimball	Town of Truckee Historic Resources and Architectural Inventory	Kautz Environmental Consultants, Inc.
008919	2001	Crosland, Richard	A Cultural Resource Inventory of the I-80 Corridor from Bridge Street to the State Highway 89 Interchange at Truckee, California CalTrans Project No. 03-291003	JBR Environmental Consultants, Inc.

Report	Year	Author(s)	Title	Affiliation
008920	2004	Carr, Rick	An Archaeological Survey Report for the Donner Crest Timber Harvesting Plan	Graduate Forester, Applied Forest Management
008927	2003	Bunse, R., B. Larson, and C. Toffelmier	National Register of Historic Places Inventory and Evaluation of the Truckee Ranger District Work Center; Tahoe National Forest Heritage Report No. TNF 1807/ R-2003-0517-00068	JRP Historical Consulting Services
009119	1980	Lord, Paul A., Jr.	Completion Report; Truckee Historical Survey Project	None
009280	2007	Jensen, Peter	Archaeological Survey, 82.64- acre Indian Jack Project	Jensen & Associates
010454	2010	Waechter, S. A., D. J. Andolina, S. G. Lindstrom, J. Garibaldi, and E. Romanski	Revised Cultural Resources Inventory for the Proposed 625 and 650 Line Upgrade Project, Nevada and Placer Counties, California. LTBMU Report no. TB-2007-043/R2007051900068	Far Western Anthropological Research Group, Inc.
<b>010762</b>	<b>1995</b>	<b>Lindström, S., and H. C. Bunt</b>	<b>Steele Enterprises</b>	<b>None</b>
011075	2011	Houdyschell, William H.	An Archaeological Survey Report for the Alder Creek Community Fuel Break Exemption Grant # 10USFS-ES0533 Nevada County, California	None
<b>011083</b>	<b>2012</b>	<b>Waechter, Sharon A., and Allen McCabe</b>	<b>Phase II Evaluation for the Tahoe Donner to Downtown Recreation Trail, Truckee, Nevada County, California</b>	<b>Far Western Anthropological Research Group, Inc.</b>
011797	1994	Lindström, Susan	Truckee Falls Heritage Resource Inventory, 225-Acre Parcel, Truckee, CA, Nevada County	None
012544	2015	Lindström, Susan	Phase 1A Historical and Archaeological Resources Inventory Report Tahoe Donner Trails Project Five-Year Implementation Plan Truckee, California Nevada County	None
012545	2017	Lindström, S., and D. Blom	Donner Lake Rim Trail Project Cultural Resource Inventory	Battle Born GIS Consulting

Of these 28 studies, six directly addressed portions of the current APE and are briefly described below.

- **Report 003503** is a study conducted in 2001 to support the Town of Truckee in its environmental review of alternative road connections to the Truckee Donner Subdivision. This study, which examined the central portion of the current APE, resulted in the documentation of two sites within the APE, including P-29-001236 (Euer Valley Road) and P-29-001238 (a single-pole utility line).
- **Report 003602** documents a study conducted in 2001 to support planned construction of a water storage tank and a 1,200-foot pipeline by the District. The report's study area, which intersected the current APE near its eastern end, did not result in the documentation of any cultural resources.
- **Report 010762** is a study conducted in 1995 to support a Timber Harvesting Plan. The report's study area, which intersected the current APE near its eastern end, did not result in the documentation of any cultural resources within the APE.
- **Report 011083** was conducted in 2012 to support the Tahoe Donner to Downtown Recreation Trail, which includes the Trout Creek Trail. Surveys conducted for the study characterized the entire current APE and provided eligibility recommendations for three previously unevaluated resources.

- **Report 011797** documents a study conducted in 1994 to support development of the Coyote Moon Golf Course. The report's study area included the area south of the current APE's western half, but the study did not result in the documentation of any cultural resources.
- **Report 012544** was conducted in 2015 to support the Tahoe Donner Association's plans to rehabilitate existing hiking trails and construct new trails over an approximately 22-mile area. Only the far western portion of the current APE was investigated by this study, which did not result in the documentation of any cultural resources.

### Previously Documented Resources

The records search also determined that there are 29 previously recorded cultural resources located within the study area (**Table 7**). Five of these resources are located within the current APE; they are shown in bold and discussed briefly below.

**Table 7. Previously Documented Resources within the Study Area**

<b>Primary</b>	<b>Trinomial</b>	<b>Description</b>	<b>Year</b>	<b>Author(s)</b>	<b>Affiliation</b>
P-29-000169	CA-NEV-000111	Low-density lithic scatter with tools	1973	Peak, A., and P. Johnson	None
P-29-000171	CA-NEV-000113	Lithic scatter	1973	Peak, A., and P. Johnson	None
P-29-000514	CA-NEV-000456H	Historic campsite	1980	Rush, Alex	None
P-29-000515	CA-NEV-000457H	Small scatter of historic debris	1980	Rush, Henton	None
<b>P-29-000732</b>	<b>CA-NEV-000701H</b>	<b>Overland Emigrant Trail</b>	<b>1976</b>	<b>Wilford, Paul</b>	<b>None</b>
P-29-001059		Trout Creek Dump	2001	Lindstrom, S., and L. Bennett	None
P-29-001128	CA-NEV-000793	Lithic scatter with tools	1993	Jensen, Sean	Jensen & Associates
P-29-001130	CA-NEV-000794H	Scatter of 1920s – 1950s refuse	1993	Jensen, Sean	Jensen & Associates
P-29-001233	CA-NEV-000857H	Historic and modern refuse scatter	2000	Crosland, Richard	JBR Environmental Consultants
P-29-001234	CA-NEV-000858	Lithic scatter	2001	Lindstrom, S., and L. Bennett	None
P-29-001235	CA-NEV-000859H	Cinder quarry pit	2001	Lindstrom, S., and L. Bennett	None
<b>P-29-001236</b>	<b>None</b>	<b>Euer Valley Road (Bridge Street Extension)</b>	<b>1994</b>	<b>Lindstrom, S., and C. B. Blanchard</b>	<b>None</b>
P-29-001237	None	Historic flume	1994	Lindstrom, S., and C. B. Blanchard	None
<b>P-29-001238</b>	<b>None</b>	<b>Historic single-pole utility line</b>	<b>2001</b>	<b>Lindstrom, S., and L. Bennett</b>	<b>None</b>
P-29-001239	None	Historic road segment	2001	Lindstrom, S., and L. Bennett	None
P-29-001241	None	Historic fenceline	2001	Lindstrom, S., and L. Bennett	None
P-29-001242	CA-NEV-000861H	Concrete water intake structure	2001	Lindstrom, S., and L. Bennett	None
P-29-001243	None	High-cut stump with axe marks	2001	Lindstrom, S., and L. Bennett	None
P-29-001248	CA-NEV-000865H	Sawmill and associated outbuilding	2000	Lindstrom, S.	None
P-29-001249	None	Historic refuse deposit	2000	Lindstrom, S.	None
P-29-001250	None	Emigrant Trail marker	2000	Lindstrom, S.	None

Primary	Trinomial	Description	Year	Author(s)	Affiliation
P-29-001492	CA-NEV-000971H	Truckee Ranger District Work Name: Center/ Old Truckee Ranger Station	2003	Larson, Bryan, and Cindy Toffelmier	JRP
P-29-004231	None	Historic dirt road	1994	Lindstrom, S.	None
P-29-004232	None	Numerous historic-era isolated artifacts	1994	Bunt, Herbert C., and Susan G. Lindstrom	None
<b>P-29-004341</b>	<b>None</b>	<b>Lithic scatter with tools and historic refuse</b>	<b>2012</b>	<b>McCabe, A., and A. Garner</b>	<b>Far Western Anthropological Research Group, Inc.</b>
<b>P-29-004342</b>	<b>None</b>	<b>Historic dirt road</b>	<b>2012</b>	<b>McCabe, A., and A. Garner</b>	<b>Far Western Anthropological Research Group, Inc.</b>
P-29-004343	None	Mid-20 <sup>th</sup> century refuse scatter	2011	McCabe, A., and A. Garner	Far Western Anthropological Research Group, Inc.
P-29-004344	None	Historic dirt road	2011	McCabe, A., and A. Garner	Far Western Anthropological Research Group, Inc.
P-29-004345	None	Mid-20 <sup>th</sup> century dump site	2011	McCabe, A., and A. Garner	Far Western Anthropological Research Group, Inc.

Of these 29 resources, five intersect portions of the current APE and are briefly described below.

- **P-29-000732 (CA-NEV-000701H)** represents the Overland Emigrant Trail. The trail was designated a California Registered Historical Landmark No. 799 in 1964, and as such it has automatically been listed as a historical resource on the CRHR. P-29-000732 intersects the current APE at its far eastern end, near the intersection of Comstock Drive and Pioneer Trail.
- **P-29-001236** is a section of Euer Valley Road, which was constructed in the 1880s to reach Sophary Euer's mountain dairy ranch in Euer Valley. The road has not been evaluated for eligibility to the CRHR or NRHP; in her 1994 study (Report 003503) Susan Lindström noted that although the road is associated with events and personalities of local importance, it is "typical and (does) not incorporate any unique or unusual engineering aspects." The road has been altered by subsequent grading and alterations of its original alignment, leading Lindström to recommend that the road does not meet criteria for listing in the CRHR. A portion of the road in the center of the current APE has been repurposed as the Trout Creek Recreational Trail.
- **P-29-001238** represents an east-to-west trending single-pole utility line that was constructed some time prior to 1955. In her 1994 study (Report 003503), Lindström recommended that the utility line was ineligible for the CRHR because all of its "potentially significant information will have been recovered with the completion of the heritage inventory report and no further research or project constraints are necessary." The eastern portion of the current APE and the far western portion of Alternative B are located within P-29-001238's corridor.
- **P-29-004341** represents a sparse, surface and near-surface scatter of basalt tools and debitage, historic-period refuse, and modern trash on a western terrace above Trout Creek. The site was found ineligible for the CRHR through survey evaluation (Report 011083). Originally located adjacent to Trout Creek in the western portion of the current APE, the majority of the site appears to have been destroyed during construction of the pedestrian bridge that crosses the creek.

- **P-29-004342** is a dirt road that is depicted on 1940 and 1955 maps of the Truckee area, and is currently used as a recreational trail. The road cuts diagonally through the western portion of the current APE. In 2012 Sharon Waechter and Allen McCabe recommended that the site is ineligible for inclusion in the CRHR (Report 011083).

### 5.7.6 Native American Outreach

On October 8, 2021, HELIX requested that the Native American Heritage Commission (NAHC) conduct a search of their Sacred Lands File for the presence of Native American sacred sites or human remains in the vicinity of the proposed project area. A written response received from the NAHC on November 16, 2021, stated that the Sacred Lands File was negative for the presence of Native American cultural resources in the immediate project area.

On February 24, 2022, HELIX sent letters to eight Native American contacts who were recommended by the NAHC as potential sources of information related to cultural resources in the vicinity of the project area:

- Darryl Cruz, Tribal Historic Preservation Officer, Washoe Tribe of Nevada and California
- Pamela Cubbler, Treasurer, Colfax-Todds Valley Consolidated Tribe
- Steven Hutchason, Tribal Historic Preservation Officer, Wilton Rancheria
- Clyde Prout, Chairperson, Colfax-Todds Valley Consolidated Tribe
- Don Ryberg, Chairperson, Tsi Akim Maidu
- Serrell Smokey, Chairperson, Washoe Tribe of Nevada and California
- Jesus Tarango, Chairperson, Wilton Rancheria
- Gene Whitehouse, Chairperson, United Auburn Indian Community of the Auburn Rancheria

The letters advised the tribes and specific individuals of the proposed project and requested information regarding cultural resources in the immediate area, as well as any feedback or concerns related to the proposed project. As of the date of this report, no responses have been received. Documentation related to Native American coordination is included as Attachment B of the CRA.

### 5.7.7 Intensive Pedestrian Survey

#### Survey Methods

On October 19, 2021, HELIX Cultural Resources Group Manager Clarus Backes, RPA, conducted a pedestrian survey to characterize any prehistoric or historic-era archaeological resources located within the APE. During the survey the ground surface throughout the APE was examined for the presence of historic-era artifacts (e.g., metal, glass, ceramics), prehistoric artifacts (e.g., flaked stone tools, tool-making debris), and other features that might represent human activity that took place more than 50 years ago. Survey conditions were generally good in all areas where the pipeline alignment alternatives follow paved or graded roads and trails, and moderate to poor in surrounding areas where thick vegetation and patchy snow limited ground surface visibility. Survey photographs are presented in Attachment C of the CRA.

## Survey Results

The APE is generally bordered by residential parcels and forested land to the north and west, industrial land uses to the east, and the Coyote Moon Golf Course to the south. The 1.7-mile long APE follows disturbed areas along its entire length and is generally characterized by a moderate level of human disturbance. The recreational trail and dirt roads in the APE are subject to regular recreational uses including walking, jogging, bicycling, and cross-country skiing. The utility corridor contains overhead utility lines and utility poles and the vegetation is regularly maintained to prevent interference with the power lines. Terrain within the APE ranges from steeply sloping to gently sloping, with elevations varying from approximately 6,235-feet above mean sea level (amsl) at the western end of the APE to approximately 5,980-feet amsl near the eastern end of the APE. Soils in the APE generally consist of a 1.6-foot to 5.9-foot thick stratum of gravelly or sandy clay loam overlying unweathered bedrock.

Both Alignment A and Alignment B begin at an approximately 0.05-mile section of Northwoods Boulevard, located at the west end of the APE. Alignment A would turn east through the Trout Creek trailhead parking lot, and continue east along the Trout Creek Trail for approximately 0.35-miles until it would reach the existing pedestrian bridge that crosses over Trout Creek. The approximately 12-foot wide Trout Creek Trail is heavily used by cyclists and pedestrians, and its entire length is fully paved. Alignment B would turn east onto the existing overhead utility corridor and follow the corridor approximately 0.23-mile until it jogs north to connect with Trout Creek Trail (and Alignment A) on the west side of the pedestrian bridge. The utility corridor is approximately 200-foot wide and heavily disturbed by regular, ongoing maintenance and vegetation management activities. The area west of the bridge was once the location of archaeological site P-29-004341, a scatter of prehistoric basalt tools and debitage, historic-period refuse, and modern trash that was destroyed by construction of the existing bridge.

Both alignments share a common path east of Trout Creek. In the central portion of the APE the alignments continue along the paved Trout Creek Trail for 0.47-mile before making a slight turn northwards to join an existing dirt utility access road. This paved section of the APE represents Euer Valley Road (P-29-001236), a historic-era road that has been recommended ineligible for listing in the CRHR. The alignments then follow the heavily disturbed dirt utility access road approximately 0.31-mile before re-entering the existing overhead utility corridor for 0.3-mile. From the end of the utility corridor, the alignments join an existing paved driveway that travels 0.17-mile to the intersection of Comstock Drive and Pioneer Trail, the eastern termini of the two pipeline alignment alternatives.

The two proposed pump station location alternatives were also surveyed for cultural resources. Visibility in both areas was moderate to poor due to thick undergrowth and snow, although both show evidence of recent disturbance in the form of borrow pits and push piles.

No evidence for undocumented prehistoric or historic-era cultural resources was found during the survey of the pipeline alignments and pump station location alternatives. The survey found that the majority of the APE is paved, graded, or heavily disturbed by ongoing maintenance activities; ground visibility was poor in the two pump station location alternatives, but both appear to be recently disturbed. In summary, the proposed project would not affect previously recorded cultural resources, and no undocumented resources were found during the survey.

### 5.7.8 Analysis

- a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
- c) Disturb any human remains, including those interred outside of formal cemeteries?

**Less than significant impact with mitigation.** The records search determined that the entirety of the APE has previously been surveyed for cultural resources, and five previously documented resources are located within the boundaries of the APE. These resources are almost all linear, historic-era resources, many of which have been repurposed into modern recreational trails and access roads. The sole previously documented prehistoric resource, site P-29-004341, was destroyed by construction of the pedestrian bridge over Trout Creek.

The results of HELIX's Native American outreach remain inconclusive – a search of the Sacred Lands File by the NAHC did not indicate the presence of sensitive Native American resources in the area, and as of March 1, 2022 no responses have been received from the Native American tribes and individuals contacted by HELIX for additional information.

The majority of the two alignment alternatives consist of paved trails, graded dirt access roads, and a regularly maintained transmission corridor. As such, neither corridor shows evidence of undocumented cultural resources. Ground visibility was moderate to poor during the survey of the two pump station location alternatives, but the terrain and previous disturbances in these areas suggest that the likelihood of encountering cultural resources in either is low.

No historical resources or historic properties will be affected by the proposed project. However, because previous studies have demonstrated that the region has a long history of occupation and land use throughout the prehistoric and historic eras, the APE should be considered moderately sensitive for cultural resources if excavations or trenching extend below previously disturbed areas. The recommendations provided below, Mitigation Measures CUL-1 through CUL-2, are intended to minimize the potential for buried cultural resources to be significantly impacted during project implementation.

#### **Mitigation Measure CUL-1: Inadvertent Discoveries**

In the event that cultural resources are exposed during ground-disturbing activities, construction activities should be halted in the immediate vicinity of the discovery. If the site cannot be avoided during the remainder of construction, an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards should then be retained to evaluate the find's significance under the California Environmental Quality Act (CEQA). If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted and should be discussed in consultation with the District.

#### **Mitigation Measure CUL-2: Treatment of Human Remains**

Although there is no evidence to suggest the presence of human remains, their discovery is always a possibility during a project. If such an event did occur, the specific procedures outlined



by the NAHC, in accordance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code, will be followed:

1. All excavation activities within 60-feet of the remains will immediately stop, and the area will be protected with flagging or by posting a monitor or construction worker to ensure that no additional disturbance occurs.
2. The project owner or their authorized representative will contact the County Coroner.
3. The coroner will have two working days to examine the remains after being notified in accordance with HSC 7050.5. If the coroner determines that the remains are Native American and are not subject to the coroner's authority, the coroner will notify NAHC of the discovery within 24 hours.
4. NAHC will immediately notify the Most Likely Descendant (MLD), who will have 48 hours after being granted access to the location of the remains to inspect them and make recommendations for treatment of them. Work will be suspended in the area of the find until the senior archaeologist approves the proposed treatment of human remains.
5. If the coroner determines that the human remains are neither subject to the coroner's authority nor of Native American origin, then the senior archaeologist will determine mitigation measures appropriate to the discovery.

## 5.8 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 5.8.1 Background and Setting

California's electricity needs are satisfied by a variety of entities, including investor-owned utilities, publicly owned utilities, electric service providers and community choice aggregators. In 2020, the California power mix totaled 272,576 gigawatt hours (GWh). In-state generation accounted for 51 percent of the state's power mix. The remaining electricity came from out-of-state imports (CEC 2020). **Table 8** provides a summary of California's electricity sources as of 2020.

**Table 8. California Electricity Sources 2020**

Fuel Type	Percent of California Power
Coal	2.74
Large Hydro	12.21
Natural Gas	37.06
Nuclear	9.33
Oil	0.01
Other (Petroleum Coke/Waste Heat)	0.19
Renewables	33.09

Source: CEC 2020.

Overall, California's total grid-served electric generation continues to decline as local, distributed generation systems expanded across the state. Behind-the-meter residential rooftop solar photovoltaic systems directly reduce the measured delivery of power from the state's fleet of utility-scale power plants. In 2020, California experienced the third driest year since year since 1895, as drought conditions returned to the state. Similarly, 2020 had the third highest annual average temperature recorded over

the past 126-year record. As a result, annual hydroelectric generation fell by 44 percent from 2019 levels to 21,414 GWh.

California's natural gas-fired electric generation increased by 7 percent in 2020 to 92,298 GWh, accounting for 48 percent of in-state generation. In-state renewables (small hydro, geothermal, biomass, solar, and wind) decreased by 1.4 percent compared to 2019, due to decreased generation from biomass (plant retirements) and small hydroelectric generation (drought conditions). Combined wind and solar generation were up by 2 percent over 2019 levels while geothermal generation was up 3.4 percent in 2020. Looking ahead into 2021, hydroelectric generation continues into historically low levels for each of the first five months of the year for which there is available CAISO data (CEC 2020).

## 5.8.2 Regulatory Framework Relating to Energy

### Energy Independence and Security Act of 2007

House of Representatives Bill 6 (HR 6), the federal Energy Independence and Security Act of 2007, established new standards for a few equipment types not already subjected to a standard, and updated some existing standards. Perhaps the most substantial new standard that HR 6 established is for general service lighting that is being deployed in two phases. First, phased in between 2012 through 2014, common light bulbs were required to use about 20 to 30 percent less energy than previous incandescent bulbs. Second, by 2020, light bulbs must consume 60 percent less energy than today's bulbs; this requirement would effectively phase out the incandescent light bulb.

### Energy Improvement and Extension Act of 2007

The formerly entitled "Renewable Energy and Job Creation Act of 2008," or Division B of HR 1424, was signed into law by President Bush in October 2008. The signed bill contains \$18 billion in incentives for clean and renewable energy technologies, as well as for energy efficiency improvements.

## 5.8.3 Analysis

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

**Less than significant impact.** The proposed project would involve the construction of a pump station and a pipeline alignment which would improve the transport of water, electrical, and communications utilities to the Tahoe Donner Subdivision, as requested by the District. While construction activities would result in the temporary consumption of energy resources in the form of vehicle and equipment fuels (gasoline and diesel fuel) and electricity/natural gas (directly or indirectly), such consumption would be incidental and temporary and would thus not have the potential to result in wasteful, inefficient, or unnecessary consumption of energy resources.

With regard to long-term operations, although the project would construct new utility services with the construction of a new pipeline alignment and pump station for water, electrical, and communication utility demand, the project would necessitate very limited new equipment that would create additional energy demands. The project would construct a new utility pipeline alignment and pump station as requested by the District and the diminishing existing utility pipeline that serves the Tahoe Donner Subdivision. According to the Water Systems Engineer, the current water system requires approximately 1,100,000 kilowatt-hours (kWh) per year to supply water to the Tahoe Donner subdivision (Pers Comm

2022). With implementation of the project, the electricity required to supply water would be reduced to 800,000 kWh per year, a 300,000 kWh per year net reduction in energy use. Overall, the proposed project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

**No impact.** See the discussion under question a) above. The proposed project would not result in a substantial new demand for energy resources nor conflict with or obstruct any state or local plan for renewable energy or energy efficiency. No impact would occur.

## 5.9 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 5.9.1 Background and Setting

#### Geology

The project site is in an area with gentle to moderately sloping hills with elevation ranging from approximately 6,003-feet to 6,397-feet. A general slope moves downward from north to south within the project vicinity. The project site is approximately 6,235-feet above mean sea level at the western end of the alignment and approximately 5,980-feet above mean sea level near the eastern end of the alignment. The Town of Truckee is located in the northern portion of the Sierra geologic province. The northern Sierra Nevada mountain range is subdivided into three main geologic complexes which are

regions of distinct rock types, topography, and structure that were defined by the primary mountain building episodes of the Sierra Nevada mountain range. The Truckee Basin, in which the Town of Truckee is located, lies within the eastern most complex of the Sierra Nevada range. The basin is located between two north-trending mountain ranges, the 9,000-foot-high Sierra Nevada on the west and the 10,000-foot Carson Range on the east.

The bedrock of the Truckee Basin is primarily defined by Triassic (230 to 190 million years ago) and Jurassic (190 to 135 million years ago) metamorphic rock and includes granite intrusions associated with the Sierra Nevada range. These rocks are consolidated, very dense and hard, with small grain structure and little capacity for water storage. On top of the bedrock is a late Tertiary (from 63 million to two million years ago) sequence of volcanic flows, glacial deposits, and stream and lake deposits. The structure of the deposits is nearly horizontal beds of mostly unconsolidated volcanic material and sedimentary material. Sedimentary material is generally very porous and stores large amounts of ground water (Town 2006b).

### Seismicity

The Town of Truckee is not located within any of the Earthquake Fault Zones delineated by the Alquist-Priolo Earthquake Fault Zoning Act and is not included on the list of California cities considered to be within fault-rupture zones (CDC 2021). Additionally, Nevada County is not included on the list of counties considered to be within fault-rupture zones. As there are no faults in direct proximity to the Town of Truckee, it is not within any Alquist-Priolo designated zones, the risk of seismically induced ground rupture is low.

Faults located near Truckee include the Mohawk Valley Fault, the southern section of which lies approximately 20-miles northwest of Truckee in Sierra County, and the Dog Valley Fault, which extends in from Dog Valley (approximately 20-miles northeast of Truckee) southwest to near Donner Lake. Several small trace faults are also located within the Town of Truckee limits. None of these faults are designated as Alquist-Priolo Special Study Zones, which identify fault areas considered to be of greatest risk in the state.

### Seismic Hazards

While Truckee has a relatively low risk of seismic hazard when compared to the rest of California, the Town of Truckee is surrounded by seismically active regions and will on occasion experience earthquakes. There are no faults within the Town's boundary; however, there are faults in close proximity to the boundary. The Town of Truckee and its sphere are subject to three principal earthquake-related seismic hazards: ground shaking, liquefaction, ground rupture. These seismic hazards can cause damage to structures and put the health and safety of citizens at risk.

The faults in the Truckee region are capable of generating earthquakes of significant magnitude on the Richter Scale, potentially producing ground shaking in the Town of Truckee. Earthquake ground shaking is the source of the most widespread earthquake damage. The intensity of ground shaking can be several times larger on sites underlain by thick deposits of saturated sediments than on bedrock. Liquefaction is a phenomenon primarily associated with saturated, cohesionless soil layers located close to the ground surface. During liquefaction, soils lose strength and ground failure may occur. The California Department of Conservation has not mapped the Town of Truckee to identify the potential for soil liquefaction. However, as granular soils must be saturated to be at risk of liquefaction, the areas in

the Town of Truckee most susceptible to liquefaction include areas along the Truckee River and where there are higher groundwater levels.

As there are no faults in direct proximity to the Town, and Truckee is not within an Alquist-Priolo designated zone, the risk of seismically induced ground rupture is low.

### Soils

The property includes eight soil mapping units (NRCS 2022):

- Cinder land-Sierraville-Kyburz complex, 30-50 slopes,
- Lorack variant gravelly loam, 2-30 percent slopes,
- Fugawee-Tahoma complex, 30-50 percent slopes,
- Kyburz-Trojan complex, 30-50 percent slopes,
- Kyburz-Aldi complex, 2-30 percent slopes,
- Meiss-Rock outcrop complex, 30-75 percent slopes,
- Pits, borrow, and
- Tallac-Cryumbrepts, wet complex, 2 to 30 percent slopes

Cinder land-Sierraville-Kyburz complex soils occur on mountain slopes, backslopes, mountain flanks, and cinder cones and consists of outwash derived from volcanic rock. A typical profile is gravelly loam from 0- to 7-inches, very gravelly clay loam from 7-to 25-inches, extremely gravelly sandy loam from 25- to 36-inches and is cemented from 36- to 60-inches; the depth to water table is greater than 80-inches.

Lorack variant gravelly loam soils occur on backslopes and outwash terraces and consists of residuum weathered from volcanic rock and cinders. A typical profile is very stony sandy loam from 0 to 9 inches, stony clay loam from 9- to 24-inches, clay loam from 24-to 75-inches and unweathered bedrock from 75- to 79-inches; the depth to water table is greater than 80-inches.

Fugawee-Tahoma complex soils occur on mountain slopes, backslopes, and mountain flanks and consists of residuum weathered from igneous rock and basic tuff. A typical profile is gravelly or sandy loam from 0- to 8-inches, gravelly clay loam from 8- to 41-inches, and unweathered bedrock from 41- to 45-inches; the depth to water table is greater than 80-inches.

Kyburz-Trojan complex soils occur on mountain slopes, backslopes, and mountain flanks and consists of colluvium over residuum weathered from andesite. A typical profile is slightly decomposed plant material from 0- to 1-inches, moderately decomposed plant material from 1- to 2-inches, gravelly sandy loam from 2- to 7-inches, gravelly loam from 7- to 14-inches, gravelly clay loam from 14- to 25-inches, gravelly clay loam from 25- to 36-inches, and bedrock from 36- to 46-inches; the depth to water table is greater than 80-inches.

Kyburz-Aldi complex soils occur on mountain slopes, backslopes, and mountain flanks and consists of colluvium over residuum weathered from andesite or basalt. A typical profile dominated by Kyburz soil is slightly decomposed plant material from 0- to 1-inches, moderately decomposed plant material from 1- to 2-inches, gravelly sandy loam from 2- to 7-inches, gravelly loam from 7- to 14-inches, gravelly clay loam from 14- to 25-inches, gravelly clay loam from 25- to 36-inches, and bedrock from 36- to 46-inches. A typical profile dominated by Aldi soil is slightly decomposed plant material, loam from 0- to 8-inches,

clay loam from 8- to 18-inches, and bedrock from 18- to 79-inches. The depth to water table for both Kyburz and Aldi soils is greater than 80-inches.

Meiss-Rock outcrop complex soils occur on mountain slopes, backslopes, and mountain flanks and consists of residuum weathered from andesite. A typical profile is sandy loam from 0- to 9-inches, gravelly sandy loam from 9- to 19-inches, and unweathered bedrock from 19- to 23-inches; the depth to water table is greater than 80-inches.

Pits, borrow soils are areas created to remove earthen material from, which will be used for fill at another location.

Tallac-Cryumbrepts, wet complex soils occur moraine, backslopes, and mountain flanks and consist of glaciofluvial deposits. A typical soil profile is very gravelly sandy loam from 0- to 16-inches, very cobbly coarse sandy loam from 16- to 22-inches, extremely gravelly coarse sandy loam from 22- to 41-inches and is cemented from 41- to 60-inches; the depth to water table is 42- to 60-inches.

None of the eight soil types found in the project area are on the National Hydric Soils List for Nevada County (NRCS 2015).

## 5.9.2 Analysis

- 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?

**No Impact.** The project area is not located within any of the Earthquake Fault Zones delineated by the Alquist-Priolo Earthquake Fault Zoning Act and the Town of Truckee is not included on the list of California cities considered to be within fault-rupture zones (CDC 2015). Additionally, Nevada County is not included on the list of counties considered to be within fault-rupture zones. The nearest major faults are the West Tahoe Fault, located approximately 30-miles south of the project area, and Honey Lake Fault, located approximately 50-miles north of the project area (CDC 2015). As there are no faults in direct proximity to Truckee and the Town of Truckee is not within any Alquist-Priolo designated zones, the risk of seismically induced ground rupture within the Town of Truckee, including the project area, is considered low. Because the proposed project is not located in an area considered at high risk of ground rupture of a fault, and because the proposed pipeline and pump station would meet current standards for earthquake stability, the project is expected to have no impact.

- ii. Strong seismic ground shaking?

**Less than significant impact.** Most structures, roads, trails, and associated infrastructure are potentially subject to damage from ground shaking in the event of an earthquake. Ground shaking during an earthquake is an unavoidable hazard for structures and facilities in the Sierra Nevada region, including the project area. The intensity of such an event would depend on the causative fault and the distance to the epicenter, the moment magnitude, and the duration of shaking. The peak ground acceleration within the project area is relatively lower than in other seismically active regions of California.



Nonetheless, ground shaking within the project area could potentially cause significant damage to the proposed pipeline, if not constructed in accordance with Uniform Building Code requirements for areas within Seismic Risk Zone 3. However, the pipeline would meet all state requirements within Seismic Risk Zone 3. Therefore, no mitigation is necessary, and impacts related to the proposed project are expected to be less than significant.

iii. Seismic-related ground failure, including liquefaction?

**Less than significant.** As noted above, the project is not located within a delineated Alquist-Priolo Earthquake Fault Zone. Soils mapped within the project area are not considered to be hydric soils, which are typically, saturated soils (NRCS 2015). In considering the history of past earthquake activity in the region, the potential for ground lurching, differential settlement or lateral spreading occurring during or following seismic events near or on the site is considered to be low. In addition, the design of the project will conform to state requirements which account for some degree of seismicity. The proposed project would not be expected to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving liquefaction of soils or other ground failures. Therefore, the proposed project would have a less than significant impact.

iv. Landslides?

**Less than significant.** Slopes in the project area are generally gentle to mild slopes in most locations, representing the low susceptibility for potential landslides. Landslides are found regionally, but no evidence of landslides is known to occur within the boundary of the project area. The proposed project would not be expected to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, as a result of landslides. Therefore, the proposed project would have a less than significant impact.

b) Result in substantial soil erosion or the loss of topsoil?

**Less than significant impact.** Construction of the proposed project would require surface disturbance. However, the pipeline alignment would be constructed on previously disturbed land such as utility corridors, bridge crossings, existing recreational trails, and paved roads. No undisturbed habitat or jurisdictional features would be impacted from the pipeline construction and none of the eight soil types found in the project area are on the National Hydric Soils List for Nevada County (NRCS 2015). Topsoil may be substantially loosed or exposed from construction, even in previously disturbed areas, but best management practices (BMP) would be put in place during construction to prevent erosion of loose soil. Therefore, the impact of the proposed project related to soil erosion and loss of topsoil is less than significant.

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

**Less than significant impact.** The proposed project is not located on a geologic unit or soil type that is known to be or documented as unstable, and no soils found in the project area are on the National Hydric Soils List for Nevada County (NRCS 2015). As noted above in Impact Discussion a-iii, the project area is not located within a delineated Alquist-Priolo Earthquake Fault Zone. In consideration of the

history of past earthquake activity in the region, the potential for lateral spreading, subsidence, liquefaction, or other related ground failure occurring during or following seismic events near or on the site is considered to be low. The pipeline alignment would run through previously disturbed areas including utility corridors, recreational trails, and paved roads. The proposed project would not be expected to cause instability of any geologic unit or soil, and therefore impact would be considered less than significant.

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

**Less than significant.** The eight soils within the project area have been mapped by the U.S. Department of Agriculture (NRCS 2022). These soils are not expected to contain large subsurface clay contents. Subsurface clay materials can expand and contract enough to cause damage to structures. However, by virtue that expansive soil materials are encountered throughout the state, they are generally addressed through standardized foundation engineering practices. Compliance with all the State of California standards and practices, as well as application of the existing regulations identified in the Uniform Building Code would minimize the risk associated with development of the proposed project, therefore this impact is considered **less than significant**.

- 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?

**No impact.** No septic tanks are proposed; therefore no impact would occur.

- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**Less than significant impact with mitigation.** No previous surveys conducted in the project area have identified the project site as sensitive for paleontological resources or other geologically sensitive resources, nor have testing or ground disturbing activities performed to date uncovered any paleontological resources or geologically sensitive resources. While the likelihood of encountering paleontological resources and other geologically sensitive resources is considered low, project-related ground disturbing activities could affect the integrity of a previously unknown paleontological or other geologically sensitive resource, resulting in a substantial change in the significance of the resource. Therefore, the proposed project could result in potentially significant impacts to paleontological resources. Implementation of the proposed mitigation (Mitigation Measure GEO-1) would reduce potentially significant impacts to a level of less than significant.

#### **Mitigation Measure GEO-1: Avoid and Minimize Impacts to Paleontological Resources**

In the event a paleontological or other geologically sensitive resources (such as fossils or fossil formations) are identified during any phase of project construction, all excavations within 100-feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the appropriate representative at the District who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the District shall implement those measures which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code Section 21083.2.

## 5.10 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 5.10.1 Background and Setting

GHGs, as defined under California’s AB 32, include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF<sub>6</sub>). AB 32, the California Global Warming Solutions Act of 2006, recognizes that California is a source of substantial amounts of GHG emissions. The statute states that:

*Global warming poses a serious threat to the economic wellbeing, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.*

In order to help avert these potential consequences, AB 32 established a State goal of reducing GHG emissions to 1990 levels by the year 2020, which is a reduction of approximately 16 percent from forecasted emission levels, with further reductions to follow. In addition, AB 32 required CARB develop the Climate Change Scoping Plan (Scoping Plan) to help the state achieve the targeted GHG reductions. In 2015, Executive Order (EO) B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California’s GHG emission reduction targets with those of leading international governments, including the 28 nation European Union. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32. As a follow-up to AB 32 and in response to EO-B-30-15, Senate Bill (SB) 32 was passed by the California legislature in 2016 to codify the EO’s California GHG emission reduction target of 40 percent below 1990 levels by 2030. The most recent update to the Scoping Plan was adopted in December 2017 and establishes a proposed framework for California to meet the EO-B-30-15 reduction target (CARB 2017).

There are no established federal, state, or local quantitative thresholds applicable to the project to determine the quantity of GHG emissions that may have a significant effect on the environment. The NSAQMD has not adopted a GHG threshold or GHG guidance for lead agencies. Therefore, the Sacramento Metropolitan Air Quality Management District’s (SMAQMD’s) Land Development and

Construction Projects GHG Threshold has been chosen as the most appropriate threshold for the proposed project due to the SMAQMD's proximity to the MCAB (SMAQMD 2021). SMAQMD was one of the first districts to adopt GHG thresholds and are one of the only districts that has a construction emissions threshold. Per the SMAQMD GHG thresholds, a significant impact would occur if the proposed project's construction or operation would exceed the SMAQMD threshold of 1,100 metric tons (MT) of carbon dioxide equivalents (CO<sub>2</sub>e) per year.

### 5.10.2 Analysis

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

#### Less than significant impact.

##### Construction

Construction GHG emission sources include construction equipment exhaust, on-road hauling truck exhaust, vendor vehicle exhaust, worker commuting vehicle exhaust, and blasting. GHG emissions were modeled using CalEEMod and USEPA AP-42 emissions factors, and the same methodology and assumptions as described in the Air Quality analysis, above. The CalEEMod output is included as Appendix B to this Initial Study.

The estimated construction GHG emissions for the project are shown in **Table 9**. The project's construction emissions of 293.3 metric tons of CO<sub>2</sub>e per year would be below the SMAQMD construction threshold of 1,100 metric tons CO<sub>2</sub>e. Therefore, the project's construction period GHG emissions would be less than cumulatively considerable.

**Table 9. Annual GHG Emissions from Project Construction**

Source	Emissions (MT CO <sub>2</sub> e)
Equipment and on-road vehicles	289.5
Blasting	3.8
<b>Total Annual Emissions</b>	<b>293.3</b>
<b>SMAQMD Threshold</b>	<b>1,100</b>
<i>Threshold Exceeded?</i>	<i>No</i>

Source: CalEEMod; Thresholds – SMAQMD 2021.

MT CO<sub>2</sub>e = Metric tons of carbon dioxide equivalents.

##### Operation

Long-term operation of the project would result in direct emissions of GHG from the periodic maintenance/testing of the proposed diesel-powered generator, and indirect GHG emissions resulting from the electricity used by the project. According to the project engineer, the current water system requires approximately 1,100,000 kilowatt-hours (kWh) per year to supply water to the Tahoe Donner subdivision. With implementation of the project, the electricity required to supply water would be reduced to 800,000 kWh per year, a 300,000 kWh net reduction in energy use. The project operational GHG emissions and the GHG emissions for the existing water system electricity use were modeled using CalEEMod, described in the Air Quality section. The CalEEMod output is included as **Appendix B** to this

Initial Study. The project's GHG emissions resulting from the proposed emergency generator and electricity use, and the GHG emissions resulting from the existing water system electricity use are summed and compared to the SMAQMD threshold in **Table 10**.

**Table 10. Annual GHG Emissions from Project Operation**

Source	Emissions (MT CO <sub>2</sub> e)
Emergency Generator	3.4
Electricity Use with Project Implementation	484.2
Subtotal	487.6
Existing Electricity Use	(-663.9)
<b>Net Project Emissions</b>	<b>-176.3</b>
<b>SMAQMD Threshold</b>	<b>1,100</b>
<i>Threshold Exceeded?</i>	<i>No</i>

Source: CalEEMod; Thresholds – SMAQMD 2021.  
MT CO<sub>2</sub>e = Metric tons of carbon dioxide equivalents.

The project would result in a net reduction in GHG emissions of -176.3 metric tons CO<sub>2</sub>e per year and would not exceed the SMAQMD operational threshold of 1,100 metric tons CO<sub>2</sub>e. Therefore, the project's construction period GHG emissions would be less than cumulatively considerable.

Because the project's construction period and long-term operational GHG emissions would not exceed the SMAQMD's threshold, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and the impact would be less than significant.

- b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

**Less than significant impact.** As discussed in criterion a) above, the project would not exceed the screening GHG emissions threshold during construction and long-term operation of the project would result in a net decrease in GHG emissions compared to existing conditions. In addition, many long-term GHG reduction plans, including the CARB Scoping Plan, estimate future GHG emissions and corresponding reduction targets based on local and statewide growth estimates. The project would not contribute to any future growth in population or employment in the Town of Truckee or the State. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and impacts would be less than significant.

## 5.11 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 5.11.1 Background and Setting

The following databases were reviewed for the proposed project and surrounding area to identify potential hazardous contamination sites: the California Department of Toxic Substances Control (DTSC) EnviroStor database (DTSC 2019a); California State Water Resources Control Board Geotracker (DTSC 2019c); and the U.S. EPA’s Superfund National Priorities List (EPA 2019b). No sites were identified on or near the project site.

The Truckee Tahoe Airport is located outside of but adjacent to the Town of Truckee boundary. The airport is owned and operated by the Truckee Tahoe Airport District. It is a general aviation facility that serves as a regional center for private and charter flights (Town 2006a). In 2004, the Foothill Airport Land Use Commission adopted the updated *Truckee Tahoe Airport Land Use Compatibility Plan* (Mead & Hunt, 2004). The plan describes a series of land use safety and compatibility zones, and associated

guidelines for development around the Truckee Tahoe Airport that are intended to safeguard against development that is incompatible with airport operations. The project site is located approximately 3.5-miles from the Truckee Tahoe Airport and is located within the Truckee Tahoe Airport influence area, as identified in the *Truckee Tahoe Airport Land Use Compatibility Plan* (Mead & Hunt, 2004).

More than half of the area within the Town's boundary, including the entire project area is mapped as a very high fire hazard severity zone by the California Department of Forestry and Fire Protection (CAL FIRE 2007). The *Town of Truckee 2025 General Plan* (Town 2006a) identifies the project area as a "High Risk" to "Very High Risk" area for Community Threat from Wildland Fire. However, most areas within the Town of Truckee boundary are also identified as a "Very High Risk" area.

The calculation of threat from wildfire hazard is based on a number of combining factors including fuel loading (vegetation), topography, and climatic conditions such as winds, humidity, and temperature. Risks are particularly pronounced in certain areas, particularly where homes are located within or next to dense vegetation and forest, and where steep slopes and other similar conditions exist. Pine forest vegetation is located north of the project site; however, the pipeline alignment would mainly run through disturbed areas between Northwoods Boulevard and the intersection of Pioneer Trail and Comstock Drive.

Federal and state laws include provisions for the safe handling of hazardous substances. The federal Occupational Safety and Health Administration (OSHA) administers requirements to ensure worker safety. Construction activity must also be in compliance with the California OSHA regulations (Occupational Safety and Health Act of 1970). The proposed project would comply with all applicable federal and state laws.

### 5.11.2 Analysis

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

**Less than significant.** Based on records searches of the project area, the project site is not currently listed as having hazardous materials. During project construction, oil, gasoline, diesel fuel, paints, solvents, and other hazardous materials may be used. If spilled, these substances could pose a risk to the environment and to human health. The routine transport, use, and disposal of hazardous materials are subject to local, state, and federal regulations to minimize risk and exposure. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or environment, and impacts would be less than significant for questions a) and b).

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

**Less than significant impact.** Forest Charter School is located over a quarter mile east of the eastern terminus of the project site. During project construction, oil, gasoline, diesel fuel, and other hazardous materials may be used. If spilled, these substances could pose a risk to the environment and to human health. The routine transport, use, and disposal of hazardous materials are subject to local, state, and

federal regulations to minimize risk and exposure. The potential risk of exposure or impacts from transport, use, and disposal of hazardous materials to schools and other nearby sensitive receptors would be minimized through implementation of the regulations. The potential for risks associated with the accidental release of hazardous materials during routine transport, use, or disposal would result in a less than significant impact.

- 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?

**No impact.** A search of the California Department of Toxic Substances Envirostor database, California State Water Resources Control Board Geotracker, and USEPA Superfund National Priorities List indicated that the project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As a result, it would not create a significant hazard or excessive noise to the public or to the environment and 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?

**Less than significant.** The project area is located 3.5-miles from the Truckee Tahoe Airport and is within the influence area for the Truckee Tahoe Airport (Mead & Hunt, 2004). However, the project would be a compatible land use with the safe airport operations and would not result in a safety hazard for people residing or working in the project area. Therefore, impacts would be less than significant.

- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

**Less than significant impact with mitigation.** The proposed project would involve construction activities on 0.05-miles of Northwood Boulevard, as well as on the intersection of Pioneer Trail and Comstock Drive. The construction on Northwoods Boulevard, a major collector in the Town of Truckee, may result in temporary disturbance to traffic or lane closures along this road. However, a Traffic Control Plan would be prepared in compliance with Mitigation Measure TRA-1 identified in Section 5.19, Transportation, which would reduce potential impacts to less than significant impact with mitigation.

- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

**No impact.** The proposed project would construct a mainly subterranean pipeline alignment to transport water, electrical, and communications utilities to the Tahoe Donner Subdivision. Due to the nature of the proposed project and the lack of above ground infrastructure involved, impacts associated with wildland fires are not anticipated. Therefore, the proposed project would not expose people or structures to risks associated with wildland fires, and no impact would occur.



## 5.12 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Create or contribute runoff water which would exceed the capacity of existing or planner stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazards, tsunamis, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 5.12.1 Background and Setting

The project area is located within the Town of Truckee, which is located in the Sierra Nevada Mountains of California, just west of the Nevada state line. The project area is located within the Truckee River Watershed. The Truckee River, beginning at the outlet of the dam at Lake Tahoe in Tahoe City, is the dominant hydrological feature in the watershed. The headwaters of the Truckee River, including the upper Truckee River, are in the Sierra Nevada Mountains at elevations above Lake Tahoe and are outside of the Truckee River Watershed boundary. However, runoff into the headwaters and Lake Tahoe supplies most of the water to the Truckee River, particularly the section of river between Tahoe City and the Town of Truckee. Truckee River flows are heavily dependent on the yearly snowpack of the Sierra Nevada, with high flows generally occurring in the spring or early summer. Reservoir and river operations for the Truckee River Basin are governed by complex legal agreements, decrees, and

regulations that specify numerous conditions for the distribution and water use (Town 2006b). Although the Truckee River is the dominant hydrological feature in the watershed of the project area, it does not flow across the project area. Trout Creek, a tributary to the Truckee River, is the only perennial stream that flows across the project.

The project area is in two hydrologic units: the Trout Creek-Truckee River hydrologic unit (HUC12: 160501020206) and the Prosser Creek hydrologic unit (HUC12: 160501020205). The majority of the Study Area is within the Trout Creek-Truckee River hydrologic unit; however, the northeastern corner of the site is within the Prosser Creek hydrologic unit. Waterways in the Trout Creek-Truckee River hydrologic unit drain into Trout Creek and eventually the Truckee River. Waterways in the Prosser Creek hydrologic unit drain into Alder Creek and eventually the Prosser Creek Reservoir.

NWI mapping based on 1984 aerial imagery shows Trout Creek, classified as Freshwater Forested/Shrub Wetland, crossing through the western portion of the project area. No other aquatic features are identified in the project area based on NWI mapping.

The Federal Emergency Management Agency (FEMA), through its Flood Insurance Rate Mapping program, designates zones where flooding could occur during 100-year and 500-year flood events. The 100-year floodplain boundary is the basic planning criteria used to distinguish the zones where the danger of floods justifies the establishment of floodplain management regulations. Outside this boundary, the risk of flooding is generally not considered sufficient to require floodplain management regulations. The proposed pipeline alignment and pump station will not be located within any 100-year flood plain zone or other special flood hazard areas identified by FEMA (2010).

The project area is located within a groundwater aquifer identified as “Other rocks” by the USGS (2003). Areas identified as “Other rocks” are underlain by low-permeability deposits and rocks, unsaturated materials, or aquifers that supply little water because they are of local extent, poorly permeable, or both. Rocks and deposits with minimal permeability, which are not considered to be aquifers, consist of intrusive igneous rocks, metamorphic rocks, shale, siltstone, evaporite deposits, silt, and clay (USGS 2013).

#### Regulatory Framework Relating to Hydrology and Water Quality

The State Water Regional Control Board manages and administers water quality in California. Water quality in the project area is governed by the Lahontan Regional Water Quality Control Board (LRWQCB) (Region 6) and is outlined in the Water Quality Control Plan for the Lahontan Basin Plan (LRWQCB 2019).

The Porter-Cologne Water Quality Control Act allows the California SWRCB to adopt statewide water quality control plans or basin plans. The purpose of the plans is to establish water quality objectives for specific water bodies. The LRWQCB has prepared the Water Quality Control Plan for the Lahontan Region (Basin Plan) that establishes water quality objectives and implementation programs to meet the stated objectives and to protect the beneficial uses of the Truckee River basin waters. The act also authorizes the NPDES program under the CWA, which includes water quality requirements for storm water discharges from construction activities (e.g., clearing, grading, stockpiling, etc.) that disturb 1 acre or more. Prior to discharging storm water, construction operators must obtain coverage under the statewide Construction General Permit (2009- 0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ) from the State Water Resources Control Board. Waste discharges (including organic or earthen materials) within the 100-year floodplain of the Truckee River and any tributary to the Truckee

River are prohibited under the Basin Plan. However, the LRWQCB may grant exemptions to the prohibition for certain categories of projects if it is found that specific exemption criteria are applicable to the projects. Section 18.24.050 of the Town of Truckee Development Code (Town 2012) also prohibits construction within flood hazard areas, as defined by FEMA or the Federal Insurance Administration maps.

### 5.12.2 Analysis

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

**Less than significant impact with mitigation.** Stormwater runoff has the potential to be altered during project construction. Potential impacts would be minimized by following the National Pollution Discharge Elimination System (NPDES) program standards. Prior to the commencement of project construction, the District shall obtain coverage under the State's National Pollutant Discharge Elimination System (NPDES) General Construction Permit, as issued by the LRWQCB. The District shall be responsible for ensuring that construction activities comply with the conditions in this permit, including the development of a Stormwater Pollution Prevention Plan (SWPPP), implementation of best management practices identified in the SWPPP, and monitoring to ensure that effects on water quality are minimized. Compliance with the NPDES stormwater program would ensure that the proposed project would not violate any water quality standards or waste discharge requirements. Therefore, the impacts relating to the proposed project would be less than significant.

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

**No impact.** The District obtains its water supply from the Martis Valley Groundwater Basin. The basin is a low-lying area of approximately 57 square miles that is completely contained within a larger watershed of approximately 167 square miles. The proposed project operation would require water from the Martis Valley Basin be pumped through the pipeline alignment in order to serve the Tahoe Donner Subdivision. However, given the total subsurface storage and sustainable yield of 24,000-acre-feet per year (AFY), there is enough available water in the basin for the next 20 years of service even if no recharge occurred. Since recharge will continue to occur, the actual yield of the Basin can be expected to be sustainable over a longer period. Therefore, the proposed project would have a less than significant impact on groundwater supplies and would not interfere substantially with groundwater recharge.

- 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?

**Less than significant impact.** Project construction would require grading and excavation that would disturb soils and increase the potential for erosion. The construction would include trenching to allow for a water, electrical and communication pipeline alignment underneath the paved Trout Creek Trail, as well underneath paved roadways, disturbed utility corridors and dirt roads. The proposed project was designed to avoid drainages within the project area by the proposed construction of the pipeline in disturbed areas as well as construction on a pedestrian bridge. However, if construction is improperly

managed, erosion of soils may cause sedimentation of Trout Creek, which is a tributary to the Truckee River. Erosion resulting in sedimentation of Trout Creek, or the Truckee River would be considered substantial, and create a significant impact. As discussed in impact discussion “a)” of this section, compliance with all applicable federal, state, and local regulations and policies, including LRWQCB water quality standards would minimize the potential impact of erosion and sedimentation from construction of the proposed project. Impacts are anticipated to 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?
- (iii) Create or contribute runoff water which would exceed the capacity of existing or planner stormwater drainage systems or provide substantial additional sources of polluted runoff?
- (iv) Impede or redirect flood flows?

**Less than significant impact.** The proposed project would construct an approximately 1.7-mile-long pipeline corridor that would be primarily subterranean. The pipeline alignment would have a 6-foot-wide and 6-foot-deep excavated trench. During construction, approximately 20-feet on either side of the excavated trench would be temporarily disturbed due to the construction area. Following construction, erosion controls measures and limited revegetation would be implemented, as needed, to assist with rehabilitation of the disturbed construction area. The proposed project has been designed to avoid drainages within the project area. For 0.02-mile, the new pipeline alignment would cross Trout Creek by attaching to the existing pedestrian bridge. The pipeline would be high enough above Trout Creek to not significantly impede or redirect flood flows during a major storm event. Additionally, in order to avoid drainages, the pipeline would be constructed on disturbed land for the remaining portion of the pipeline alignment to avoid any potential impacts to undisturbed land. With the intentional design to avoid drainages, combined with implementation of the SWPPP and associated BMPs required under the statewide Construction General Permit, the proposed project would prevent runoff from reaching natural waterways and drainages. The proposed project would not significantly change existing site conditions and would not result in flooding on- or off-site, create or contribute to new runoff, or significantly impede or redirect flood flows. Therefore, impacts would be less than significant for questions c(ii), c(iii), or c(iv).

- d) In flood hazards, tsunamis, or seiche zones, risk release of pollutants due to project inundation?

**Less than significant impact.** The proposed project is not located in a tsunami or seiche zone and is not located in a FEMA special flood hazard area. Most of the proposed pipeline would be subterranean, and areas of the pipeline alignment that would be attached to the bridge crossing and subject to inundation would be designed to withstand floodwaters to reduce the risk of pipe rupture and release of pollutants into Trout Creek. During project construction, oil, gasoline, diesel fuels, and other materials may be used. If the project area were to be inundated during construction, these substances could pose a risk to the environment and to human health. However, these substances would be outside the FEMA special flood hazard zone and would be in accordance with the routine transport, use, and disposal of hazardous materials are subject to local, state, and federal regulations to minimize risk and exposure. Therefore, impacts would be less than significant.

- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**No impact.** The Town of Truckee is located within the jurisdiction of the LRWQCB (Region 6). The LRWQCB developed a Water Quality Control Plan for the North Lahontan Basin, which defines the river basins and establishes beneficial uses to be protected, water quality objectives to protect those uses, and a program of implementation needed for achieving the objectives. The proposed project would not conflict with or obstruct the implementation of this plan and would therefore have no impact.

### 5.13 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural conservation plan?				

#### 5.13.1 Background and Setting

The project area is located entirely within the Town of Truckee limits, in Nevada County, California. The proposed project would begin on Northwoods Boulevard and move east. Alignment A would move east on the paved Trout Creek Trail before reaching the bridge crossing over Trout Creek. Alignment B would move east on the existing overhead electrical utility corridor before moving northeast to align with the Trout Creek Trail. Alignment B would then move east on Trout Creek Trail before reaching the bridge crossing on Trout Creek. Both Alignment A and Alignment B would then move northeast on an existing dirt road and sewer pipeline before connecting to disturbed land from existing overhead electrical transmission lines. Both pipeline alignments would terminate on an existing paved driveway and water pipeline at the intersection of Comstock Drive and Pioneer Trail. The project is bordered by residential parcels and forested land to the north and west, industrial land uses to the east, and the Coyote Moon Golf Course to the south. The land within the project area is designated as either Industrial or Single Family Residential in the *Town of Truckee 2025 General Plan* (Truckee 2006a).

#### 5.13.2 Analysis

a) Physically divide an established community?

**Less than significant impact.** The proposed project would not block existing access within a community. The proposed project would construct a pump station and a pipeline alignment to provide water, electrical and communications utilities to the Tahoe Donner Subdivision. The proposed project would begin on Northwoods Boulevard and end at the intersection of Comstock Drive and Pioneer Trail. However, construction within these neighborhoods would be short term and temporary, and no existing community would be divided. A less than significant impact would occur, and no mitigation is necessary.

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?

**No impact.** The proposed pipeline alignment runs primarily subterranean, and physical impacts to the land during project construction would be short-term and temporary. Town of Truckee General Plan

land use designation for the project site is Residential 0.5 du/acre and Industrial (Town 2006a). The Zoning Districts within the proposed project would be Single Family Residential 0.5 du/acre (RS 0.5) and Manufacturing (M). Implementation of the proposed pipeline alignment and pump station project would not conflict with any agency's plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the proposed project would not conflict with any land use plan, policy, or regulation adopted, and no impact would occur.

## 5.14 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 5.14.1 Background and Setting

A number of important mineral resource areas, as defined by the State of California, exist in Truckee (Town 2006a). These resources are generally associated with alluvial deposits along the length of the Truckee River Valley, although some mineral resources are associated with volcanic features, such as the Hirschdale cinder cone. Alluvial aggregates consist of gravel, sand and broken stone that are used in production of concrete and asphalt; cinders are also used for building and road construction materials. State law requires that the General Plan include policies for important mineral resource areas that address the conservation and development of identified mineral deposits, balance the value of these deposits against competing land uses, and minimize the impacts of mining activities. According to the General Plan, important mineral resources areas do not occur within the boundary of the project area.

### 5.14.2 Analysis

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

**No Impact.** The proposed project is located in a zone of known mineral or aggregate resources; however, no active mining operations are present on or near the site. Implementation of the project would not interfere with the extraction of any known mineral resources or conflict with any conservation plan. Therefore, less than significant impacts would occur for questions a) and b).



## 5.15 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 5.15.1 Background and Setting

#### Noise Terminology and Metrics

All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A weighting (dBA) to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol  $L_{EQ}$ , with a specified duration. The Community Noise Equivalent Level (CNEL) is a 24-hour average, where noise levels during the evening hours of 7:00 p.m. to 10:00 p.m. have an added 5 dBA weighting, and sound levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. have an added 10 dBA weighting. This is similar to the Day Night noise level ( $L_{DN}$ ), which is a 24-hour average with an added 10 dBA weighting on the same nighttime hours but no added weighting on the evening hours. Sound levels expressed in CNEL or  $L_{DN}$  are always based on dBA.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.0000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this wide range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of dBA. The threshold of hearing for the human ear is about 0 dBA, which corresponds to 20 mPa. Because decibels are logarithmic units, SPL cannot be added or subtracted through standard arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than from one source under the same conditions. For example, if one automobile produces an SPL of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dBA—rather, they would

combine to produce 73 dBA. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dBA louder than one source.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1 dBA changes in sound levels, when exposed to steady, single-frequency (“pure-tone”) signals in the mid-frequency (1,000 Hz–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dBA are generally not perceptible. It is widely accepted, however, that people begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dBA increase is generally perceived as a distinctly noticeable increase, and a 10-dBA increase is generally perceived as a doubling of loudness.

Groundborne Vibration Terminology and Metrics

Groundborne vibration consists of rapidly fluctuating motions or waves transmitted through the ground with an average motion of zero. Sources of groundborne vibrations include natural phenomena and anthropogenic causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions). Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. For the purposes of this analysis, a PPV descriptor with units of inches per second (in/sec) is used to evaluate construction-generated vibration for building damage and human annoyance. Generally, a PPV of 0.012 in/sec from steady state sources produces vibration that is barely perceptible. At 0.1 in/sec PPV, steady state vibration is strongly perceptible. A level of 0.5 in/sec PPV is commonly used as a threshold for risk of architectural damage to standard dwellings (Caltrans 2020).

Regulatory Framework

Chapter 18.44 (Noise) of the Truckee Municipal Code establishes standards for the elimination and regulation of noise disturbances in order to protect the health, safety, welfare, and living/working environments of those living and working in the Town of Truckee. Section 18.44.040 sets exterior noise standards for noise measured at a receiving church, commercial, hospital, public library, residential, or school property. These noise levels are presented in **Table 11**.

**Table 11. Noise Standard by Receiving Land Use**

Noise Level Standards, dBA		
Cumulative number of minutes in any hour	Day – 7:00 a.m. to 10:00 p.m.	Night – 10:00 p.m. to 7:00 a.m.
<b>Hospital, Library, Religious Institution, Residential, or School Uses</b>		
30 (1)	55	50
15	60	55
5	65	60
1	70	65
0	75	70
<b>Commercial</b>		
30	65	60
15	70	65

5	75	70
1	80	75
0	85	80

Section 18.44.070 establishes that the provisions of Chapter 18.44 do not apply to noise sources associated with non-single-family residential construction, provided the activities do not take place before 7:00 a.m. or after 9:00 p.m. on any day except Sunday, or before 9:00 a.m. or after 6:00 p.m. on Sunday.

The Town's General Plan Noise Element contains land use compatibility exterior noise exposure standards. When siting a new land use, the following exterior noise levels for that use would be normally acceptable (Town 2006a):

- Residential, Mobile Homes: 60 CNEL or less
- Residential in Mixed Use Development: 65 CNEL or less
- Hospitals, Schools, Congregate Care: 65 CNEL or less
- Office, Medical, Light Industrial: 70 CNEL or less
- Hotel; Commercial: 70 CNEL or less
- Neighborhood Parks; RV Parks: 65 CNEL or less
- Other Recreation; Community and Regional Parks: 70 CNEL or less

Goal N-3 of the Town's General Plan Noise Element is to reduce noise levels from sources such as domestic uses, construction and car stereos, and from mobile sources, including motor vehicular traffic and aircraft operations. Policy P3.13 requires standard construction noise control measures be included as requirements at construction sites in order to minimize construction noise impacts.

#### Existing Noise and Vibration Setting

The proposed pipeline alignment generally runs through undeveloped areas with residential uses to the north and a golf course to the south, resulting in low existing ambient noise levels. At the western end of the alignment, noise is generated by vehicular traffic along Northwoods Boulevard. In the vicinity of the proposed pump station sites, noise is generated by the manufacturing uses to the east and vehicular traffic along SR 80.

### **5.15.2 Analysis**

- 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?

**Less than significant impact with mitigation.**

#### Construction

Construction for the pipeline and pump station and would generally involve site preparation, grading, underground infrastructure/utility installation, building construction, and paving. These activities would generate noise from the use of heavy offroad construction equipment that could affect nearby sensitive

receptors, particularly the residences located on the southern side of Lausanne Way, east of Northwoods Boulevard. Construction of pipeline Alignment A would occur as close as approximately 75 feet from the residential property lines. The loudest combination of construction equipment anticipated to be used at this location would be an excavator, loader, and dump truck for trenching as part of the underground infrastructure/utility installation phase. At a distance of 75 feet, an excavator, loader, and dump truck operating simultaneously would generate a noise level of 76.4 dBA  $L_{EQ}$  (U.S. Department of Transportation 2008).

This calculated noise level conservatively assumes all three pieces of equipment would be operating simultaneously at a given location, thus combining to generate elevated noise levels at nearby receptor locations. In reality, the pieces of equipment would likely be distanced from one another and/or not all operating at the same time. In addition, the equipment would continuously progress along the linear pipeline alignment and would not affect a given receptor for an extended period of time. While construction of the pump station would occur at a single location, there are no sensitive receptors in proximity to the proposed sites that would be affected.

Per section 18.44.070 of the Town's Municipal Code, construction is exempt from noise level standards provided the activities do not take place before 7:00 a.m. or after 9:00 p.m. on any day except Sunday, or before 9:00 a.m. or after 6:00 p.m. on Sunday. As such, there is no adopted numerical standard for maximum allowable temporary construction noise. However, the project's construction noise would represent a temporary increase over ambient noise levels. In addition, Goal N-3 of the Town's General Plan Noise Element aims to reduce noise levels from construction. Therefore, the project's construction noise generation is considered potentially significant. The Town's General Plan Noise Element contains recommended construction noise reduction measures. Mitigation Measure NOI-1 would require implementation of these measures, as well as compliance with the allowable construction hours set forth in the Town's Municipal Code. With implementation of Mitigation Measure NOI-1, standard project construction activities would not result in the generation of a substantial temporary increase in ambient noise levels in the vicinity of the project.

There is potential that blasting would be required to clear areas of hard rock during construction. The specific locations and details of the blasting are unknown at this time; therefore, blasting noise impacts are considered potentially significant. Mitigation Measure NOI-2, which involves preparation and implementation of a blasting management plan, would be required to reduce potential impacts to a less-than-significant level.

Construction noise impacts would be less than significant with mitigation incorporated.

#### **Mitigation Measure NOI-1: Construction Noise Reduction Measures**

The District shall incorporate the following construction noise reduction measures into project construction activities:

- Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction site.

- Utilize “quiet” air compressors and other stationary noise-generating equipment where appropriate technology exists.
- The project sponsor shall designate a “disturbance coordinator” who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem will be implemented. The project sponsor shall also post a telephone number for excessive noise complaints in conspicuous locations in the vicinity of the project site. Additionally, the project sponsor shall send a notice to neighbors in the project vicinity with information on the construction schedule and the telephone number for noise complaints.
- Construction shall not occur before 7:00 a.m. or after 9:00 p.m. on any day except Sunday, or before 9:00 a.m. or after 6:00 p.m. on Sunday.

#### **Mitigation Measure NOI-2: Blasting Management Plan**

- Should blasting be required on the project site, the District shall prepare a Blasting Management Plan that minimizes potential blasting effects to adjacent residences. All blast planning must be done by an appropriate licensed blasting contractor, and submitted to the District with the appropriate blasting permits, and all other applicable local, state, and federal permits, licenses, and bonding. The blasting contractor or owner must conduct all notifications, inspections, monitoring, and major or minor blasting requirements planning with seismograph reports, as necessary.

#### Operation

The proposed pump station would have the potential to generate noise during operations. The primary noise sources associated with the pump station are anticipated to include the pumps, pump room ventilation system, site transformer, and backup generator. The pumps would be located inside a pump room and are not expected to generate substantial exterior noise. The backup generator would be used in instances of normal power failure and would be tested once a month for an hour. It would not represent a new regular source of noise.

As discussed above, the Town’s Municipal Code sets noise standards by receiving land use for hospital, library, religions institution, residential, school, and commercial land uses. Pump station Site 1 would be located along the eastern boundary of a large District-owned parcel that is bordered by another large District-owned parcel to the south and manufacturing land uses to the east, which are not subject to noise standards. While residentially zoned parcels are present to the west and north of pump station Site 1, they are located approximately 1,600-feet and 320-feet, respectively, from the center of the proposed site. Based on these distances, noise from operation of the pump station would not result in a substantial increase in ambient noise levels at these parcels. In addition, these areas are currently undeveloped and do not contain residential receptors that would be subject to noise.

Pump station Site 2 would be located at the northeastern corner of a large District-owned parcel that is bordered by another large District-owned parcel to the north and manufacturing land uses to the east, which are not subject to noise standards. While residentially zoned parcels are present to the

west/southwest of pump station Site 2, they are located approximately 900-feet from the center of the proposed site. Based on this distance, noise from operation of the pump station would not result in a substantial increase in ambient noise levels at these parcels. In addition, these areas are currently undeveloped and do not contain residential receptors that would be subject to noise. Land to the south of this District-owned parcel is developed with State Route-80.

As such, there are no noise-sensitive receiving land uses in proximity to either pump station site that would be exposed to substantial increases over ambient noise levels or noise levels in excess of applicable standards from operation of the pump station. Operational noise impacts would therefore be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

**Less than significant impact.** The most substantial source of vibration during project construction would be from the use of a vibratory roller, which is anticipated to be used for repaving of asphalt removed along Northwoods Boulevard and Trout Creek Trail and for paving of the access driveway for the new pump station. The closest vibration-sensitive receptors would be the residences located on the southern side of Lausanne Way, east of Northwoods Boulevard. A vibratory roller would be used as close as approximately 150-feet from the residential dwellings. Per Caltrans' *Transportation and Construction Vibration Guidance Manual (2020)*, a large vibratory roller produces a vibration level of 0.210 in/sec PPV at a distance of 25-feet (Caltrans 2020). At a distance of 150-feet, a vibratory roller would generate a vibration level of 0.03 in/sec PPV,<sup>1</sup> which would be below the 0.1-in/sec PPV strongly perceptible level for human annoyance and below the 0.5-in/sec PPV level for risk of architectural damage to standard dwellings. As such, construction vibration impacts would be less than significant.

Once operational, the project would not be a source of significant groundborne vibration, and no operational impacts would occur.

c) Expose people residing or working in the project area to excessive noise levels from airports or private airstrips?

**Less than significant impact.** The closest airport to the project is the Truckee Tahoe Airport, located approximately two miles to the southeast. According to Exhibit 3-4, Compatibility Factors: Noise & Safety, of the Truckee Tahoe Airport Land Use Compatibility Plan (Truckee Tahoe Airport Land Use Commission 2016), the project is not within a mapped noise contour (including 60, 65, and 70 CNEL) of the Truckee Tahoe Airport. As such, though aircraft noise may be audible at the project site, it would not result in excessive noise levels. Impacts would be less than significant.

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<sup>1</sup> Equipment PPV = Reference PPV \* (25/D)<sup>n</sup> (in/sec), where Reference PPV is PPV at 25 feet, D is distance from equipment to the receiver in feet, and n = 1.1 (the value related to the typical attenuation rate through the ground); formula from Caltrans 2013.

## 5.16 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of existing people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 5.16.1 Background and Setting

The population of the Town of Truckee was estimated to be approximately 16,735 people during the 2019 Census (U.S. Census Bureau 2019).

### 5.16.2 Analysis

- 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)?

**No impact.** The proposed project would construct a pipeline alignment and pump station to provide additional water, electrical and communications utilities to the Tahoe Donner Subdivision. The project would not include the construction or replacement of homes or businesses which would directly induce population growth. Additionally, the project would not increase the roadway capacity and indirectly induce population growth. The proposed project would begin at Northwoods Boulevard and terminate at the intersection of Comstock Drive and Pioneer Trail. Construction would be limited and temporary and not cause long term impacts. The construction and operation of the project would not result in an increased demand for housing, and no impacts to population and housing would occur.

- b-c) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

**No impact.** The proposed project would not involve any demolition or decommissioning of housing or displace any people or housing. Construction on Northwoods Boulevard, Comstock Drive, and Pioneer Trail would be short term and temporary. Therefore, no impact would occur.

## 5.17 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 5.17.1 Background and Setting

The Town of Truckee provides public services to local businesses and residents including fire, police, education, park, and other public services. The Truckee Area has a total of six schools: Tahoe Truckee High School, Sierra Mountain Middle School, Glenshire Elementary, Truckee Elementary, Sierra High School, and Prosser Creek Charter School. The Truckee Fire Department provides additional fire support to Truckee, and the Truckee Police Department provides additional police protection. The Fire District currently has 4 fire stations that are staffed 24 hours a day and 4 fire stations that are staffed on a part-time basis. The closest Fire Station is Station 91, which is located at 10049 Donner Pass Road, in the Town’s historic downtown area (Truckee Fire Protection District, 2011). The Truckee Police Department is approximately 5 miles from the project site at 10183 Truckee Airport Road #3306. Most parks and recreation facilities in Truckee are operated by the Truckee Donner Recreation and Park District (TDRPD).

### 5.17.2 Analysis

a) Fire protection?

**Less than significant impact.** The project site and surrounding area currently receive structural fire protection from the Truckee Fire Department and wildfire protection from the State of California Forestry and Fire Protection Department. Therefore, the project would not increase the demand for or have a significant impact on fire protection services. Additionally, the proposed project would comply with the Fire District ordinances regarding access and wildland fire protection. The potential for a minor increase in demand for fire services may occur during construction or maintenance of the pipeline



alignment or pump station. These minor public service demands would not overburden the Fire District and no mitigation measures are proposed or warranted; the impact is less than significant.

b) Police protection?

**Less than significant impact.** Police protection services within the project area would continue to be provided by the Truckee Police Department. The potential for a minor increase in demand for services may occur for police protection provided by the Truckee Police Department if a crime or accident occurs during construction or maintenance of the pipeline alignment or pump station. These minor public service demands would not overburden the Truckee Police Department and no mitigation measures are proposed or warranted; the impact is less than significant.

c) Schools?

**No Impact.** The proposed project would not generate any additional residential population that would create demand for additional schools or increase attendance or enrollment at existing schools. Accordingly, the proposed project would have no impact.

d) Parks?

**No Impact.** There are no parks within the project area. The proposed project is not expected to increase use of or demand for parks within the Town of Truckee. The proposed project would have no impact.

e) Other public facilities?

**Less than significant impact.** As described above, minor increases in demand for emergency medical services may occur if an accident or injury occurs during construction or maintenance of the proposed pipeline alignment and pump station. These minor public service demands would not overburden the public agencies and no mitigation measures are proposed or warranted. For a discussion on recreation impacts, please see recreation discussion in Section 5.18 of this document. Refer to Section 5.19 for a discussion of Transportation impacts. Impacts would be less than significant.

## 5.18 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 5.18.1 Background and Setting

Situated in a valley containing the Truckee River, Truckee is surrounded by prominent peaks and ridgelines of the Sierra Nevada mountain range. In Truckee itself, elevations range from 5,540-feet in the vicinity of Boca to nearly 7,500-feet in Tahoe Donner. Most parks and recreation facilities in Truckee are operated by the Truckee Donner Recreation and Park District (TDRPD). Coyote Moon Golf Course is located just south of the proposed project. The Coyote Moon Golf Course is privately owned and managed but open to all persons who wish to participate in the sport of golf for a predetermined rate or fee. Additionally, the paved Trout Creek Trail is located within the project area. This is a trail connection between Northwoods Boulevard in the Tahoe Donner Community and Bridge Street in the Town’s historic downtown area. The pipeline alignment is proposed to be placed underneath a section of the Trout Creek Trail. Additionally, Northwoods Boulevard is identified in the *Truckee Trails and Bikeways Master Plan* as an existing Class II Bike Lane and Trout Creek Trail is identified as a Class I Bike Trail (Town of Truckee Community Development Department, Planning Division, 2015).

### 5.18.2 Analysis

- a) 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?

**Less than significant impact.** The proposed project would not increase population within the Town of Truckee. The project is proposing a single pump station and a mainly subterranean pipeline alignment that would supply the Tahoe Donner Subdivision with water, electrical and communications utilities. Construction of Alignment A and Alignment B would result in the temporary closure of the paved Trout Creek Trail. Alignment A would temporarily impact 0.82-miles and Alignment B would temporarily impact 0.56-miles of the Trout Creek Trail. This closure could temporarily increase the use of other paved trails within Truckee, such as the Truckee River Legacy Trail, Pioneer Trail Extension to Frates Lane, Old Greenwood-Glenshire Drive Bridge Connector, and Brockway Road/State Route-267 Trail Extension and Connection to Truckee River Legacy Trail. However, the trail closure would be short-term and temporary, and the impact on the other trails would be minimal, resulting in a less than significant 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?

**No impact.** The proposed project would construct a subterranean pipeline alignment underneath a section of the paved Trout Creek Recreational Trail, causing a short term and temporary closure during construction. However, the proposed pipeline alignment and pump station would not include the development or expansion of recreational facilities. Therefore, the proposed project would have no impact.

## 5.19 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the Truckee General Plan, Development Code, and/or Public Improvement and Engineering Standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 5.19.1 Background and Setting

The Town of Truckee is located in the Lake Tahoe region, along Interstate-80 approximately 100-miles northeast of Sacramento, California, and approximately 30-miles west of Reno, Nevada. In addition to Interstate-80, State Route-89 and State Route-267 are the two major regional highways in the area. Beyond these major regional routes, a series of arterial, connector and local roadways constitute the roadway network in the Town of Truckee (Town 2006b).

Roadways within the project area include sections of Northwoods Boulevard, Comstock Drive, and Pioneer Trail. Northwoods Boulevard is a two-lane roadway that travels north south from Donner Pass Road into the Tahoe Donner Community. In addition to the community, Northwoods Boulevard also provides the main access to the Tahoe Donner Alpine, Nordic and Equestrian centers, and the Coyote Moon Golf Course. Northwoods Boulevard has a peak summer average daily vehicle trip of approximately 13,370 vehicles per day and is considered a major arterial. Comstock Drive connects to Pioneer Trail which begins at Donner Pass Road north of Interstate-80 and continues in a westerly direction. It serves a mixture of residential, industrial and commercial uses. The peak summer ADT along this roadway is approximately 3,300 vehicles per day. Comstock Drive is considered a minor collector and Pioneer Trail is considered a minor arterial according to the Town of Truckee 2025 General Plan EIR (Town 2006b).

## 5.19.2 Analysis

- a) Conflict with a plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, highways and freeways, pedestrian and bicycle paths, and mass transit?

**Less than significant impact with mitigation.** The proposed pipeline alignment would run underneath Northwoods Boulevard for 0.05-miles and underneath an existing paved driveway at the intersection of Comstock Drive and Pioneer Trail. Additionally, the pipeline alignment would run underneath the existing paved Trout Creek Trail, and through disturbed areas from existing overhead utility lines. However, the number of people expected to access the Trout Creek Trail by vehicle is minimal.

Northwoods Boulevard is considered a major arterial and has a peak summer average daily vehicle trip of approximately 13,370 vehicles per day (Town 2006a). Construction of the proposed project would need to take place during the warmer months (end of Spring- Early Fall) in order to avoid snow conditions. In order to avoid impacts to the roadway network on Northwoods Boulevard as well as avoid any potential disruption to or re-routing of traffic that might be needed during project construction, a Traffic Control Plan would be required as mitigation. Mitigation Measure TRA-1 would require the preparation of a Traffic Control Plan to ensure continued circulation on all impacted roadways. With the implementation of Mitigation Measure TRA-1, the proposed project would have a less than significant impact.

### Mitigation Measure TRA-1: Traffic Control Plan

A Traffic Control Plan shall be developed for the proposed project to manage traffic during temporary lane closures. The plan shall be prepared by the District and submitted to the Town of Truckee for review and approval prior to the commencement of construction activities.

- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the Truckee General Plan, Development Code, and/or Public Improvement and Engineering Standards?

**No impact.** The proposed project would not conflict with any applicable congestion management programs, including, but not limited to level of service standards and travel demand measures, or other standards established by the *Town of Truckee 2025 General Plan* or Development Code. Therefore, the proposed project will have no impact.

- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

**No impact.** The proposed project would construct a pump station and a mainly subterranean pipeline. Long-term traffic levels would not increase and there would be no change in location that would result in a safety risk. Therefore, the construction of the pump station and pipeline would not result in a change in air traffic patterns and would have no impact on air traffic patterns.

- d) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

**No impact.** The proposed project does not propose new roadways or reconfiguration of existing roadways. The project would construct a pump station and a pipeline alignment for water, electrical and communications utilities to the Truckee Donner Subdivision. Therefore, the proposed project would not increase hazards due to a geometric design feature or incompatible use and would have no impact.

- e) Result in inadequate emergency access?

**Less than significant impact with mitigation.** Construction of the proposed project could temporarily alter emergency access on Northwoods Boulevard. During construction, circulation through these roadways would be maintained through the implementation of the Traffic Control Plan that would be prepared in compliance with Mitigation Measure TRA-1. Operation of the proposed project would have no impact on emergency access. Therefore, the proposed project would have a less than significant impact with implementation of Mitigation Measure TRA-1.

## 5.20 TRIBAL CULTURAL RESOURCES

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

### 5.20.1 Background and Setting

Effective July 1, 2015, AB 52 amended CEQA to mandate consultation with California Native American tribes during the CEQA process to determine whether a proposed project may have a significant impact on a tribal cultural resource, and that this consideration be made separately from cultural and paleontological resources. Recognizing that California tribes are experts in their tribal cultural resources and heritage, AB 52 requires that CEQA lead agencies carry out consultation with tribes at the commencement of the CEQA process to identify tribal cultural resources. Furthermore, because a significant effect on a tribal cultural resource is considered a significant impact on the environment under CEQA, consultation is required to develop appropriate avoidance, impact minimization, and mitigation measures. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and tribal governments, public agencies, and project proponents would have information available to identify and address potential adverse impacts to tribal cultural resources.

The purpose of consultation is to identify Tribal Cultural Resources (TCR) that may be significantly impacted by the proposed project and to allow the District to avoid or mitigate significant impacts prior to project approval and implementation. Section 21074(a) of the PRC defines TCRs, for the purpose of CEQA, as: Sites, features, places, cultural landscapes (geographically defined in terms of the size and

scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- a) Included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or
- b) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or
- c) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Because criteria A and B also meet the definition of a Historical Resource under CEQA, a TCR may also require additional consideration as a Historical Resource. TCRs may or may not exhibit archaeological, cultural, or physical indicators and can only be identified by a culturally affiliated tribe, which has been determined under State law to be the subject matter expert for TCRs.

#### Native American Outreach

HELIX prepared a Cultural Resources Assessment Letter Report which is included as **Appendix D** to this Initial Study. On October 8, 2021, HELIX requested that the Native American Heritage Commission (NAHC) conduct a search of their Sacred Lands File for the presence of Native American sacred sites or human remains in the vicinity of the proposed project area. A written response received from the NAHC on November 16, 2021, stated that the Sacred Lands File was negative for the presence of Native American cultural resources in the immediate project area.

On February 24, 2022, HELIX sent letters to eight Native American contacts who were recommended by the NAHC as potential sources of information related to cultural resources in the vicinity of the project area:

- Darryl Cruz, Tribal Historic Preservation Officer, Washoe Tribe of Nevada and California
- Pamela Cubbler, Treasurer, Colfax-Todds Valley Consolidated Tribe
- Steven Hutchason, Tribal Historic Preservation Officer, Wilton Rancheria
- Clyde Prout, Chairperson, Colfax-Todds Valley Consolidated Tribe
- Don Ryberg, Chairperson, Tsi Akim Maidu
- Serrell Smokey, Chairperson, Washoe Tribe of Nevada and California
- Jesus Tarango, Chairperson, Wilton Rancheria
- Gene Whitehouse, Chairperson, United Auburn Indian Community of the Auburn Rancheria

The letters advised the tribes and specific individuals of the proposed project and requested information regarding cultural resources in the immediate area, as well as any feedback or concerns related to the proposed project. As of the date of this report, no responses have been received. Documentation related to Native American coordination is included as Attachment B of the CRA.



## 5.20.2 Analysis

- a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?
  - ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

**Less than significant with mitigation.** The District was not been approached for formal consultation by any tribe under AB52. A summary of the CRA prepared by HELIX (**Appendix D**) analyzed impacts to Tribal Cultural Resources (TCR). Please Refer to Section 5.7 Cultural Resources. Although no evidence has been provided that TCRs are present in the project area and the thresholds under PRC Section 21074(a)(1) have not been met, the District acknowledges that TCRs may be present within the project area, and the proposed project could cause a significant impact to unknown TCRs within the project footprint. Accordingly, implementation of Mitigation Measures TCR-1 (in addition to Mitigation Measures CUL-1 and CUL-2) is required. With the incorporation of these mitigation measures to address unanticipated discoveries to TCRs, the proposed project's potential impacts to unknown TCRs would be less than significant.

### **Mitigation Measure TCR-1: Unanticipated Discovery of Tribal Cultural Resources.**

If any suspected TCRs or human remains are discovered during ground disturbing construction activities, all work shall cease within 60-feet of the find, or an agreed upon distance based on the project area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a TCR (PRC §21074). The Tribal Representative will make recommendations for further evaluation and culturally appropriate treatment as necessary. If deemed necessary by the District, a qualified cultural resources specialist meeting the Secretary of Interior's Standards and Qualifications for Archaeology may also assess the significance of the find in joint consultation with Native American Representatives to ensure that Tribal values are considered. Work at the discovery location may not resume until the District, in consultation as appropriate and in good faith, determines that all necessary investigation and treatment of the discovery under the requirements of CEQA, including AB52, have been satisfied. These recommendations and actions taken (or not taken) will be documented in the project record. If the discovery includes human remains, the procedures in Mitigation Measure CUL-2 shall be implemented.

## 5.21 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the Regional Water Quality Board, Lahontan Region?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the relocation or construction of new water or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 5.21.1 Background and Setting

Within the project area, sewer service is served by the Tahoe-Truckee Sanitation Agency (TTSA) and Truckee Sanitary District (TSD), and storm water services is served by the Town of Truckee. Additionally, solid waste removal and recycling services are provided by the Tahoe-Truckee Sierra Disposal (TTSD) Company. Two separate bodies make up the TTSD: Tahoe Truckee Disposal and the Eastern Regional Landfill Material Recovery Facility (MRF). Tahoe Truckee Disposal is responsible for collecting household waste and recyclables and the MRF is a recycling center for household and construction materials that act as a transfer station for household waste. Water supply for the District is obtained from the Martis Valley Groundwater Basin. The basin-wide annual recharge is estimated at 29,165 acre-feet per year (AFY) (Town 2006b).

Gas is provided by the Southwest Gas Corporation and electrical services is provided by the District.

## 5.21.2 Analysis

- a) Exceed wastewater treatment requirements of the Regional Water Quality Board, Lahontan Region?
- d) 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?

**No impact.** The proposed project would construct a pipeline alignment that would transfer water, electrical, and communications utilities to the Tahoe Donner Subdivision. The proposed project would not induce a demand for additional wastewater treatment as the project has no association with wastewater facilities. Additionally, temporary disruptions to wastewater services during project construction are not anticipated. Therefore, no impacts related to water or wastewater service, or treatment area are anticipated, and no mitigation would be necessary.

- b) Require or result in the relocation or construction of new water or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

**Less than significant impact.** The proposed project includes the construction of a pipeline alignment that would transport water, electrical, and communications utilities to the Tahoe Donner Subdivision. Currently the Tahoe Donner Subdivision is entirely served by a 14-inch pipeline and two pump stations that were constructed in the early 1970s and are approaching the end of their useful life. The proposed pipeline alignment would be constructed to adequately serve the water demands for the Tahoe Donner Subdivision as requested by the District. In addition to the water pipeline, the District intends to install underground electrical and communications conduits in the proposed trench. These conduits would provide for additional connections within the District's electrical distribution system, increasing the reliability and redundancy. Therefore, this project would be a joint effort involving potable water, electrical and communications utilities.

The operation of the new proposed pipeline alignment would adequately serve the Tahoe Donner Subdivision future needs relating to water, electrical and communications utilities. The utilities that would be constructed as part of the proposed project would comply with standards from the California SWRCB and the LRWQCB in order to minimize environmental impacts. With compliance with these state and regional standards, the proposed project would cause a less than significant impact.

- c) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

**Less than significant impact.** The District obtains its water supply from the Martis Valley Groundwater Basin. Water may be used during project construction for dust suppression; however, this water use during construction would be short-term and minimal. Operation of the proposed pipeline alignment would require the water from the Martis Valley Groundwater Basin in order to serve the Tahoe Donner Subdivision. Given the total subsurface storage and sustainable yield of 24,000-acre-feet- per year (AFY), there would be enough available water in the basin until 2025 even if no recharge occurred (Town 2006b). Since recharge would continue to occur, the actual yield of the Basin can be expected to be sustainable over a longer period. With limited water usage during construction, and ongoing

groundwater supply from the Martis Valley Groundwater Basin, impacts would therefore be less than significant.

- e) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- f) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

**Less than significant impact.** Very little solid waste is anticipated to result from the proposed project. All solid waste from construction activities would be removed from the project area by the construction contractor(s) upon completion of construction. The construction solid waste would be disposed of at a landfill facility with sufficient permitted capacity to accommodate disposal of the project's solid waste. Solid waste removal and recycling services are provided by the Tahoe - Truckee Sierra Disposal (TTSD) Company. Incoming solid waste is either recycled or transported to the Lockwood Regional Landfill in Storey County, Nevada. This 1,535-acre site has a 60-year capacity to accommodate the buildout projections for the TTSD's service area. TTSD handles approximately 60,000-tons of waste per year and is operating at 50 percent of their total capacity of 120,000-tons per year. In 2002, the outfit expanded the MRF facility and transfer station to increase capacity by 100 percent. TTSD plans on continuing to expand their services to accommodate the growth and increasing needs of their service area. Therefore, TTSD's services as well as the Lockwood Regional Landfill has sufficient remaining capacity to accommodate any debris generated from project construction. The proposed project would not generate solid waste in excess demand of State or local standards, negatively impact the provision of solid waste services, or conflict with federal, state, and local management and reduction statutes. Therefore, impacts would be less than significant for questions d), e), and f).

## 5.22 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 5.22.1 Background and Setting

The Town of Truckee lies within a Very High Fire Hazard Severity Zone (VHFHSZ), as defined by the California Department of Forestry, indicating that wildland fires are considered to pose a significant hazard (CAL FIRE 2007). The level of fire danger risk within the town ranges from moderate to very high based on the density of development. Most areas fall under a high to very high level of threat to wildland fire. The California Department of Forestry and Fire Protection (CDF) provides wildland fire protection to undeveloped forested area of the Sierra Nevada, including parts of the Town of Truckee.

In September 2003, the Nevada County Board of Supervisors appointed a five-member Fire Plan Committee (FPC) to develop the Nevada County Fire Plan (NCFP) that would reduce the risk from wildland fires to life, property and natural resources in the County and comply with the Disaster Management Act of 2000 and the Healthy Forest Restoration Act of 2003. This plan was accepted by the Nevada County Board of Supervisors in 2005. The Fire Plan includes an extensive series of recommendations aimed at reducing wildland fire risk in the County, including fuel management and defensible space enforcement strategies, public education, infrastructure improvements to increase fire-fighting capacity, and coordination with local fire agencies to ensure consistent and effective wildland fire mitigation efforts.

## 5.22.2 Analysis

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

**Less than significant impact with mitigation.** As discussed in Section 5.19, Transportation, construction of the proposed project could temporarily alter emergency access on Northwoods Boulevard. During construction, circulation through these roadways would be maintained through the implementation of the Traffic Control Plan that would be prepared in compliance with Mitigation Measure TRA-1. Operation of the proposed project would have no impact on an emergency response or evacuation plan. Therefore, the proposed project would have a less than significant impact with implementation of Mitigation Measure TRA-1.

- 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?

**Less than significant.** The project site is approximately 6,235-feet above mean sea level at the western end of the alignment and approximately 5,980-feet above mean sea level near the eastern end of the alignment. A general slope moves downward from north to south within the project vicinity. The proposed project would not exacerbate wildfire risks as the project involves the construction of a primarily subterranean pipeline alignment for water, electrical, and communications utilities. Due to the nature of design for the proposed project, occupants would not be exposed to wildfire risks and impacts would be less than significant.

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

**Less than significant.** The proposed project includes the construction of an approximately 1.7-mile, pipeline alignment that would be used for water, electrical, and communications utilities for the Tahoe Donner Subdivision. During construction, the proposed pipeline alignment would be installed mainly subterranean along disturbed areas of overhead electrical transmission lines, a recreational trail, a bridge crossing, and through disturbed areas with no jurisdictional features. Installation and trenching within the disturbed areas, along with operation of the primarily subterranean pipeline alignment would not exacerbate fire risk that may result in temporary or ongoing impacts to the environment. Therefore, impacts would be less than significant.

- 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?

**Less than significant.** The proposed project is the construction of a mainly subterranean pipeline alignment and a single above ground pump station. The likelihood of the proposed project to expose people or structures to flooding or landslides would be low. Landslides are found regionally, but no evidence of landslides is known to occur within the boundary of the project area. Therefore, the proposed project would have a less than significant impact.

## 5.23 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 5.23.1 Background and Setting

### 5.23.2 Analysis

- 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?

**Less than significant impact with mitigation.** As detailed in this Initial Study, the proposed project would not have a significant impact on the environment and would not result in any of the impacts requiring a mandatory finding of significance provided that the mitigation measures identified herein are properly implemented and maintained as described in the Biological, Cultural and Tribal Cultural Resource sections of this Initial Study. The mitigation monitoring and reporting plan and its identified mitigation measures as identified herein applicable to Biological, Cultural, and Tribal Cultural Resources, if properly implemented and maintained, would reduce the identified potential impacts to those resources to a level of less-than-significant.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?

**Less than significant impact.** The proposed project would replace an existing 14-inch pipeline, with a new 1.7-mile-long pipeline alignment corridor for the transport of water, electrical and communications utilities to the Tahoe Donner Subdivision. The pipeline alignment would have a 6-foot-wide and 6-foot-deep excavated trench. During construction, approximately 20-feet on either side of the excavated trench would be temporarily disturbed by the construction area. Following construction, erosion controls measures, and limited revegetation would be implemented, as needed, to assist with rehabilitation of the disturbed construction area. Key areas of concern that are discussed in the Initial Study include, Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Geology and Soils, Noise, Transportation, Tribal Cultural Resources, and Wildfire. However, impacts relating to these key areas of concern would be short-term and temporary during project construction and no long-term, operational impacts would be associated with the project. Therefore, the proposed project would not have a cumulatively considerable impacts, and no additional mitigation is required.

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

**Less than significant impact with mitigation.** As described herein, the proposed project would not result in any substantial adverse effects on human beings either directly or indirectly except for temporary increase in any criteria pollutant for which the project region is non-attainment, an increase in temporary noise during project construction, and a temporary traffic increase during project construction. With implementation of Mitigation Measure AQ-1, project construction activities would not result in a cumulatively considerable net increase of any criteria pollutant and impacts to air quality would result in less than significant. Additionally, Mitigation Measures NOI-1 and NOI-2, which identifies construction noise reduction and blasting control measures, respectively, would reduce potential impacts associated with temporary noise increases to a level of less than significant. Mitigation Measure TRA-1 would require the preparation of a Traffic Control Plan to ensure continued circulation on all impacted roadways and reduce impacts to traffic to a less than significant level. This mitigation measure also reduces potential significant impacts associated with Hazards and Hazardous Materials and Wildlife to levels less than significant. Mitigation Measure GEO-1 would reduce potentially significant impacts from project construction on paleontological resources to a level less than significant.

## 6.0 MITIGATION MONITORING AND REPORTING PROGRAM

A Mitigation Monitoring and Reporting Program (MMRP) has been prepared by the District per Section 15097 of the CEQA Guidelines and is presented in **Appendix E**.



## 7.0 PREPARERS

The following people contributed to the preparation of this report:

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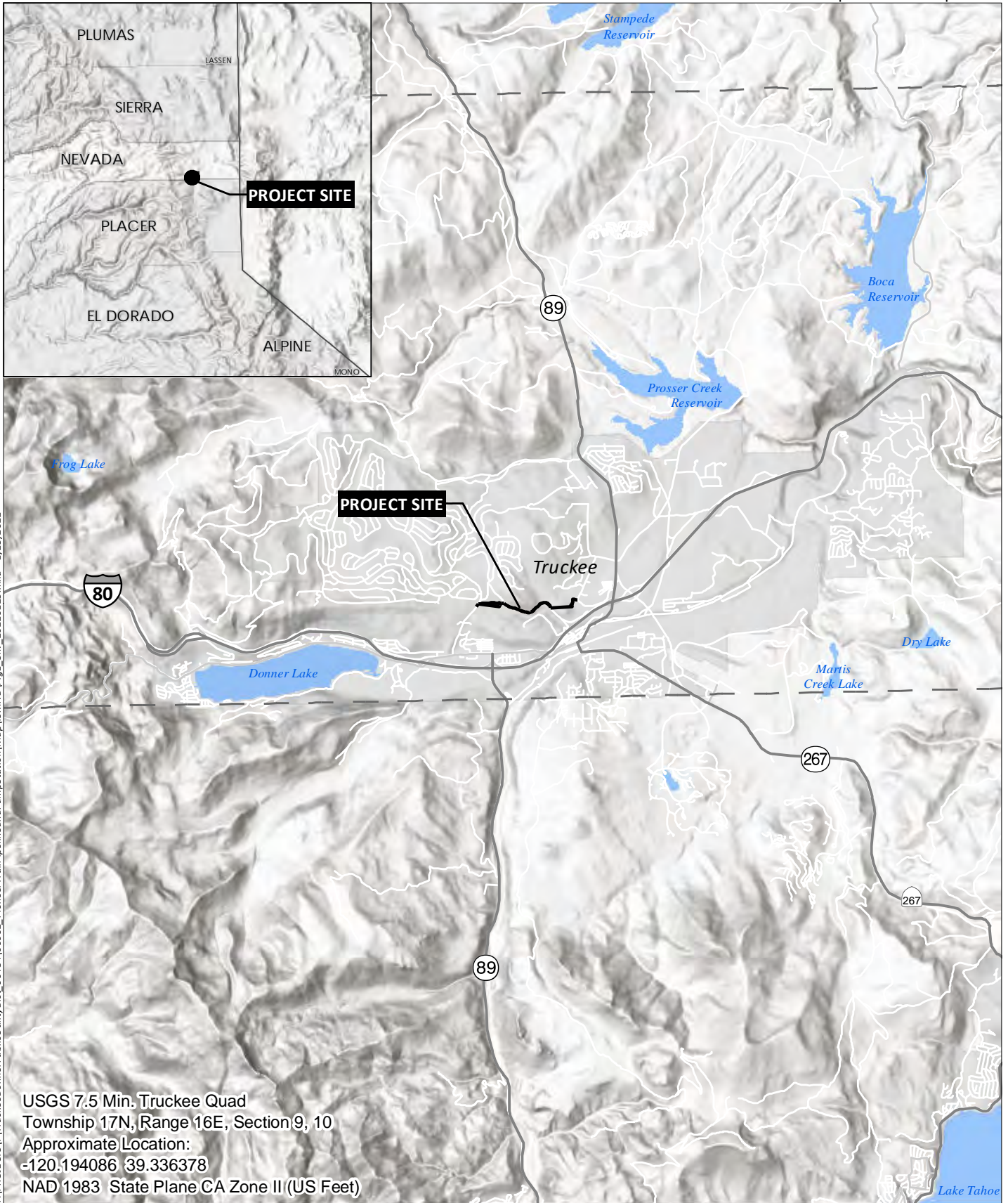
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# Appendix A

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Figures





T:\PROJECTS\TruckeeDonnerPublicUtilityDist\_06484\00002\_PioneerTrailPipelineandPumpstation\Map\ISMND\Fig1\_Srv\_20220125.mxd 1/25/2022

USGS 7.5 Min. Truckee Quad  
 Township 17N, Range 16E, Section 9, 10  
 Approximate Location:  
 -120.194086 39.336378  
 NAD 1983 State Plane CA Zone II (US Feet)

Source: Base Map Layers (Esri, USGS, NGA, NASA)





**Legend**

- Alignment A
- Alignment B
- Creek Crossing on Existing Pedestrian Bridge
- Trout Creek Recreational Trail
- Existing Dirt Road and Sewer Pipeline
- Existing Overhead Electrical Transmission Lines
- Existing Paved Driveway and Water Pipeline
- New Pump Station
- Existing Paved Roadway





T:\PROJECTS\TruckeeDonnerPublicUtilityDist\_06484\00002\_PioneerTrailPipelineandPumpStation\Map\SMND\Fig2\_SitePlan\_20220125.mxd 3/8/2022



Source: Aerial (DigitalGlobe, 6/2/2021).

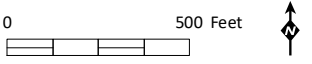


**Legend**

-  25-ft Buffer
-  Disturbed Jeffery Pine Forest Alliance - 10.47 Acres
-  Trout Creek - 0.06 Acre
-  Developed - 3.23 Acres













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Source: Aerial (DigitalGlobe, 6/2/2021).

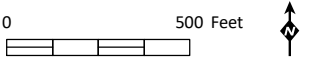


**Legend**

-  Area of Potential Effects
-  Alignment A
-  Alignment B
-  Creek Crossing on Existing Pedestrian Bridge
-  Trout Creek Recreational Trail
-  Existing Dirt Road and Sewer Pipeline
-  Existing Overhead Electrical Transmission Lines
-  Existing Paved Driveway and Water Pipeline
-  New Pump Station
-  Existing Paved Roadway



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Source: Aerial (DigitalGlobe, 6/2/2021).



# Appendix B

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CalEEMod  
Output

## Drilling and Blasting

### Blast Parameters

Area/Blast (SF)	Hole Spacing (ft)	Hole Diameter (in)	Hole Depth (ft)	Holes/Blast	Density ANFO (lb/CF)	ANFO/Hole (lb)	Tons ANFO/Blast
500	5	3	7	20	51.19	17.589	0.176

### Blast Frequency

Drill Rigs	Days Drilling	blasts/day	blasts/month	blasts/year
1	24.0	1	2	12

### Fugitive Dust

Source	PM10 EF Drilling (lb/hole)	PM2.5 EF Drilling (lb/hole)	Drilling Control Efficiency	PM10 EF Blasting (lb/blast)	PM2.5 EF Blasting (lb/blast)	PM10 (lb/day)	PM10 (TPY)	PM2.5 (lb/day)	PM2.5 (TPY)
Blasting	-	-	-	0.0814	0.0047	0.08	0.0005	0.00	0.0000
Drilling	0.65	0.12	75%	-	-	0.14	0.0195	0.03	0.0036
Total						0.22	0.0200	0.03	0.0036

#### Notes:

- Drilling emissions Factor Source: AP-42 5th Edition, Section 11.9, Table 11.9-4, October 1998. Assumes PM10 = TSP/2 = 1.3 lbs/hole / 2 = 0.65 lb/hole.
- Drilling emissions factor for PM2.5 is calculated based on a similar mechanical process for aggregate rock crushing. The emission factors for tertiary rock crushing will be used, based on AP-42 11.19.2, Table 11.19.2-2, Final Section, updated August 2004. The tertiary crushing emission factor for PM10 is 0.00054 lb/ton and the emissions factor for PM2.5 is 0.00010 lb/ton. The ratio of PM2.5 to PM10 is 0.00010/0.00054 = 0.185. Since the PM10 emission factor is estimated to be 0.65 lb/hole (see note 1), the emission factor for PM2.5 is estimated to be 0.65 lb/hole x 0.185 = 0.12 lb/hole.
- Drilling Control Efficiency estimated to be between 63% and 88%, based on drill rotoclone or similar dust shroud device. Assumed midpoint of range reported.
- Blasting emissions factors from AP-42 5th Edition, Section 11.9, Table 11.9-1. Also referenced Appendix E.2 of Background document to AP-42 5th Edition, Section 11.9:  

$$\text{PM10 EF} = 0.000014(A)^{1.5}(0.52)$$
, where A = horizontal area in ft<sup>2</sup> with a scaling factor for  $\leq 10\mu\text{m}$  of 0.52  

$$\text{PM2.5 EF} = 0.000014(A)^{1.5}(0.03)$$
, where A = horizontal area in ft<sup>2</sup> with a scaling factor for  $\leq 2.5\mu\text{m}$  of 0.03
- Daily drilling emissions based on ability to drill two holes per hour per drill rig for up to 8 hours per day.

### Blasting Gases - ANFO Emission Factors

CO EF (lb/ton)	NOX EF (lb/ton)	SOx EF (lb/ton)	CO2 EF (lb/ton)	CH4 EF (lb/ton)	N2O EF (lb/ton)
67	17	2	566	0.02	0.005

### Blasting Gases - ANFO Emission Criteria Pollutants

CO (lb/day)	CO (TPY)	NOX (lb/day)	NOX (TPY)	SOX (lb/yr)	SOX (TPX)
11.78	0.07	2.99	0.02	0.35	0.00

### Blasting Gases - ANFO Emission Greenhouse Gases

CO2 (lb/day)	CO2 (TPY)	CH4 (lb/day)	CH4 (TPY)	N2O (lb/day)	N2O (TPY)	Total CO2e (MT/year)
99.56	0.5973	0.00	0.0000	0.0009	0.0106	3.793

#### Notes:

- Emission Factor Source: AP-42 5th Edition, Section 13.3, Table 13.3-1, February 1980, ND = no data. Uncontrolled CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions are calculated using the emission factors of 73.96 kg/MMBtu,  $3 \times 10^{-3}$  kg/MMBtu, and  $6 \times 10^{-4}$  kg/MMBtu, respectively, from 40 CFR 98, Tables C-1 and C-2 for distillate fuel oil No. 2. A diesel fuel oil to ammonium nitrate ratio of 9% and a diesel heating value of 19,300 Btu/pound of diesel fuel were used to express the CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emission factors in terms of lb/ton of ANFO.

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Pioneer Trail Pipeline and Pumpstation**

**Nevada County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.20	1000sqft	0.03	1,200.00	0
Other Asphalt Surfaces	0.50	Acre	0.50	21,780.00	0
Other Non-Asphalt Surfaces	2.50	Acre	2.50	108,900.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	80
<b>Climate Zone</b>	1			<b>Operational Year</b>	2024
<b>Utility Company</b>	Sierra Pacific Resources				
<b>CO2 Intensity (lb/MWhr)</b>	1328.16	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Genral Light Indistry = pump station building.

Other Non-Asphalt Surfaces = pipe alignment.

Other Asphalt Surfaces = new access driveway and repaving excavated areas.

Construction Phase - Schedule per project engineer.

Off-road Equipment -

Off-road Equipment - Bore/Drill rig for blasting drilling.

Off-road Equipment - Equipment for erecting pumphouse and installing equipment.

Off-road Equipment - Equipment per project engineer.

Off-highway Trucks = dump truck for stockpiling soil and a water truck.

Off-road Equipment - Equipment per project engineer.

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Off-road Equipment - Equipment per project engineer.

Off-highway Truck = water truck.

Trips and VMT - Max building construction crew of 10 and max vendor trips of 4 per day assumed.

7 mile haul distance for vegetation/debris per project engineer.

38 loads (76 one-way trips) asphalt/aggregate imported during paving.

On-road Fugitive Dust - 0.25 miles of unpaved access road assumed for each haul trip during site prep and grading/excavation.

Grading - 2,000 CY vegetation/debris exported during site prep.

1,800 CY sand imported for utility trenching.

Architectural Coating - Internal area for painting equal to exterior area.

Vehicle Trips - No new project trips generated

Area Coating - Internal area for painting equal to exterior area.

Energy Use - Energy use per project engineer.

Water And Wastewater - No water use.

Solid Waste - No solid waste generation.

Construction Off-road Equipment Mitigation - Fugitive dust mitigation to meet requirements of NSAQMD Rule 226 - Dust Control

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,800.00	600.00
tblAreaCoating	Area_Nonresidential_Interior	1800	600
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	5.00
tblConstructionPhase	NumDays	230.00	44.00
tblConstructionPhase	NumDays	8.00	131.00
tblConstructionPhase	NumDays	18.00	45.00
tblConstructionPhase	NumDays	5.00	22.00
tblEnergyUse	NT24E	1.85	666.67
tblEnergyUse	NT24NG	0.31	0.00
tblEnergyUse	T24E	0.56	0.00

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblEnergyUse	T24NG	3.17	0.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialImported	0.00	1,800.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	96.40
tblOnRoadDust	HaulingPercentPave	100.00	98.80
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1.49	0.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	750.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	7.00
tblTripsAndVMT	HaulingTripNumber	0.00	76.00
tblTripsAndVMT	VendorTripNumber	22.00	4.00
tblTripsAndVMT	WorkerTripNumber	55.00	20.00
tblVehicleTrips	CC_TL	6.60	7.30
tblVehicleTrips	CC_TL	6.60	7.30
tblVehicleTrips	CC_TL	6.60	7.30
tblVehicleTrips	CNW_TL	6.60	7.30

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblVehicleTrips	CNW_TL	6.60	7.30
tblVehicleTrips	CNW_TL	6.60	7.30
tblVehicleTrips	CW_TL	14.70	9.50
tblVehicleTrips	CW_TL	14.70	9.50
tblVehicleTrips	CW_TL	14.70	9.50
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.00
tblWater	IndoorWaterUseRate	277,500.00	0.00

**2.0 Emissions Summary**

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Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1007	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.2000e-004	9.2000e-004	0.0000		9.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
<b>Total</b>	<b>1.3315</b>	<b>5.5041</b>	<b>3.1387</b>	<b>5.9100e-003</b>	<b>0.0000</b>	<b>0.1811</b>	<b>0.1811</b>	<b>0.0000</b>	<b>0.1811</b>	<b>0.1811</b>		<b>629.6365</b>	<b>629.6365</b>	<b>0.0883</b>	<b>0.0000</b>	<b>631.8435</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1007	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.2000e-004	9.2000e-004	0.0000		9.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
<b>Total</b>	<b>1.3315</b>	<b>5.5041</b>	<b>3.1387</b>	<b>5.9100e-003</b>	<b>0.0000</b>	<b>0.1811</b>	<b>0.1811</b>	<b>0.0000</b>	<b>0.1811</b>	<b>0.1811</b>		<b>629.6365</b>	<b>629.6365</b>	<b>0.0883</b>	<b>0.0000</b>	<b>631.8435</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/1/2022	5/31/2022	5	22	
2	Grading/Excavation	Grading	6/1/2022	11/30/2022	5	131	
3	Blasting Drilling	Trenching	6/1/2022	7/4/2022	5	24	
4	Building Construction	Building Construction	7/1/2022	8/31/2022	5	44	

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

5	Paving	Paving	8/1/2022	9/30/2022	5	45
6	Architectural Coating	Architectural Coating	10/1/2022	10/7/2022	5	5

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 3**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 600; Non-Residential Outdoor: 600; Striped Parking Area: 7,841 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Off-Highway Trucks	1	2.00	402	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading/Excavation	Excavators	2	8.00	158	0.38
Grading/Excavation	Graders	0	8.00	187	0.41
Grading/Excavation	Off-Highway Trucks	2	2.00	402	0.38
Grading/Excavation	Rubber Tired Dozers	0	8.00	247	0.40
Grading/Excavation	Rubber Tired Loaders	2	8.00	203	0.36
Grading/Excavation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Blasting Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	250.00	16.80	6.60	7.00	LD_Mix	HDT_Mix	HHDT
Grading/Excavation	6	15.00	0.00	225.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Blasting Drilling	1	3.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	20.00	4.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	76.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0103	0.0000	0.0103	1.5600e-003	0.0000	1.5600e-003			0.0000			0.0000
Off-Road	0.3345	2.7804	4.0948	8.4700e-003		0.1224	0.1224		0.1126	0.1126		819.7616	819.7616	0.2651		826.3898
<b>Total</b>	<b>0.3345</b>	<b>2.7804</b>	<b>4.0948</b>	<b>8.4700e-003</b>	<b>0.0103</b>	<b>0.1224</b>	<b>0.1327</b>	<b>1.5600e-003</b>	<b>0.1126</b>	<b>0.1142</b>		<b>819.7616</b>	<b>819.7616</b>	<b>0.2651</b>		<b>826.3898</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0261	0.8577	0.2988	2.7600e-003	4.2823	6.2800e-003	4.2886	0.4393	6.0000e-003	0.4453		293.2126	293.2126	2.5500e-003	0.0462	307.0336
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0245	0.2238	5.5000e-004	0.0639	3.4000e-004	0.0642	0.0169	3.1000e-004	0.0173		55.4829	55.4829	1.8900e-003	2.0000e-003	56.1258
<b>Total</b>	<b>0.0537</b>	<b>0.8821</b>	<b>0.5226</b>	<b>3.3100e-003</b>	<b>4.3462</b>	<b>6.6200e-003</b>	<b>4.3528</b>	<b>0.4562</b>	<b>6.3100e-003</b>	<b>0.4625</b>		<b>348.6956</b>	<b>348.6956</b>	<b>4.4400e-003</b>	<b>0.0482</b>	<b>363.1594</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Site Preparation - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.6300e-003	0.0000	4.6300e-003	7.0000e-004	0.0000	7.0000e-004			0.0000			0.0000
Off-Road	0.3345	2.7804	4.0948	8.4700e-003		0.1224	0.1224		0.1126	0.1126	0.0000	819.7616	819.7616	0.2651		826.3898
<b>Total</b>	<b>0.3345</b>	<b>2.7804</b>	<b>4.0948</b>	<b>8.4700e-003</b>	<b>4.6300e-003</b>	<b>0.1224</b>	<b>0.1270</b>	<b>7.0000e-004</b>	<b>0.1126</b>	<b>0.1133</b>	<b>0.0000</b>	<b>819.7616</b>	<b>819.7616</b>	<b>0.2651</b>		<b>826.3898</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0261	0.8577	0.2988	2.7600e-003	1.4339	6.2800e-003	1.4401	0.1544	6.0000e-003	0.1604		293.2126	293.2126	2.5500e-003	0.0462	307.0336
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0245	0.2238	5.5000e-004	0.0639	3.4000e-004	0.0642	0.0169	3.1000e-004	0.0173		55.4829	55.4829	1.8900e-003	2.0000e-003	56.1258
<b>Total</b>	<b>0.0537</b>	<b>0.8821</b>	<b>0.5226</b>	<b>3.3100e-003</b>	<b>1.4977</b>	<b>6.6200e-003</b>	<b>1.5043</b>	<b>0.1713</b>	<b>6.3100e-003</b>	<b>0.1777</b>		<b>348.6956</b>	<b>348.6956</b>	<b>4.4400e-003</b>	<b>0.0482</b>	<b>363.1594</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Grading/Excavation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5500e-003	0.0000	1.5500e-003	2.4000e-004	0.0000	2.4000e-004			0.0000			0.0000
Off-Road	1.2518	11.6108	11.2521	0.0295		0.4477	0.4477		0.4119	0.4119		2,850.8518	2,850.8518	0.9220		2,873.9024
<b>Total</b>	<b>1.2518</b>	<b>11.6108</b>	<b>11.2521</b>	<b>0.0295</b>	<b>1.5500e-003</b>	<b>0.4477</b>	<b>0.4493</b>	<b>2.4000e-004</b>	<b>0.4119</b>	<b>0.4122</b>		<b>2,850.8518</b>	<b>2,850.8518</b>	<b>0.9220</b>		<b>2,873.9024</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.8900e-003	0.2897	0.0619	1.0700e-003	0.6365	2.6500e-003	0.6391	0.0687	2.5400e-003	0.0713		113.9434	113.9434	8.9000e-004	0.0179	119.3123
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0830	0.0734	0.6713	1.6400e-003	0.1916	1.0200e-003	0.1926	0.0508	9.4000e-004	0.0518		166.4488	166.4488	5.6700e-003	6.0000e-003	168.3774
<b>Total</b>	<b>0.0899</b>	<b>0.3631</b>	<b>0.7332</b>	<b>2.7100e-003</b>	<b>0.8281</b>	<b>3.6700e-003</b>	<b>0.8318</b>	<b>0.1195</b>	<b>3.4800e-003</b>	<b>0.1230</b>		<b>280.3922</b>	<b>280.3922</b>	<b>6.5600e-003</b>	<b>0.0239</b>	<b>287.6897</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Grading/Excavation - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0000e-004	0.0000	7.0000e-004	1.1000e-004	0.0000	1.1000e-004			0.0000			0.0000
Off-Road	1.2518	11.6108	11.2521	0.0295		0.4477	0.4477		0.4119	0.4119	0.0000	2,850.8518	2,850.8518	0.9220		2,873.9024
<b>Total</b>	<b>1.2518</b>	<b>11.6108</b>	<b>11.2521</b>	<b>0.0295</b>	<b>7.0000e-004</b>	<b>0.4477</b>	<b>0.4484</b>	<b>1.1000e-004</b>	<b>0.4119</b>	<b>0.4120</b>	<b>0.0000</b>	<b>2,850.8518</b>	<b>2,850.8518</b>	<b>0.9220</b>		<b>2,873.9024</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.8900e-003	0.2897	0.0619	1.0700e-003	0.2265	2.6500e-003	0.2291	0.0277	2.5400e-003	0.0303		113.9434	113.9434	8.9000e-004	0.0179	119.3123
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0830	0.0734	0.6713	1.6400e-003	0.1916	1.0200e-003	0.1926	0.0508	9.4000e-004	0.0518		166.4488	166.4488	5.6700e-003	6.0000e-003	168.3774
<b>Total</b>	<b>0.0899</b>	<b>0.3631</b>	<b>0.7332</b>	<b>2.7100e-003</b>	<b>0.4181</b>	<b>3.6700e-003</b>	<b>0.4217</b>	<b>0.0785</b>	<b>3.4800e-003</b>	<b>0.0820</b>		<b>280.3922</b>	<b>280.3922</b>	<b>6.5600e-003</b>	<b>0.0239</b>	<b>287.6897</b>



Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Blasting Drilling - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2241	2.2664	2.0411	9.4400e-003		0.0728	0.0728		0.0669	0.0669		913.5608	913.5608	0.2955		920.9474
<b>Total</b>	<b>0.2241</b>	<b>2.2664</b>	<b>2.0411</b>	<b>9.4400e-003</b>		<b>0.0728</b>	<b>0.0728</b>		<b>0.0669</b>	<b>0.0669</b>		<b>913.5608</b>	<b>913.5608</b>	<b>0.2955</b>		<b>920.9474</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0166	0.0147	0.1343	3.3000e-004	0.0383	2.0000e-004	0.0385	0.0102	1.9000e-004	0.0104		33.2898	33.2898	1.1300e-003	1.2000e-003	33.6755
<b>Total</b>	<b>0.0166</b>	<b>0.0147</b>	<b>0.1343</b>	<b>3.3000e-004</b>	<b>0.0383</b>	<b>2.0000e-004</b>	<b>0.0385</b>	<b>0.0102</b>	<b>1.9000e-004</b>	<b>0.0104</b>		<b>33.2898</b>	<b>33.2898</b>	<b>1.1300e-003</b>	<b>1.2000e-003</b>	<b>33.6755</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Blasting Drilling - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2241	2.2664	2.0411	9.4400e-003		0.0728	0.0728		0.0669	0.0669	0.0000	913.5608	913.5608	0.2955		920.9474
<b>Total</b>	<b>0.2241</b>	<b>2.2664</b>	<b>2.0411</b>	<b>9.4400e-003</b>		<b>0.0728</b>	<b>0.0728</b>		<b>0.0669</b>	<b>0.0669</b>	<b>0.0000</b>	<b>913.5608</b>	<b>913.5608</b>	<b>0.2955</b>		<b>920.9474</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0166	0.0147	0.1343	3.3000e-004	0.0383	2.0000e-004	0.0385	0.0102	1.9000e-004	0.0104		33.2898	33.2898	1.1300e-003	1.2000e-003	33.6755
<b>Total</b>	<b>0.0166</b>	<b>0.0147</b>	<b>0.1343</b>	<b>3.3000e-004</b>	<b>0.0383</b>	<b>2.0000e-004</b>	<b>0.0385</b>	<b>0.0102</b>	<b>1.9000e-004</b>	<b>0.0104</b>		<b>33.2898</b>	<b>33.2898</b>	<b>1.1300e-003</b>	<b>1.2000e-003</b>	<b>33.6755</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9141	9.1106	8.4437	0.0159		0.4477	0.4477		0.4236	0.4236		1,523.6260	1,523.6260	0.3209		1,531.6478
<b>Total</b>	<b>0.9141</b>	<b>9.1106</b>	<b>8.4437</b>	<b>0.0159</b>		<b>0.4477</b>	<b>0.4477</b>		<b>0.4236</b>	<b>0.4236</b>		<b>1,523.6260</b>	<b>1,523.6260</b>	<b>0.3209</b>		<b>1,531.6478</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1900e-003	0.2386	0.0775	8.0000e-004	0.0245	2.2700e-003	0.0268	7.0600e-003	2.1700e-003	9.2400e-003		84.1854	84.1854	7.0000e-004	0.0125	87.9385
Worker	0.1107	0.0978	0.8951	2.1800e-003	0.2555	1.3600e-003	0.2568	0.0678	1.2600e-003	0.0690		221.9318	221.9318	7.5600e-003	7.9900e-003	224.5033
<b>Total</b>	<b>0.1199</b>	<b>0.3364</b>	<b>0.9726</b>	<b>2.9800e-003</b>	<b>0.2800</b>	<b>3.6300e-003</b>	<b>0.2836</b>	<b>0.0748</b>	<b>3.4300e-003</b>	<b>0.0782</b>		<b>306.1172</b>	<b>306.1172</b>	<b>8.2600e-003</b>	<b>0.0205</b>	<b>312.4418</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9141	9.1106	8.4437	0.0159		0.4477	0.4477		0.4236	0.4236	0.0000	1,523.6260	1,523.6260	0.3209		1,531.6478
<b>Total</b>	<b>0.9141</b>	<b>9.1106</b>	<b>8.4437</b>	<b>0.0159</b>		<b>0.4477</b>	<b>0.4477</b>		<b>0.4236</b>	<b>0.4236</b>	<b>0.0000</b>	<b>1,523.6260</b>	<b>1,523.6260</b>	<b>0.3209</b>		<b>1,531.6478</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1900e-003	0.2386	0.0775	8.0000e-004	0.0245	2.2700e-003	0.0268	7.0600e-003	2.1700e-003	9.2400e-003		84.1854	84.1854	7.0000e-004	0.0125	87.9385
Worker	0.1107	0.0978	0.8951	2.1800e-003	0.2555	1.3600e-003	0.2568	0.0678	1.2600e-003	0.0690		221.9318	221.9318	7.5600e-003	7.9900e-003	224.5033
<b>Total</b>	<b>0.1199</b>	<b>0.3364</b>	<b>0.9726</b>	<b>2.9800e-003</b>	<b>0.2800</b>	<b>3.6300e-003</b>	<b>0.2836</b>	<b>0.0748</b>	<b>3.4300e-003</b>	<b>0.0782</b>		<b>306.1172</b>	<b>306.1172</b>	<b>8.2600e-003</b>	<b>0.0205</b>	<b>312.4418</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8884	8.9699	11.7314	0.0179		0.4662	0.4662		0.4289	0.4289		1,729.3552	1,729.3552	0.5593		1,743.3379
Paving	0.0291					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9175</b>	<b>8.9699</b>	<b>11.7314</b>	<b>0.0179</b>		<b>0.4662</b>	<b>0.4662</b>		<b>0.4289</b>	<b>0.4289</b>		<b>1,729.3552</b>	<b>1,729.3552</b>	<b>0.5593</b>		<b>1,743.3379</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.7800e-003	0.2849	0.0608	1.0500e-003	0.0296	2.6100e-003	0.0322	8.1200e-003	2.4900e-003	0.0106		112.0415	112.0415	8.7000e-004	0.0176	117.3208
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0830	0.0734	0.6713	1.6400e-003	0.1916	1.0200e-003	0.1926	0.0508	9.4000e-004	0.0518		166.4488	166.4488	5.6700e-003	6.0000e-003	168.3774
<b>Total</b>	<b>0.0898</b>	<b>0.3582</b>	<b>0.7322</b>	<b>2.6900e-003</b>	<b>0.2212</b>	<b>3.6300e-003</b>	<b>0.2248</b>	<b>0.0589</b>	<b>3.4300e-003</b>	<b>0.0624</b>		<b>278.4904</b>	<b>278.4904</b>	<b>6.5400e-003</b>	<b>0.0236</b>	<b>285.6983</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8884	8.9699	11.7314	0.0179		0.4662	0.4662		0.4289	0.4289	0.0000	1,729.3552	1,729.3552	0.5593		1,743.3379
Paving	0.0291					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9175</b>	<b>8.9699</b>	<b>11.7314</b>	<b>0.0179</b>		<b>0.4662</b>	<b>0.4662</b>		<b>0.4289</b>	<b>0.4289</b>	<b>0.0000</b>	<b>1,729.3552</b>	<b>1,729.3552</b>	<b>0.5593</b>		<b>1,743.3379</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.7800e-003	0.2849	0.0608	1.0500e-003	0.0296	2.6100e-003	0.0322	8.1200e-003	2.4900e-003	0.0106		112.0415	112.0415	8.7000e-004	0.0176	117.3208
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0830	0.0734	0.6713	1.6400e-003	0.1916	1.0200e-003	0.1926	0.0508	9.4000e-004	0.0518		166.4488	166.4488	5.6700e-003	6.0000e-003	168.3774
<b>Total</b>	<b>0.0898</b>	<b>0.3582</b>	<b>0.7322</b>	<b>2.6900e-003</b>	<b>0.2212</b>	<b>3.6300e-003</b>	<b>0.2248</b>	<b>0.0589</b>	<b>3.4300e-003</b>	<b>0.0624</b>		<b>278.4904</b>	<b>278.4904</b>	<b>6.5400e-003</b>	<b>0.0236</b>	<b>285.6983</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.9525					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>21.1571</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0609	0.0538	0.4923	1.2000e-003	0.1405	7.5000e-004	0.1413	0.0373	6.9000e-004	0.0380		122.0625	122.0625	4.1600e-003	4.4000e-003	123.4768
<b>Total</b>	<b>0.0609</b>	<b>0.0538</b>	<b>0.4923</b>	<b>1.2000e-003</b>	<b>0.1405</b>	<b>7.5000e-004</b>	<b>0.1413</b>	<b>0.0373</b>	<b>6.9000e-004</b>	<b>0.0380</b>		<b>122.0625</b>	<b>122.0625</b>	<b>4.1600e-003</b>	<b>4.4000e-003</b>	<b>123.4768</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.9525					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>21.1571</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0609	0.0538	0.4923	1.2000e-003	0.1405	7.5000e-004	0.1413	0.0373	6.9000e-004	0.0380		122.0625	122.0625	4.1600e-003	4.4000e-003	123.4768
<b>Total</b>	<b>0.0609</b>	<b>0.0538</b>	<b>0.4923</b>	<b>1.2000e-003</b>	<b>0.1405</b>	<b>7.5000e-004</b>	<b>0.1413</b>	<b>0.0373</b>	<b>6.9000e-004</b>	<b>0.0380</b>		<b>122.0625</b>	<b>122.0625</b>	<b>4.1600e-003</b>	<b>4.4000e-003</b>	<b>123.4768</b>



Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.385522	0.064823	0.251338	0.159546	0.050594	0.009769	0.008563	0.017134	0.000942	0.000162	0.043296	0.000631	0.007681
Other Asphalt Surfaces	0.385522	0.064823	0.251338	0.159546	0.050594	0.009769	0.008563	0.017134	0.000942	0.000162	0.043296	0.000631	0.007681
Other Non-Asphalt Surfaces	0.385522	0.064823	0.251338	0.159546	0.050594	0.009769	0.008563	0.017134	0.000942	0.000162	0.043296	0.000631	0.007681

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1007	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.2000e-004	9.2000e-004	0.0000		9.8000e-004
Unmitigated	0.1007	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.2000e-004	9.2000e-004	0.0000		9.8000e-004

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0287					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.2000e-004	9.2000e-004	0.0000		9.8000e-004
<b>Total</b>	<b>0.1007</b>	<b>0.0000</b>	<b>4.3000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>9.2000e-004</b>	<b>9.2000e-004</b>	<b>0.0000</b>		<b>9.8000e-004</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0287					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.2000e-004	9.2000e-004	0.0000		9.8000e-004
<b>Total</b>	<b>0.1007</b>	<b>0.0000</b>	<b>4.3000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>9.2000e-004</b>	<b>9.2000e-004</b>	<b>0.0000</b>		<b>9.8000e-004</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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Fire Pumps and Emergency Generators

Pioneer Trail Pipeline and Pumpstation - Nevada County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	1	12	750	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (750 - 9999 HP)	1.2308	5.5041	3.1383	5.9100e-003		0.1811	0.1811		0.1811	0.1811		629.6356	629.6356	0.0883		631.8425
<b>Total</b>	<b>1.2308</b>	<b>5.5041</b>	<b>3.1383</b>	<b>5.9100e-003</b>		<b>0.1811</b>	<b>0.1811</b>		<b>0.1811</b>	<b>0.1811</b>		<b>629.6356</b>	<b>629.6356</b>	<b>0.0883</b>		<b>631.8425</b>

**11.0 Vegetation**

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Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Pioneer Trail Pipeline and Pumpstation  
Nevada County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.20	1000sqft	0.03	1,200.00	0
Other Asphalt Surfaces	0.50	Acre	0.50	21,780.00	0
Other Non-Asphalt Surfaces	2.50	Acre	2.50	108,900.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	80
<b>Climate Zone</b>	1			<b>Operational Year</b>	2024
<b>Utility Company</b>	Sierra Pacific Resources				
<b>CO2 Intensity (lb/MWhr)</b>	1328.16	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Genral Light Indistry = pump station building.  
 Other Non-Asphalt Surfaces = pipe alignment.  
 Other Asphalt Surfaces = new access driveway and repaving excavated areas.

Construction Phase - Schedule per project engineer.

Off-road Equipment -

Off-road Equipment - Bore/Drill rig for blasting drilling.

Off-road Equipment - Equipment for erecting pumphouse and installing equipment.

Off-road Equipment - Equipment per project engineer.

Off-highway Trucks = dump truck for stockpiling soil and a water truck.

Off-road Equipment - Equipment per project engineer.



Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Off-road Equipment - Equipment per project engineer.

Off-highway Truck = water truck.

Trips and VMT - Max building construction crew of 10 and max vendor trips of 4 per day assumed.

7 mile haul distance for vegetation/debris per project engineer.

38 loads (76 one-way trips) asphalt/aggregate imported during paving.

On-road Fugitive Dust - 0.25 miles of unpaved access road assumed for each haul trip during site prep and grading/excavation.

Grading - 2,000 CY vegetation/debris exported during site prep.

1,800 CY sand imported for utility trenching.

Architectural Coating - Internal area for painting equal to exterior area.

Vehicle Trips - No new project trips generated

Area Coating - Internal area for painting equal to exterior area.

Energy Use - Energy use per project engineer.

Water And Wastewater - No water use.

Solid Waste - No solid waste generation.

Construction Off-road Equipment Mitigation - Fugitive dust mitigation to meet requirements of NSAQMD Rule 226 - Dust Control

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,800.00	600.00
tblAreaCoating	Area_Nonresidential_Interior	1800	600
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	5.00
tblConstructionPhase	NumDays	230.00	44.00
tblConstructionPhase	NumDays	8.00	131.00
tblConstructionPhase	NumDays	18.00	45.00
tblConstructionPhase	NumDays	5.00	22.00
tblEnergyUse	NT24E	1.85	666.67
tblEnergyUse	NT24NG	0.31	0.00
tblEnergyUse	T24E	0.56	0.00

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblEnergyUse	T24NG	3.17	0.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialImported	0.00	1,800.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	96.40
tblOnRoadDust	HaulingPercentPave	100.00	98.80
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1.49	0.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	750.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	7.00
tblTripsAndVMT	HaulingTripNumber	0.00	76.00
tblTripsAndVMT	VendorTripNumber	22.00	4.00
tblTripsAndVMT	WorkerTripNumber	55.00	20.00
tblVehicleTrips	CC_TL	6.60	7.30
tblVehicleTrips	CC_TL	6.60	7.30
tblVehicleTrips	CC_TL	6.60	7.30
tblVehicleTrips	CNW_TL	6.60	7.30

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblVehicleTrips	CNW_TL	6.60	7.30
tblVehicleTrips	CNW_TL	6.60	7.30
tblVehicleTrips	CW_TL	14.70	9.50
tblVehicleTrips	CW_TL	14.70	9.50
tblVehicleTrips	CW_TL	14.70	9.50
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.00
tblWater	IndoorWaterUseRate	277,500.00	0.00

**2.0 Emissions Summary**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2022	7-31-2022	0.4797	0.4797
2	8-1-2022	9-30-2022	0.6293	0.6293
		Highest	0.6293	0.6293

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0184	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	483.2655	483.2655	0.0106	2.1800e-003	484.1799
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	7.3800e-003	0.0330	0.0188	4.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	3.4272	3.4272	4.8000e-004	0.0000	3.4392
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0258</b>	<b>0.0330</b>	<b>0.0189</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.0900e-003</b>	<b>1.0900e-003</b>	<b>0.0000</b>	<b>1.0900e-003</b>	<b>1.0900e-003</b>	<b>0.0000</b>	<b>486.6928</b>	<b>486.6928</b>	<b>0.0110</b>	<b>2.1800e-003</b>	<b>487.6192</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0184	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	483.2655	483.2655	0.0106	2.1800e-003	484.1799
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	7.3800e-003	0.0330	0.0188	4.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	3.4272	3.4272	4.8000e-004	0.0000	3.4392
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0258</b>	<b>0.0330</b>	<b>0.0189</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.0900e-003</b>	<b>1.0900e-003</b>	<b>0.0000</b>	<b>1.0900e-003</b>	<b>1.0900e-003</b>	<b>0.0000</b>	<b>486.6928</b>	<b>486.6928</b>	<b>0.0110</b>	<b>2.1800e-003</b>	<b>487.6192</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/1/2022	5/31/2022	5	22	
2	Grading/Excavation	Grading	6/1/2022	11/30/2022	5	131	

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

3	Blasting Drilling	Trenching	6/1/2022	7/4/2022	5	24
4	Building Construction	Building Construction	7/1/2022	8/31/2022	5	44
5	Paving	Paving	8/1/2022	9/30/2022	5	45
6	Architectural Coating	Architectural Coating	10/1/2022	10/7/2022	5	5

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 3**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 600; Non-Residential Outdoor: 600; Striped Parking Area: 7,841 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Off-Highway Trucks	1	2.00	402	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading/Excavation	Excavators	2	8.00	158	0.38
Grading/Excavation	Graders	0	8.00	187	0.41
Grading/Excavation	Off-Highway Trucks	2	2.00	402	0.38
Grading/Excavation	Rubber Tired Dozers	0	8.00	247	0.40
Grading/Excavation	Rubber Tired Loaders	2	8.00	203	0.36
Grading/Excavation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Blasting Drilling	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	250.00	16.80	6.60	7.00	LD_Mix	HDT_Mix	HHDT
Grading/Excavation	6	15.00	0.00	225.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Blasting Drilling	1	3.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	20.00	4.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	76.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads



Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1000e-004	0.0000	1.1000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0306	0.0450	9.0000e-005		1.3500e-003	1.3500e-003		1.2400e-003	1.2400e-003	0.0000	8.1804	8.1804	2.6500e-003	0.0000	8.2466
<b>Total</b>	<b>3.6800e-003</b>	<b>0.0306</b>	<b>0.0450</b>	<b>9.0000e-005</b>	<b>1.1000e-004</b>	<b>1.3500e-003</b>	<b>1.4600e-003</b>	<b>2.0000e-005</b>	<b>1.2400e-003</b>	<b>1.2600e-003</b>	<b>0.0000</b>	<b>8.1804</b>	<b>8.1804</b>	<b>2.6500e-003</b>	<b>0.0000</b>	<b>8.2466</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-004	9.2300e-003	3.2200e-003	3.0000e-005	0.0369	7.0000e-005	0.0370	3.8100e-003	7.0000e-005	3.8800e-003	0.0000	2.9219	2.9219	3.0000e-005	4.6000e-004	3.0597
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.5000e-004	2.4500e-003	1.0000e-005	6.7000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5616	0.5616	2.0000e-005	2.0000e-005	0.5676
<b>Total</b>	<b>5.8000e-004</b>	<b>9.4800e-003</b>	<b>5.6700e-003</b>	<b>4.0000e-005</b>	<b>0.0376</b>	<b>7.0000e-005</b>	<b>0.0377</b>	<b>3.9900e-003</b>	<b>7.0000e-005</b>	<b>4.0600e-003</b>	<b>0.0000</b>	<b>3.4835</b>	<b>3.4835</b>	<b>5.0000e-005</b>	<b>4.8000e-004</b>	<b>3.6273</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Site Preparation - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0306	0.0450	9.0000e-005		1.3500e-003	1.3500e-003		1.2400e-003	1.2400e-003	0.0000	8.1804	8.1804	2.6500e-003	0.0000	8.2466
<b>Total</b>	<b>3.6800e-003</b>	<b>0.0306</b>	<b>0.0450</b>	<b>9.0000e-005</b>	<b>5.0000e-005</b>	<b>1.3500e-003</b>	<b>1.4000e-003</b>	<b>1.0000e-005</b>	<b>1.2400e-003</b>	<b>1.2500e-003</b>	<b>0.0000</b>	<b>8.1804</b>	<b>8.1804</b>	<b>2.6500e-003</b>	<b>0.0000</b>	<b>8.2466</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-004	9.2300e-003	3.2200e-003	3.0000e-005	0.0125	7.0000e-005	0.0125	1.3600e-003	7.0000e-005	1.4300e-003	0.0000	2.9219	2.9219	3.0000e-005	4.6000e-004	3.0597
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.5000e-004	2.4500e-003	1.0000e-005	6.7000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5616	0.5616	2.0000e-005	2.0000e-005	0.5676
<b>Total</b>	<b>5.8000e-004</b>	<b>9.4800e-003</b>	<b>5.6700e-003</b>	<b>4.0000e-005</b>	<b>0.0131</b>	<b>7.0000e-005</b>	<b>0.0132</b>	<b>1.5400e-003</b>	<b>7.0000e-005</b>	<b>1.6100e-003</b>	<b>0.0000</b>	<b>3.4835</b>	<b>3.4835</b>	<b>5.0000e-005</b>	<b>4.8000e-004</b>	<b>3.6273</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Grading/Excavation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0000e-004	0.0000	1.0000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0820	0.7605	0.7370	1.9300e-003		0.0293	0.0293		0.0270	0.0270	0.0000	169.3993	169.3993	0.0548	0.0000	170.7690
<b>Total</b>	<b>0.0820</b>	<b>0.7605</b>	<b>0.7370</b>	<b>1.9300e-003</b>	<b>1.0000e-004</b>	<b>0.0293</b>	<b>0.0294</b>	<b>2.0000e-005</b>	<b>0.0270</b>	<b>0.0270</b>	<b>0.0000</b>	<b>169.3993</b>	<b>169.3993</b>	<b>0.0548</b>	<b>0.0000</b>	<b>170.7690</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.6000e-004	0.0186	4.0000e-003	7.0000e-005	0.0329	1.7000e-004	0.0331	3.6100e-003	1.7000e-004	3.7800e-003	0.0000	6.7669	6.7669	5.0000e-005	1.0700e-003	7.0858
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-003	4.4000e-003	0.0437	1.1000e-004	0.0120	7.0000e-005	0.0120	3.1800e-003	6.0000e-005	3.2400e-003	0.0000	10.0314	10.0314	3.2000e-004	3.4000e-004	10.1396
<b>Total</b>	<b>5.4600e-003</b>	<b>0.0230</b>	<b>0.0477</b>	<b>1.8000e-004</b>	<b>0.0449</b>	<b>2.4000e-004</b>	<b>0.0451</b>	<b>6.7900e-003</b>	<b>2.3000e-004</b>	<b>7.0200e-003</b>	<b>0.0000</b>	<b>16.7983</b>	<b>16.7983</b>	<b>3.7000e-004</b>	<b>1.4100e-003</b>	<b>17.2254</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Grading/Excavation - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0820	0.7605	0.7370	1.9300e-003		0.0293	0.0293		0.0270	0.0270	0.0000	169.3991	169.3991	0.0548	0.0000	170.7688
<b>Total</b>	<b>0.0820</b>	<b>0.7605</b>	<b>0.7370</b>	<b>1.9300e-003</b>	<b>5.0000e-005</b>	<b>0.0293</b>	<b>0.0294</b>	<b>1.0000e-005</b>	<b>0.0270</b>	<b>0.0270</b>	<b>0.0000</b>	<b>169.3991</b>	<b>169.3991</b>	<b>0.0548</b>	<b>0.0000</b>	<b>170.7688</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.6000e-004	0.0186	4.0000e-003	7.0000e-005	0.0119	1.7000e-004	0.0121	1.5200e-003	1.7000e-004	1.6800e-003	0.0000	6.7669	6.7669	5.0000e-005	1.0700e-003	7.0858
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-003	4.4000e-003	0.0437	1.1000e-004	0.0120	7.0000e-005	0.0120	3.1800e-003	6.0000e-005	3.2400e-003	0.0000	10.0314	10.0314	3.2000e-004	3.4000e-004	10.1396
<b>Total</b>	<b>5.4600e-003</b>	<b>0.0230</b>	<b>0.0477</b>	<b>1.8000e-004</b>	<b>0.0239</b>	<b>2.4000e-004</b>	<b>0.0241</b>	<b>4.7000e-003</b>	<b>2.3000e-004</b>	<b>4.9200e-003</b>	<b>0.0000</b>	<b>16.7983</b>	<b>16.7983</b>	<b>3.7000e-004</b>	<b>1.4100e-003</b>	<b>17.2254</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Blasting Drilling - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.6900e-003	0.0272	0.0245	1.1000e-004		8.7000e-004	8.7000e-004		8.0000e-004	8.0000e-004	0.0000	9.9452	9.9452	3.2200e-003	0.0000	10.0256
<b>Total</b>	<b>2.6900e-003</b>	<b>0.0272</b>	<b>0.0245</b>	<b>1.1000e-004</b>		<b>8.7000e-004</b>	<b>8.7000e-004</b>		<b>8.0000e-004</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>9.9452</b>	<b>9.9452</b>	<b>3.2200e-003</b>	<b>0.0000</b>	<b>10.0256</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.6000e-004	1.6000e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3676	0.3676	1.0000e-005	1.0000e-005	0.3715
<b>Total</b>	<b>1.8000e-004</b>	<b>1.6000e-004</b>	<b>1.6000e-003</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3676</b>	<b>0.3676</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.3715</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Blasting Drilling - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.6900e-003	0.0272	0.0245	1.1000e-004		8.7000e-004	8.7000e-004		8.0000e-004	8.0000e-004	0.0000	9.9452	9.9452	3.2200e-003	0.0000	10.0256
<b>Total</b>	<b>2.6900e-003</b>	<b>0.0272</b>	<b>0.0245</b>	<b>1.1000e-004</b>		<b>8.7000e-004</b>	<b>8.7000e-004</b>		<b>8.0000e-004</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>9.9452</b>	<b>9.9452</b>	<b>3.2200e-003</b>	<b>0.0000</b>	<b>10.0256</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.6000e-004	1.6000e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3676	0.3676	1.0000e-005	1.0000e-005	0.3715
<b>Total</b>	<b>1.8000e-004</b>	<b>1.6000e-004</b>	<b>1.6000e-003</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3676</b>	<b>0.3676</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.3715</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0201	0.2004	0.1858	3.5000e-004		9.8500e-003	9.8500e-003		9.3200e-003	9.3200e-003	0.0000	30.4086	30.4086	6.4000e-003	0.0000	30.5687
<b>Total</b>	<b>0.0201</b>	<b>0.2004</b>	<b>0.1858</b>	<b>3.5000e-004</b>		<b>9.8500e-003</b>	<b>9.8500e-003</b>		<b>9.3200e-003</b>	<b>9.3200e-003</b>	<b>0.0000</b>	<b>30.4086</b>	<b>30.4086</b>	<b>6.4000e-003</b>	<b>0.0000</b>	<b>30.5687</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	5.1500e-003	1.6700e-003	2.0000e-005	5.2000e-004	5.0000e-005	5.7000e-004	1.5000e-004	5.0000e-005	2.0000e-004	0.0000	1.6790	1.6790	1.0000e-005	2.5000e-004	1.7538
Worker	2.2400e-003	1.9700e-003	0.0196	5.0000e-005	5.3500e-003	3.0000e-005	5.3800e-003	1.4200e-003	3.0000e-005	1.4500e-003	0.0000	4.4924	4.4924	1.4000e-004	1.5000e-004	4.5409
<b>Total</b>	<b>2.4400e-003</b>	<b>7.1200e-003</b>	<b>0.0213</b>	<b>7.0000e-005</b>	<b>5.8700e-003</b>	<b>8.0000e-005</b>	<b>5.9500e-003</b>	<b>1.5700e-003</b>	<b>8.0000e-005</b>	<b>1.6500e-003</b>	<b>0.0000</b>	<b>6.1714</b>	<b>6.1714</b>	<b>1.5000e-004</b>	<b>4.0000e-004</b>	<b>6.2947</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0201	0.2004	0.1858	3.5000e-004		9.8500e-003	9.8500e-003		9.3200e-003	9.3200e-003	0.0000	30.4086	30.4086	6.4000e-003	0.0000	30.5687
<b>Total</b>	<b>0.0201</b>	<b>0.2004</b>	<b>0.1858</b>	<b>3.5000e-004</b>		<b>9.8500e-003</b>	<b>9.8500e-003</b>		<b>9.3200e-003</b>	<b>9.3200e-003</b>	<b>0.0000</b>	<b>30.4086</b>	<b>30.4086</b>	<b>6.4000e-003</b>	<b>0.0000</b>	<b>30.5687</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	5.1500e-003	1.6700e-003	2.0000e-005	5.2000e-004	5.0000e-005	5.7000e-004	1.5000e-004	5.0000e-005	2.0000e-004	0.0000	1.6790	1.6790	1.0000e-005	2.5000e-004	1.7538
Worker	2.2400e-003	1.9700e-003	0.0196	5.0000e-005	5.3500e-003	3.0000e-005	5.3800e-003	1.4200e-003	3.0000e-005	1.4500e-003	0.0000	4.4924	4.4924	1.4000e-004	1.5000e-004	4.5409
<b>Total</b>	<b>2.4400e-003</b>	<b>7.1200e-003</b>	<b>0.0213</b>	<b>7.0000e-005</b>	<b>5.8700e-003</b>	<b>8.0000e-005</b>	<b>5.9500e-003</b>	<b>1.5700e-003</b>	<b>8.0000e-005</b>	<b>1.6500e-003</b>	<b>0.0000</b>	<b>6.1714</b>	<b>6.1714</b>	<b>1.5000e-004</b>	<b>4.0000e-004</b>	<b>6.2947</b>



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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0200	0.2018	0.2640	4.0000e-004		0.0105	0.0105		9.6500e-003	9.6500e-003	0.0000	35.2990	35.2990	0.0114	0.0000	35.5844
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0207</b>	<b>0.2018</b>	<b>0.2640</b>	<b>4.0000e-004</b>		<b>0.0105</b>	<b>0.0105</b>		<b>9.6500e-003</b>	<b>9.6500e-003</b>	<b>0.0000</b>	<b>35.2990</b>	<b>35.2990</b>	<b>0.0114</b>	<b>0.0000</b>	<b>35.5844</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	6.3000e-003	1.3500e-003	2.0000e-005	6.4000e-004	6.0000e-005	7.0000e-004	1.8000e-004	6.0000e-005	2.3000e-004	0.0000	2.2857	2.2857	2.0000e-005	3.6000e-004	2.3934
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7200e-003	1.5100e-003	0.0150	4.0000e-005	4.1100e-003	2.0000e-005	4.1300e-003	1.0900e-003	2.0000e-005	1.1100e-003	0.0000	3.4459	3.4459	1.1000e-004	1.2000e-004	3.4831
<b>Total</b>	<b>1.8800e-003</b>	<b>7.8100e-003</b>	<b>0.0164</b>	<b>6.0000e-005</b>	<b>4.7500e-003</b>	<b>8.0000e-005</b>	<b>4.8300e-003</b>	<b>1.2700e-003</b>	<b>8.0000e-005</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>5.7316</b>	<b>5.7316</b>	<b>1.3000e-004</b>	<b>4.8000e-004</b>	<b>5.8765</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0200	0.2018	0.2640	4.0000e-004		0.0105	0.0105		9.6500e-003	9.6500e-003	0.0000	35.2990	35.2990	0.0114	0.0000	35.5844
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0207</b>	<b>0.2018</b>	<b>0.2640</b>	<b>4.0000e-004</b>		<b>0.0105</b>	<b>0.0105</b>		<b>9.6500e-003</b>	<b>9.6500e-003</b>	<b>0.0000</b>	<b>35.2990</b>	<b>35.2990</b>	<b>0.0114</b>	<b>0.0000</b>	<b>35.5844</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	6.3000e-003	1.3500e-003	2.0000e-005	6.4000e-004	6.0000e-005	7.0000e-004	1.8000e-004	6.0000e-005	2.3000e-004	0.0000	2.2857	2.2857	2.0000e-005	3.6000e-004	2.3934
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7200e-003	1.5100e-003	0.0150	4.0000e-005	4.1100e-003	2.0000e-005	4.1300e-003	1.0900e-003	2.0000e-005	1.1100e-003	0.0000	3.4459	3.4459	1.1000e-004	1.2000e-004	3.4831
<b>Total</b>	<b>1.8800e-003</b>	<b>7.8100e-003</b>	<b>0.0164</b>	<b>6.0000e-005</b>	<b>4.7500e-003</b>	<b>8.0000e-005</b>	<b>4.8300e-003</b>	<b>1.2700e-003</b>	<b>8.0000e-005</b>	<b>1.3400e-003</b>	<b>0.0000</b>	<b>5.7316</b>	<b>5.7316</b>	<b>1.3000e-004</b>	<b>4.8000e-004</b>	<b>5.8765</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0524					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
<b>Total</b>	<b>0.0529</b>	<b>3.5200e-003</b>	<b>4.5300e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.6394</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.2000e-004	1.2200e-003	0.0000	3.3000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2808	0.2808	1.0000e-005	1.0000e-005	0.2838
<b>Total</b>	<b>1.4000e-004</b>	<b>1.2000e-004</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>3.4000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.2808</b>	<b>0.2808</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.2838</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0524					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
<b>Total</b>	<b>0.0529</b>	<b>3.5200e-003</b>	<b>4.5300e-003</b>	<b>1.0000e-005</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6383</b>	<b>0.6383</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.6394</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.2000e-004	1.2200e-003	0.0000	3.3000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2808	0.2808	1.0000e-005	1.0000e-005	0.2838
<b>Total</b>	<b>1.4000e-004</b>	<b>1.2000e-004</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>3.4000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.2808</b>	<b>0.2808</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.2838</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0









Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	802176	483.2655	0.0106	2.1800e-003	484.1799
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>483.2655</b>	<b>0.0106</b>	<b>2.1800e-003</b>	<b>484.1799</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	802176	483.2655	0.0106	2.1800e-003	484.1799
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>483.2655</b>	<b>0.0106</b>	<b>2.1800e-003</b>	<b>484.1799</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0184	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Unmitigated	0.0184	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
<b>Total</b>	<b>0.0184</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.0000e-005</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
<b>Total</b>	<b>0.0184</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.0000e-005</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**7.2 Water by Land Use**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**8.2 Waste by Land Use**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	1	12	750	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**



Pioneer Trail Pipeline and Pumpstation - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	7.3800e-003	0.0330	0.0188	4.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	3.4272	3.4272	4.8000e-004	0.0000	3.4392
<b>Total</b>	<b>7.3800e-003</b>	<b>0.0330</b>	<b>0.0188</b>	<b>4.0000e-005</b>		<b>1.0900e-003</b>	<b>1.0900e-003</b>		<b>1.0900e-003</b>	<b>1.0900e-003</b>	<b>0.0000</b>	<b>3.4272</b>	<b>3.4272</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>3.4392</b>

**11.0 Vegetation**

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Pioneer Trail Pumphouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Pioneer Trail Pumphouse Exsiting Energy Use  
Nevada County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	80
<b>Climate Zone</b>	1			<b>Operational Year</b>	2024
<b>Utility Company</b>	Sierra Pacific Resources				
<b>CO2 Intensity (lb/MWhr)</b>	1328.16	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - This model is for estimating emissions from existing pump system energy use only.

Land Use -

Construction Phase - No construction.

Off-road Equipment - No construction.

Vehicle Trips - No trip generation

Area Coating - No painting

Energy Use - Existing electriciy use per project engineer.

Water And Wastewater - No water use

Solid Waste - No solid waste generation.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	500	0

Pioneer Trail Pumpouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblAreaCoating	Area_Nonresidential_Interior	1500	0
tblEnergyUse	LightingElect	1.81	0.00
tblEnergyUse	NT24E	1.85	1,100.00
tblEnergyUse	NT24NG	0.31	0.00
tblEnergyUse	T24E	0.56	0.00
tblEnergyUse	T24NG	3.17	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblVehicleTrips	ST_TR	1.99	0.00
tblVehicleTrips	SU_TR	5.00	0.00
tblVehicleTrips	WD_TR	4.96	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

**2.0 Emissions Summary**

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Pioneer Trail Pumpouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

Pioneer Trail Pumpouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

		Highest	
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**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	662.6876	662.6876	0.0145	2.9900e-003	663.9414
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.9100e-003</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>662.6876</b>	<b>662.6876</b>	<b>0.0145</b>	<b>2.9900e-003</b>	<b>663.9415</b>

Pioneer Trail Pumpouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	662.6876	662.6876	0.0145	2.9900e-003	663.9414
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>3.9100e-003</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>662.6876</b>	<b>662.6876</b>	<b>0.0145</b>	<b>2.9900e-003</b>	<b>663.9415</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	6/1/2022	6/1/2022	5	1	

**Acres of Grading (Site Preparation Phase): 0**







Pioneer Trail Pumpouse Exsiting Energy Use - Nevada County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.385522	0.064823	0.251338	0.159546	0.050594	0.009769	0.008563	0.017134	0.000942	0.000162	0.043296	0.000631	0.007681





Pioneer Trail Pumpouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.3 Energy by Land Use - Electricity**

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.1e+006	662.6876	0.0145	2.9900e-003	663.9414
<b>Total</b>		<b>662.6876</b>	<b>0.0145</b>	<b>2.9900e-003</b>	<b>663.9414</b>

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.1e+006	662.6876	0.0145	2.9900e-003	663.9414
<b>Total</b>		<b>662.6876</b>	<b>0.0145</b>	<b>2.9900e-003</b>	<b>663.9414</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Pioneer Trail Pumpouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>3.9100e-003</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

Pioneer Trail Pumpouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>3.9100e-003</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Pioneer Trail Pumpouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Pioneer Trail Pumpouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**7.2 Water by Land Use**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000



Pioneer Trail Pumpouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Pioneer Trail Pumphouse Exsiting Energy Use - Nevada County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# Appendix C

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## Biological Resources Evaluation

February 25, 2022

Project # 06484.00002.001

Neil Kaufman  
Water System Engineer  
Truckee Donner Public Utility District  
11570 Donner Pass Road  
Truckee, CA 96161

**Subject: Biological Resources Evaluation Report for the Pioneer Trail Pipeline and Pumpstation Project, Town of Truckee, Nevada County, CA**

Dear Mr. Kaufman,

HELIX Environmental Planning, Inc. (HELIX) has prepared this biological resources evaluation report for the proposed Pioneer Trail Pipeline and Pumpstation Project in the Town of Truckee, Nevada County, California. The water supply for the Tahoe Donner Subdivision currently is served by a single 14-inch welded steel pipeline with two pump stations and two storage tanks that essentially serve as forebays. These facilities were constructed in the early 1970s and are approaching the end of their useful life. The Truckee Donner Public Utility District (District) identified the need to construct a second pipeline to provide water to the subdivision. The purpose of the proposed project is to construct a second 16-inch pipeline and a single pumpstation to transport potable water to the Tahoe Donner Subdivision. The project also proposes to construct an additional conduit for electrical services and communications utilities for the Tahoe Donner Subdivision. The purpose of our biological resources study was to evaluate the potential for regionally occurring special-status plant and animal species or other sensitive biological habitats to occur in the project site and immediate vicinity within 25-feet either side of the pipeline route (hereafter referred to as the Study Area) and/or be impacted by the proposed project. This letter report describes the methods and results of our biological resources evaluation.

## PROJECT LOCATION AND DESCRIPTION

The Study Area for the purpose of this report is 14.24-acres and includes the proposed pump station locations, the two proposed pipeline alignments (Alignment A and B), and a 25-foot buffer from either side of the centerline of the proposed pipeline alignments. The Study Area is located in the Town of Truckee, Nevada County, CA (Figure 1) and is located on Nevada County Assessor's Parcel Numbers (APNs) 019-400-028; 019-400-029; 019-400-031; 018-010-051; and 018-010-052. The Study Area is located within Township 17 North, Range 16 East, Sections 9, 10 of the U.S. Geological Survey 7.5 minute "Truckee, California" topographic quadrangle map. The approximate center of the property is at latitude 39.336378 and longitude - 120.194086, NAD 83. Figures are included in **Attachment A**.

The proposed project is an approximately 1.7-mile-long linear pipe alignment running from the Trout Creek Trailhead on Northwoods Boulevard to the west and terminating at the intersection of Comstock Drive and Pioneer Trail to the east. The proposed pipeline would supply water, electrical and

communications utilities to the Truckee Donner Subdivision. There are two pipeline alignment options for the proposed project, Alignment A and Alignment B. Both alignments are evaluated in this report and would be 6-feet-wide by 6-feet-deep. Each alignment option is described below. Figure 2 is an aerial map depicting the project elements and alternatives. Figure 3 depicts the area that would be impacted by the proposed project.

In addition to the water pipeline, the Truckee Donner Public Utilities District (District) intends to install underground electrical and communications conduits in the pipeline trench. These conduits would provide for additional connections within the District's electrical distribution system, increasing the reliability and redundancy. This project would be a combined effort involving potable water, electrical, and communications utilities. The point of connection for the electrical and communications facilities would be adjacent to the pump station.

### **Alignment A**

Alignment A would begin on Northwoods Boulevard and move north on Northwoods Boulevard for 0.05-mile before turning east onto the paved Trout Creek Trail. The alignment would continue east along the Trout Creek Trail for 0.35-mile until it would reach the existing pedestrian bridge that crosses over Trout Creek. Trout Creek Trail, a Class I bike and pedestrian trail, is a 12-foot-wide paved trail and is lined with trees and large boulders and can be very busy with cyclists and pedestrians primarily during the warmer months.

### **Alignment B**

Alignment B would begin on Northwoods Boulevard and move north on Northwoods Boulevard for 0.05-mile before turning east on the existing overhead utility corridor. After moving 0.23-mile along the utility corridor, the alignment would move northeast for 0.04-mile through disturbed habitat with no jurisdictional features before reaching the paved Trout Creek Trail. The alignment would then move east along Trout Creek Trail for 0.09-mile until it would reach the existing pedestrian bridge that spans Trout Creek.

The remaining description of the pipeline would reflect both Alignment A and Alignment B.

When the pipeline alignment would reach the existing pedestrian bridge crossing, the pipeline would be attached to the bridge to avoid impacts to Trout Creek and its riparian corridor. After crossing Trout Creek, both Alignment A and Alignment B would continue along the paved Trout Creek Trail for 0.47-mile before making a slight turn northwards to join an existing dirt utility access road for 0.31-mile. From the dirt road, the alignments would re-enter the existing overhead utility corridor for 0.3-mile. From the end of the utility corridor, the alignments would join an existing paved driveway that travels 0.17-mile to the intersection of Comstock Drive and Pioneer Trail, the eastern terminus of the pipeline alignment. Both Alignment A and Alignment B would be the same size and would excavate to the same depth of approximately 6-feet. The total length of Alignment A and Alignment B would each be approximately 1.7-miles in length.

### **Pump Station Components**

Two pump station locations are proposed for the construction of a single pump station. The proposed sites would be located at the end of the eastern existing overhead electrical transmission utility corridor near the eastern terminus, on District owned property.

### **Project Schedule**

Construction is anticipated to commence in June of 2022 and be completed by October of 2023.

### **Construction Staging Area and Equipment**

The total size of the proposed staging areas would be approximately the length of the pipeline, 1.7-miles and are included within the Study Area. Anticipated equipment to be used includes excavators, haul trucks, backhoes, and mini excavators.

## **METHODS**

Biological studies conducted in support of this report included a special-status species evaluation and a biological reconnaissance survey. A wetland delineation was conducted for the Tahoe Donner to Downtown Recreational Trail Project in 2012 (JBR 2012) that covered the entire Study Area evaluated for this project. The results of the 2012 wetland delineation were incorporated into this report; additional wetland delineation work was not deemed necessary and was not conducted by HELIX.

### **Special-Status Species Evaluation**

Regulations pertaining to the protection of biological resources at the project site are summarized in **Attachment B**. For the purposes of this report, special-status species are those that fall into one or more of the following categories, including those:

- listed as endangered or threatened under the Federal Endangered Species Act (FESA; including candidates and species proposed for listing);
- listed as endangered or threatened under the California Endangered Species Act (CESA; including candidates and species proposed for listing);
- designated as rare, protected, or fully protected pursuant to California Fish and Game Code;
- designated a Species of Special Concern (SSC) by the California Department of Fish and Wildlife (CDFW);
- considered by CDFW to be a Watch List species with potential to become an SSC;
- defined as rare or endangered under Section 15380 of the California Environmental Quality Act (CEQA); or,
- Having a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, 2B, or 3.

In order to evaluate special-status species and/or their habitats with the potential to occur in the Study Area and/or be impacted by the proposed project, HELIX obtained lists of special-status species known to occur and/or having the potential to occur in the Study Area and vicinity from the U.S. Fish and Wildlife Service (USFWS; USFWS 2022), the California Native Plant Society (CNPS; CNPS 2022), and the California Natural Diversity Database (CNDDDB; CDFW 2022). **Attachment C** includes these lists of special-status plant and animal species occurring in the project region. The potential for these regionally occurring special-status species to occur in the Study Area is analyzed in **Attachment D**.

## Biological Reconnaissance Survey

A biological reconnaissance survey was conducted on October 20, 2021, by HELIX Principal Biologist Stephen Stringer, M.S. and HELIX Field Biologist Stephanie McLaughlin, M.S. between 1100 and 1430 hours. The Study Area was systematically surveyed on foot to ensure total search coverage. Following the field survey, the potential for each species identified in the database query to occur within the Study Area was determined based on the site survey, soils, habitats present within the Study Area, and species-specific information, as shown in **Attachment D**. All plant and animal species observed onsite during the surveys were recorded (**Attachment E**), and all biological communities occurring onsite were characterized.

## Delineation of Aquatic Resources

The Study Area was delineated in 2012 by JBR Environmental Consultants when the trail was constructed. The wetland delineation map from the report, "Town of Truckee, Tahoe Donner to Downtown Recreational Trail Wetland Delineation", is included as **Attachment F**. HELIX biologists reviewed the site for any potential wetlands or other waters of the U.S. or waters of the State during the biological reconnaissance and to verify site conditions had not changed in the Study Area since the wetland delineation was conducted, except for trail construction. National Wetland Inventory (NWI) mapping was also reviewed for the Study Area to see if any wetlands have been mapped in the Study Area in the database.

## RESULTS

### Environmental Setting

The Study Area is located within a residential area in the Town of Truckee and is surrounded by residential development, a golf course, and forested lands used for recreation. The Study Area is generally bordered by residential parcels and forested land to the north and west, industrial land uses to the east, and the Coyote Moon Golf Course to the south.

### Study Area Conditions

The Tahoe Donner subdivision was constructed in the early 1970s and the Trout Creek Recreational Trail was constructed in 2014. Much of the area is surrounded by the Tahoe National Forest and the Study Area and its generally vicinity is a mosaic of forested lands, residential areas, and commercial and industrial development. The Study Area consists of a 1.7-mile-long, approximately 50-foot-wide alignment running from the Tahoe Donner Subdivision to downtown Truckee that follows primarily disturbed areas along its entire length and is generally characterized by a moderate level of human

disturbance. The recreational trail and dirt roads in the Study Area are subject to regular recreational uses including walking, jogging, bicycling, and cross-country skiing. The utility corridor contains overhead utility lines and utility poles; vegetation is regularly maintained to prevent interference with the power lines.

## Habitat Types/Vegetation Communities

Habitat types/vegetation communities in the Study Area consist of Disturbed Jeffrey Pine Forest Alliance, Developed, and Riparian habitat. Habitats and land covers are depicted on Figure 4. A list of species observed during the biological reconnaissance survey is included in **Attachment E**. Representative site photographs are included as **Attachment G**.

### Developed

Developed habitat totals 3.23-acres in the Study Area and consists of a segment of Northwoods Boulevard at the western end of the alignment, the Trout Creek trailhead parking lot, a segment of the existing paved Trout Creek Trail and pedestrian bridge crossing over Trout Creek, and paved driveways/roadways at the eastern end of the alignment.

### Disturbed Jeffrey Pine Forest Alliance

Disturbed Jeffrey Pine Forest Alliance totals 10.95-acres in the Study Area. This habitat is characterized by pine forest with a mostly closed canopy, sparse to intermittent shrub stratum, and a relatively sparse, grassy herbaceous layer. The tree layer in the Study Area was dominated by Jeffrey pine (*Pinus jeffreyi*), with white fir (*Abies concolor*) and lodgepole pine (*Pinus contorta*) scattered throughout. Greenleaf manzanita (*Arctostaphylos patula*), snowbush ceanothus (*Ceanothus velutinus*), and Utah serviceberry (*Amelanchier utahensis*) were observed in the shrub layer. Successional clearings and herbaceous understory were dominated by mahala mat (*Ceanothus prostratus*), big sagebrush (*Artemisia tridentata*), and creeping snowberry (*Gaultheria hispidula*). This habitat in the Study Area is heavily disturbed by recreational and industrial uses. The paved Trout Creek Recreational Trail, dirt utility access road, and overhead utility corridors all cross through this habitat type. The recreational trail is heavily used by hikers, cyclists, and dogwalkers; the utility access road is rutted and contains a staging area with equipment and materials. The utility corridors are maintained for fire abatement purposes and utility access.

### Riparian (Trout Creek)

Trout Creek runs northwest to southeast through a small section of the alignment. A metal pedestrian bridge spans the creek and allows for foot and bicycle traffic over the creek along the Trout Creek Trail. Trout Creek has a gravel bottom and is surrounded by fairly sparse riparian habitat dominated by mountain alder (*Alnus incana*), quaking aspen (*Populus tremuloides*), red willow (*Salix laevigata*), Scouler's willow (*Salix scouleriana*), and California corn lily (*Veratrum californicum*). The project proposes to attach the pipeline to the bottom of the bridge to avoid impacts to Trout Creek. Trout Creek comprises approximately 0.06-acre within the Study Area.



## Topography

Terrain within the Study Area ranges from steeply sloping to gently sloping. Elevations within the project area vary from approximately 6,235-feet (1,900-meters) above mean sea level at the western end of the trail alignment to approximately 5,875-feet (1,790-meters) above mean sea level near the eastern end of the alignment

## Soils

The property includes eight soil mapping units (NRCS 2022):

- Cinder land-Sierraville-Kyburz complex, 30-50% slopes,
- Lorack variant gravelly loam, 2-30% percent slopes,
- Fugawee-Tahoma complex, 30-50% percent slopes,
- Kyburz-Trojan complex, 30-50% percent slopes,
- Kyburz-Aldi complex, 2-30% percent slopes,
- Meiss-Rock outcrop complex, 30-75% percent slopes,
- Pits, borrow, and,
- Tallac-Cryumbrepts, wet complex, 2 to 30 percent slopes.

Cinder land-Sierraville-Kyburz complex soils occur on mountain slopes, backslopes, mountain flanks, and cinder cones and consists of outwash derived from volcanic rock. A typical profile is gravelly loam from 0- to 7-inches, very gravelly clay loam from 7- to 25-inches, extremely gravelly sandy loam from 25- to 36-inches and is cemented from 36- to 60-inches; the depth to water table is greater than 80 inches.

Lorack variant gravelly loam soils occur on backslopes and outwash terraces and consists of residuum weathered from volcanic rock and cinders. A typical profile is very stony sandy loam from 0- to 9-inches, stony clay loam from 9- to 24-inches, clay loam from 24- to 75-inches and unweathered bedrock from 75- to 79-inches; the depth to water table is greater than 80-inches.

Fugawee-Tahoma complex soils occur on mountain slopes, backslopes, and mountain flanks and consists of residuum weathered from igneous rock and basic tuff. A typical profile is gravelly or sandy loam from 0- to 8-inches, gravelly clay loam from 8- to 41-inches, and unweathered bedrock from 41- to 45-inches; the depth to water table is greater than 80-inches.

Kyburz-Trojan complex soils occur on mountain slopes, backslopes, and mountain flanks and consists of colluvium over residuum weathered from andesite. A typical profile is slightly decomposed plant material from 0- to 1-inches, moderately decomposed plant material from 1- to 2-inches, gravelly sandy loam from 2- to 7-inches, gravelly loam from 7- to 14-inches, gravelly clay loam from 14- to 25-inches, gravelly clay loam from 25- to 36-inches, and bedrock from 36- to 46-inches; the depth to water table is greater than 80-inches.

Kyburz-Aldi complex soils occur on mountain slopes, backslopes, and mountain flanks and consists of colluvium over residuum weathered from andesite or basalt. A typical profile dominated by Kyburz soil is slightly decomposed plant material from 0- to 1-inches, moderately decomposed plant material from 1- to 2-inches, gravelly sandy loam from 2- to 7-inches, gravelly loam from 7- to 14-inches, gravelly clay loam from 14- to 25-inches, gravelly clay loam from 25- to 36-inches, and bedrock from 36- to 46-inches.

A typical profile dominated by Aldi soil is slightly decomposed plant material from 0- to 1-inches, loam from 0- to 8-inches, clay loam from 8- to 18-inches, and bedrock from 18- to 79-inches. The depth to water table for both Kyburz and Aldi soils is greater than 80-inches.

Meiss-Rock outcrop complex soils occur on mountain slopes, backslopes, and mountain flanks and consists of residuum weathered from andesite. A typical profile is sandy loam from 0- to 9-inches, gravelly sandy loam from 9- to 19-inches, and unweathered bedrock from 19- to 23-inches; the depth to water table is greater than 80-inches.

Pits, borrow soils are areas created to remove earthen material from, which will be used for fill at another location.

Tallac-Cryumbrepts, wet complex soils occur moraine, backslopes, and mountain flanks and consist of glaciofluvial deposits. A typical soil profile is very gravelly sandy loam from 0- to 16-inches, very cobbly coarse sandy loam from 16- to 22-inches, extremely gravelly coarse sandy loam from 22- to 41-inches and is cemented from 41- to 60-inches; the depth to water table is 42- to 60-inches.

None of the eight soil types found in the Study Area are on the National Hydric Soils List for Nevada County (NRCS 2015).

## Hydrology

The Study Area is in two hydrologic units: the Trout Creek-Truckee River hydrologic unit (HUC12: 160501020206) and the Prosser Creek hydrologic unit (HUC12: 160501020205). The majority of the Study Area is within the Trout Creek-Truckee River hydrologic unit; however, the northeastern corner of the site is within the Prosser Creek hydrologic unit. Waterways in the Trout Creek-Truckee River hydrologic unit drain into Trout Creek and eventually the Truckee River. Waterways in the Prosser Creek hydrologic unit drain into Alder Creek and eventually the Prosser Creek Reservoir.

NWI mapping based on 1984 aerial imagery shows Trout Creek, classified as Freshwater Forested/Shrub Wetland, crossing through the western portion of the Study Area (Figure 5). No other aquatic features are identified in the Study Area based on NWI mapping.

## Special-Status Species Evaluation

A total of 35 regionally occurring special-status plant species and 24 regionally occurring special-status wildlife species were identified during the database queries and desktop review and are evaluated in **Attachment D**.

### Special-Status Plant Species

There are no reported occurrences of special-status plant species on or adjacent to the site and none were observed during the biological reconnaissance. A total of 35 regionally occurring special-status plant species were identified during the database queries and desktop review. The Study Area does not provide suitable habitat for the majority of the special-status plant species identified in the database queries. Many of the special-status plant species in the database queries are associated with mesic habitats, including meadows, seeps, bogs, fens and marshes. The remaining species are associated with

granite outcrops, rocky slopes, scrub, pinyon-juniper woodlands, sandy beaches, or are found outside the elevation range of the Study Area.

Based on the results of the desktop review and biological reconnaissance survey, the site provides suitable habitat for two special-status plant species: American manna grass (*Glyceria grandis*) and alder buckthorn (*Rhamnus alnifolia*). Both species have the potential to occur in the riparian habitat surrounding Trout Creek. These species are discussed briefly below. Species determined to have no potential to occur in the Study Area or be impacted by the proposed project are not discussed further in this report.

### American Manna Grass

Federal status – none

State status – None

CNPS Rare Plant Rank – 2B.3

#### *Species Description*

American manna grass is a perennial rhizomatous herb found in bogs, fens, meadows, seeps, marshes, swamps, streambanks and lake margins at 0- to 4,000-foot elevation and is typically found in slower moving pools and backwater areas in streams. This species blooms June – August (CNPS 2022).

#### *Survey History*

American manna grass was not observed in the Study Area during the biological survey and there are no reported occurrences of this species on or adjacent to the Study Area in the CNDDDB. The nearest recorded occurrence is located 8 miles south of the Study Area along the Truckee River in an area dominated by grey alder and altered by beavers (CDFW 2022).

#### *Habitat Suitability*

The segment of Trout Creek in the Study Area provides suitable habitat for American manna grass.

#### *Potential for Impacts*

Although American manna grass was not observed in the Study Area during the biological survey, focused surveys were not conducted for special-status plant species as part of the field assessment and the survey was conducted outside of the blooming period for this species. Therefore, this species could be present in the Study Area. If American manna grass is present within the segment of Trout Creek in the Study Area, it could potentially be adversely affected by construction activities as a result of access by construction equipment or personnel when the pipe is hung on the underside of the Trout Creek bridge. In the absence of proposed mitigation measures, potential adverse effects could include crushing or trampling of the plant, which would be considered a potentially significant impact.

The recommended mitigation measures for special status plant species in the following section would reduce potential impacts to this species to less than significant.

### Alder Buckthorn

Federal status – none  
State status – None  
CNPS Rare Plant Rank – 2B.2

#### *Species Description*

Alder buckthorn is a perennial deciduous shrub found in lower and upper montane coniferous forest, meadows, seeps, and riparian scrub from 4,500- to 7,000-foot elevation. This species blooms May – July (CNPS 2022).

#### *Survey History*

Alder buckthorn was not observed in the Study Area during the biological survey and there are no reported occurrences of this species on or adjacent to the Study Area in the CNDDDB. The nearest reported occurrence of the species is 0.9-miles south of the Study Area in a degraded riparian zone along Donner Creek where this species was documented as “common” in 2000 (CDFW 2022).

#### *Habitat Suitability*

The riparian habitat along the banks of Trout Creek provides suitable habitat for alder buckthorn.

#### *Potential for Impacts*

Although alder buckthorn was not observed in the Study Area during the biological survey, focused surveys were not conducted for special-status plant species as part of the field assessment and the survey was conducted outside of the blooming period for this species. Therefore, this species could be present in the Study Area. If alder buckthorn is present within the segment of Trout Creek in the Study Area, it could potentially be adversely affected by construction activities as a result of access by construction equipment or personnel when the pipe is hung on the underside of the Trout Creek bridge. In the absence of proposed mitigation measures, potential adverse effects could include crushing or trampling of the plant, or other physical damage, which would be considered a potentially significant impact.

The recommended mitigation measures for special status plant species in the following section would reduce potential impacts to this species to less than significant.

### Special-Status Wildlife Species

A total of 24 regionally occurring special-status wildlife species were identified during the database searches and desktop review. The Study Area does not provide habitat for the majority of the regionally occurring special-status wildlife species, which are associated with aquatic habitats such as lakes, ponds, wet meadows, and freshwater wetlands. The remaining species are associated with open areas, grasslands, rocky slopes, scrub, sagebrush, old-growth forest, and cliff habitat, have specific food species requirements that were not found in the Study Area, or have a narrow range of occurrence that is outside of the Study Area.

There are no reported occurrences of special-status animal species in the Study Area, and none were observed during the biological reconnaissance. However, based on the results of the desktop review and biological reconnaissance survey, the site provides suitable habitat for five special-status wildlife species: Lahontan mountain sucker (*Catostomus lahontan*), mountain whitefish (*Prosopium williamsoni*), Cooper's hawk (*Accipiter cooperii*), northern goshawk (*Accipiter gentilis*) and yellow warbler (*Setophaga petechia*) as well as other nesting migratory birds. These species are discussed below. Species determined to have no potential to occur on the project site or be impacted by the proposed project are not discussed further in this report.

### Lahontan Mountain Sucker

Federal status – none

State status – None

Other – CDFW Species of Special Concern

#### *Species Description*

The mountain sucker tends to favor clear water streams with a moderate gradient, with widths of 10- to 50-feet and depths of less than 5-feet, and rocky or gravelly bottoms. Although not exclusive to high elevations, they are frequently observed in cool mountain streams, being found as high as 9,000-feet, and in waters just above freezing temperatures. Found in pools or eddies behind or under rocks and logs (Moyle 2002).

#### *Survey History*

Lahontan mountain sucker was not observed in the Study Area during biological surveys, however, focused surveys for fish were not conducted. The nearest reported occurrence of the species is in the Truckee River approximately 0.5-mile south of the Study Area (CDFW 2022). Trout Creek flows into the Truckee River approximately 1-mile southeast of the Study Area and this species could move upstream into Trout Creek, at least occasionally.

#### *Habitat Suitability*

Although this species has not been documented in Trout Creek, the segment of Trout Creek within the Study Area provides suitable aquatic habitat for Lahontan mountain sucker.

#### *Potential for Impacts*

No direct impacts to aquatic habitat within Trout Creek are anticipated. However, in the absence of proposed mitigation measures, potential adverse effects of the proposed project on this species could include harm to individual Lahontan mountain sucker as a result of indirect impacts due to water quality impacts. Construction activities adjacent to and over the wetted portion of Trout Creek during installation of the pipe under the bridge would have the potential to negatively impact water quality if construction materials, fuel, oil or grease from equipment, or debris were to enter the waterway. Water quality impacts could result in harm to individual Lahontan mountain sucker if present in Trout Creek, which would be a potentially significant impact.

The recommended mitigation measures for special status fish species in the following section would reduce potential impacts to this species to less than significant.

### Mountain Whitefish

Federal status – none

State status – None

Other – CDFW Species of Special Concern

#### *Species Description*

Mountain whitefish generally inhabit clear, cool waters (< 20° C) of high elevation streams, rivers, and lakes (Moyle 2002). Spawning occurs during late fall to early winter (October - December) in shallow areas of small tributaries or shoreline areas of lakes, primarily over gravel, rubble, or cobble bottoms.

#### *Survey History*

Mountain whitefish was not observed in the Study Area during biological surveys, however, focused surveys for fish were not conducted. The nearest reported occurrence of the species is approximately 0.5-mile south of the Study Area in the Truckee River. Trout Creek flows into the Truckee River approximately 1-mile southeast of the Study Area and this species could move into Trout Creek at least occasionally. The species was also recorded 3.6-miles northwest of the Study Area in the south fork of Prosser Creek (CDFW 2022).

#### *Habitat Suitability*

Although this species has not been documented in Trout Creek, the segment of Trout Creek within the Study Area may provide suitable aquatic habitat.

#### *Potential for Impacts*

No direct impacts to aquatic habitat within Trout Creek are anticipated. However, in the absence of proposed mitigation measures, potential adverse effects of the proposed project on this species could include harm to individual mountain whitefish as a result of indirect impacts due to water quality impacts. Construction activities adjacent to and over the wetted portion of Trout Creek during installation of the pipe under the bridge would have the potential to negatively impact water quality if construction materials, fuel, oil or grease from equipment, or debris were to enter the waterway. Water quality impacts could result in harm to individual mountain whitefish if present in Trout Creek, which would be a potentially significant impact.

The recommended mitigation measures for special status fish species in the following section would reduce potential impacts to this species to less than significant.

### Cooper's Hawk

Federal status – none

State status – None

Other – CDFW Watch List

### *Species Description*

Cooper's hawk nests in woodlands and is very tolerant of urban and suburban areas. This species can be found in large urban parks with urban forests or in isolated trees in industrial strips and parks. They prey on medium-sized birds and small mammals. Urban areas may provide increased access to prey species such as pigeons and doves (Stout and Rosenfield 2010). This hawk forages in open woodland and habitat edges, often of an interrupted or marginal type (Zeiner et al. 1990). In wildland areas, they primarily nest in riparian growths of deciduous trees, such as canyon bottoms on river flood plains, although they prefer live oaks.

### *Survey History*

Cooper's hawk was not observed in the Study Area during biological surveys. The nearest recorded occurrence is located 9.2-miles southwest of the Study Area in a grove of white fir trees near Cedar Creek (CDFW 2022).

### *Habitat Suitability*

Suitable nesting and foraging habitat for Cooper's hawk is present in the Study Area. The Jeffrey pine forest habitat on and adjacent to the Study Area provides nesting habitat. The Tahoe National Forest surrounding the Study Area provides suitable foraging habitat.

### *Potential for Impacts*

If Cooper's hawk were to nest within or adjacent to the site prior to construction, impacts to nesting could occur through noise, vibration, and the presence of construction equipment and personnel. Project activities such as clearing and grubbing, grading or other earthwork, or tree removal during the breeding season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance, which would be a potentially significant impact.

The recommended mitigation measures for nesting migratory birds and raptors in the following section would reduce potential impacts to this species to less than significant.

### Northern Goshawk

Federal status – none

State status – None

Other – CDFW Species of Special Concern

### *Species Description*

Northern goshawk nests and forages in mature and old-growth forest stands in a broad range of coniferous and coniferous-hardwood forest types, including ponderosa, Jeffrey and lodgepole pine, mixed conifer, firs, and pinyon-juniper with relatively dense canopies. Suitable habitat for northern goshawk is mixed conifer and montane hardwood forest types with overstory trees greater than 24-inches diameter and a canopy closure of greater than 60 percent (Keane 1999). Northern goshawk



prefers relatively undisturbed forest stands, with low human disturbance, and dense canopies. The hawk forages in openings in the forest, meadow edges and open sagebrush. The nesting and fledgling period is March 1 – August 15 (Woodbridge and Hargis 2006) and northern goshawk typically nests in the larger tree within a stand.

#### *Survey History*

Northern goshawk was not observed in the Study Area during biological surveys. The closest reported occurrence of this species in the CNDDDB is approximately 3-miles southwest, where this species was documented nesting in red fir forest between 1995 and 1997 (CDFW 2022).

#### *Habitat Suitability*

Suitable nesting habitat and foraging for northern goshawk is present in the Study Area. The Jeffery pine forest habitat on and adjacent to the Study Area provides nesting habitat. The Tahoe National Forest surrounding the Study Area provides suitable foraging habitat

#### *Potential for Impacts*

If northern goshawk were to nest within or adjacent to the site prior to construction, impacts to nesting could occur through noise, vibration, and the presence of construction equipment and personnel. Project activities such as clearing and grubbing, grading or other earthwork, or tree removal during the breeding season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance, which would be a potentially significant impact.

The recommended mitigation measures for nesting migratory birds and raptors in the following section would reduce potential impacts to this species to less than significant.

#### Yellow Warbler

Federal status – none

State status – None

Other – CDFW Species of Special Concern

#### *Species Description*

Yellow warbler is found in riparian areas in close proximity to water, also nests in montane shrubbery in open conifer forests in the Cascades and Sierra Nevada. Nests and forages in willow (*Salix* sp.) shrubs and thickets and in other riparian plants including cottonwoods (*Populus* sp.), sycamores (*Platanus* sp.), ash (*Fraxinus* sp.), and alders (*Alnus* sp.) (Browning 1994).

#### *Survey History*

Yellow warbler was not observed in the Study Area during biological surveys. Yellow warblers were documented in the immediate vicinity of the Study Area during surveys for the Trout Creek Trail (Town of Truckee 2014). The nearest reported occurrence in the CNDDDB is located 1.9-miles southwest of the



Study Area in riparian habitat dominated by quaking aspen immediately east of Donner Lake (CDFW 2022).

### *Habitat Suitability*

Suitable nesting habitat and foraging for yellow warbler is present in the Study Area. The riparian habitat of Trout Creek in and adjacent to the Study Area provides moderate quality habitat for the species.

### *Potential for Impacts*

If yellow warbler were to nest within or adjacent to the site prior to construction, impacts to nesting could occur through noise, vibration, and the presence of construction equipment and personnel. Project activities such as clearing and grubbing, grading or other earthwork, or tree removal during the breeding season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance, which would be a potentially significant impact.

The recommended mitigation measures for nesting migratory birds and raptors in the following section would reduce potential impacts to this species to less than significant.

## **Migratory Birds and Raptors**

As noted in **Attachment B**, migratory and non-game birds are protected during the nesting season by California Fish and Game Code. The project site and immediate vicinity provides nesting and foraging habitat for a variety of native birds common to urbanized areas, such as mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), and California towhee (*Melospiza crissalis*). Nests were not observed during surveys; however, a variety of migratory birds have the potential to nest in and adjacent to the site, in trees, shrubs and on the ground in vegetation.

Project activities such as clearing and grubbing during the avian breeding season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance. Needless destruction of nests, eggs, and chicks would be a violation of the Fish and Game Code and a significant impact.

The recommended mitigation measures for nesting migratory birds and raptors in the following section would reduce potential impacts to this species to less than significant

## **Sensitive Natural Communities**

Natural communities are defined by one or more characteristic plant species, and the species communities in the majority of the Study Area are not considered characteristic of a sensitive natural community. Due to the disturbed nature of the Trout Creek Trail and vicinity, there are no terrestrial sensitive natural communities in the Study Area. Trout Creek and its riparian corridor would be considered a sensitive natural community and is discussed below under aquatic resources.

## Aquatic Resources

A formal delineation of the Study Area and vicinity was performed on July 15, 2011, for the previous trail project, using the U.S. Army Corps of Engineers *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (USACOE 2010) by JBR Environmental Consultants. The wetland delineation map from the report detailing their findings, “Town of Truckee, Tahoe Donner to Downtown Recreational Trail Wetland Delineation” is included as **Attachment F**.

JBR Environmental Consultants identified Trout Creek as the one potentially jurisdictional feature within the Study Area. Trout Creek is a perennial waterway and totals to approximately 0.06-acre of potentially jurisdictional waters of the U.S. and state. Trout Creek is depicted on the Habitat Map, which is included as Figure 4.

Trout Creek is a perennial stream with a narrow floodplain. The riparian habitat is dominated by mountain alder (*Alnus incana*), quaking aspen (*Populus tremuloides*), red willow (*Salix laevigata*), Scouler’s willow (*Salix scouleriana*), and California corn lily (*Veratrum californicum*).

The project has been designed to avoid impacts to aquatic resources. When the pipeline alignment would reach the pedestrian bridge crossing, the pipeline would be attached to the 0.02-mile bridge to avoid impacts to Trout Creek. There will be no direct impacts to aquatic resources (i.e., no placement of temporary or permanent fill within aquatic resources) and no mitigation is required.

## Protected Trees

The Town of Truckee regulates the preservation of trees through Section 18.30.155 of the Town Development Code. The regulations require that a tree removal permit be obtained for tree removal unless one or more exemption criteria are applicable. Section 18.30.155.C.4 of the Town Development Code specifically exempts tree removal permit requirements for “Removal of trees within public rights-of-way or easements by the Town or public or private utilities as necessary to perform maintenance, repairs, modifications and/or construct infrastructure, as well as to protect public health and safety”.

Any tree impacts resulting from the proposed project are assumed to be exempt from the requirement to obtain a tree removal permit or mitigation.

## RECOMMENDED MITIGATION MEASURES

### Special-Status Species

#### Special Status Plant Species

- Floristically appropriate botanical surveys shall be conducted to determine the presence or absence of special-status plant species within the riparian habitat in the Study Area prior to commencement of construction. The surveys shall be floristic in nature and shall be seasonally timed to coincide with the blooming period of regionally occurring special-status plant species (generally May through August). Surveys shall be conducted to determine the status of these

species in the Study Area. If special-status plants are not found during the focused surveys, then no further action is required.

- If special-status plants are documented in the Study Area, a report shall be submitted to CNDDDB to document the status of the species on the site. If the project is designed to avoid impacts to special-status plant individuals and habitat, no further mitigation for these species would be necessary.
  - If special-status plants are documented in the Study Area and project impacts to these species are anticipated, consultation with CDFW shall be conducted to develop a mitigation strategy. The proponent shall notify CDFW, providing a complete description of the location, size, and condition of the occurrence, and the extent of proposed direct and indirect impacts to it. The project proponent shall comply with any mitigation requirements imposed by CDFW. Mitigation requirements could include but are not limited to, development of a plan to relocate the special-status plants (seed) to a suitable location outside of the impact area and monitoring the relocated population to demonstrate transplant success or preservation of this species or its habitat at an on or offsite location.

### Special Status Fish Species

Lahontan mountain sucker and mountain whitefish have the potential to occur in Trout Creek. No direct impacts to Trout Creek would occur, however, potential indirect impacts were identified. The following mitigation shall be implemented for these special-status fish species:

- *Measures to Reduce Impacts to Water Quality*
  - Activities conducted in or near Trout Creek shall be limited to summer and fall months (generally June – November) when flows are lowest.
  - All disturbed soils will undergo erosion control treatment prior to October 15 and/ or immediately after construction is terminated. Erosion control blankets will be installed on any disturbed soils on a 2:1 slope or steeper.
  - Standard construction BMPs will be implemented throughout construction to avoid and minimize adverse effects to water quality within Trout Creek in and adjacent to the project site. Appropriate erosion control measures will be used (e.g., hay bales, filter fences, vegetative buffer strips or other accepted equivalents) to reduce siltation and contaminated runoff from the project site. The integrity and effectiveness of the BMPs will be inspected daily. Corrective actions and repairs shall be carried out immediately.
  - No construction will occur within the wetted portion of Trout Creek, including access by construction equipment or personnel. If work in the wetted portion of Trout Creek is unavoidable, the work area would need to be dewatered and the flow diverted around the work area. The flow will be diverted only once the construction of the diversion is

completed. The USACE, RWQCB, and CDFW would need to be consulted prior to any diversion of Trout Creek.

- Construction activities and ground disturbance adjacent to Trout Creek will be confined to the minimal area necessary to facilitate construction activities. To ensure that construction equipment and personnel do not affect sensitive aquatic habitat in Trout Creek up and downstream of the project site, orange barrier fencing will be erected to clearly define the habitat to be avoided. This will delineate the Environmentally Sensitive Area (ESA) on the project. The integrity and effectiveness of ESA fencing will be inspected daily. Corrective actions and repairs shall be carried out immediately for fence breaches.
- Construction by-products and pollutants such as petroleum products, chemicals, or other deleterious materials shall not be allowed to enter Trout Creek or riparian habitat. A plan for the emergency clean-up of any spills of fuel or other materials shall be available when construction equipment is in use.
- Construction vehicles and equipment will be maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease. Leaking vehicles and equipment shall be removed from the site.
- Equipment shall be re-fueled, washed, and serviced at the designated construction staging area or off-site. All construction and fill materials will be stored and contained in a designated area that is located away from Trout Creek to prevent transport of materials into the waterway. Equipment maintenance and storage, and materials storage will be 100-feet or more away from Trout Creek. In addition, a silt fence will be installed around the staging and materials storage areas to collect any discharge, and adequate materials should be available for spill clean-up and during storm events.
- No litter, debris, or sidecast shall be dumped or permitted to enter Trout Creek or riparian habitat. Trash and debris shall be removed from the site regularly. Following construction, all trash and construction debris shall be removed from work areas.
- Building materials storage areas containing hazardous or potentially toxic materials such as herbicides and petroleum products will be located outside of the 100-year flood zone, have an impermeable membrane between the ground and the hazardous material, and will be bermed to prevent the discharge of pollutants to ground water and runoff water.
- Worker education and awareness training regarding sensitive habitats (e.g., aquatic and riparian habitats) and special-status species will be conducted for all construction personnel. The contractor will ensure that all new personnel will receive the mandatory training before starting work.

Cooper's Hawk, Northern Goshawk, Yellow Warbler, Other Raptors, and Migratory Birds

The project site and adjacent areas provide suitable nesting habitat for a variety of native birds including native songbirds and raptors. Removal of vegetation containing active nests would potentially result in

destruction of eggs and/or chicks; noise, dust, and other anthropogenic stressors in the vicinity of an active nest could lead to forced nest abandonment and mortality of eggs and/or chicks. Needless destruction of eggs or chicks would be a violation of the Fish and Game Code. Pre-construction surveys should be conducted prior to project implementation to determine if nesting birds are present on or adjacent to the site, so that measures could be implemented if needed to avoid harming nesting birds.

The following mitigation is recommended to reduce potential project impacts to nesting birds:

- If project (construction) ground-disturbing or vegetation clearing and grubbing activities commence during the avian breeding season (March 1 through August 31), a qualified biologist should conduct a pre-construction nesting bird survey no more than 14 days prior to initiation of project activities and again immediately prior to construction. The survey area should include suitable raptor nesting habitat within 500-feet of the project boundary (inaccessible areas outside of the project site can be surveyed from the site or from public roads using binoculars or spotting scopes). Pre-construction surveys are not required in areas where project activities have been continuous since prior to March 1, as determined by a qualified biologist. Areas that have been inactive for more than 14 days during the avian breeding season should be re-surveyed prior to resumption of project activities. If no active nests are identified, no further mitigation is required. If active nests are identified, the following measure should be implemented:
  - A suitable buffer (e.g., 500-feet for raptors; 100-feet for passerines) should be established by a qualified biologist around active nests and no construction activities within the buffer should be allowed until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest, or the nest has failed). Encroachment into the buffer may occur at the discretion of a qualified biologist. Any encroachment into the buffer should be monitored by a qualified biologist to determine whether nesting birds are being impacted.

## SUMMARY/CONCLUSIONS:

### Study Area Conditions

The Study Area is in a relatively disturbed condition and supports no sensitive natural communities with the exception of a narrow segment of Trout Creek under the existing trail bridge. Habitat types/vegetation communities in the Study Area consist of Disturbed Jeffrey Pine Forest Alliance, Developed, and Riparian habitat.

### Special-Status Species

The Study Area provides habitat for two regionally occurring special-status plant species, American manna grass and alder buckthorn, and five regionally occurring special-status animal species: Lahontan mountain sucker, mountain whitefish, Cooper's hawk, northern goshawk, and yellow warbler. None of these species are federal or state listed as threatened or endangered but warrant evaluation under the CEQA due to their declining status. Implementation of the recommended mitigation measures would reduce the potential for project impacts to these special-status species to less than significant.

## Migratory Birds

There is potential for common native birds to nest in or adjacent to the Study Area where project activities could result in stress leading to nest failure. Implementation of the recommended mitigation measure for nesting bird surveys would reduce the potential for project impacts to nesting birds to less than significant.

Sincerely,



Stephen Stringer, M.S.  
Principal Biologist/Biology Group Manager

### Attachments:

- A – Figures
- B – Regulatory Context
- C – Database Query Results
- D – Potential for Regionally Occurring Special-status Species to Exist on the Project Site
- E – Species Observed on the Project Site
- F – Wetland Delineation Map from “Town of Truckee Tahoe Donner to Downtown Recreational Trail Wetland Delineation”
- G – Site Photographs

## REFERENCES:

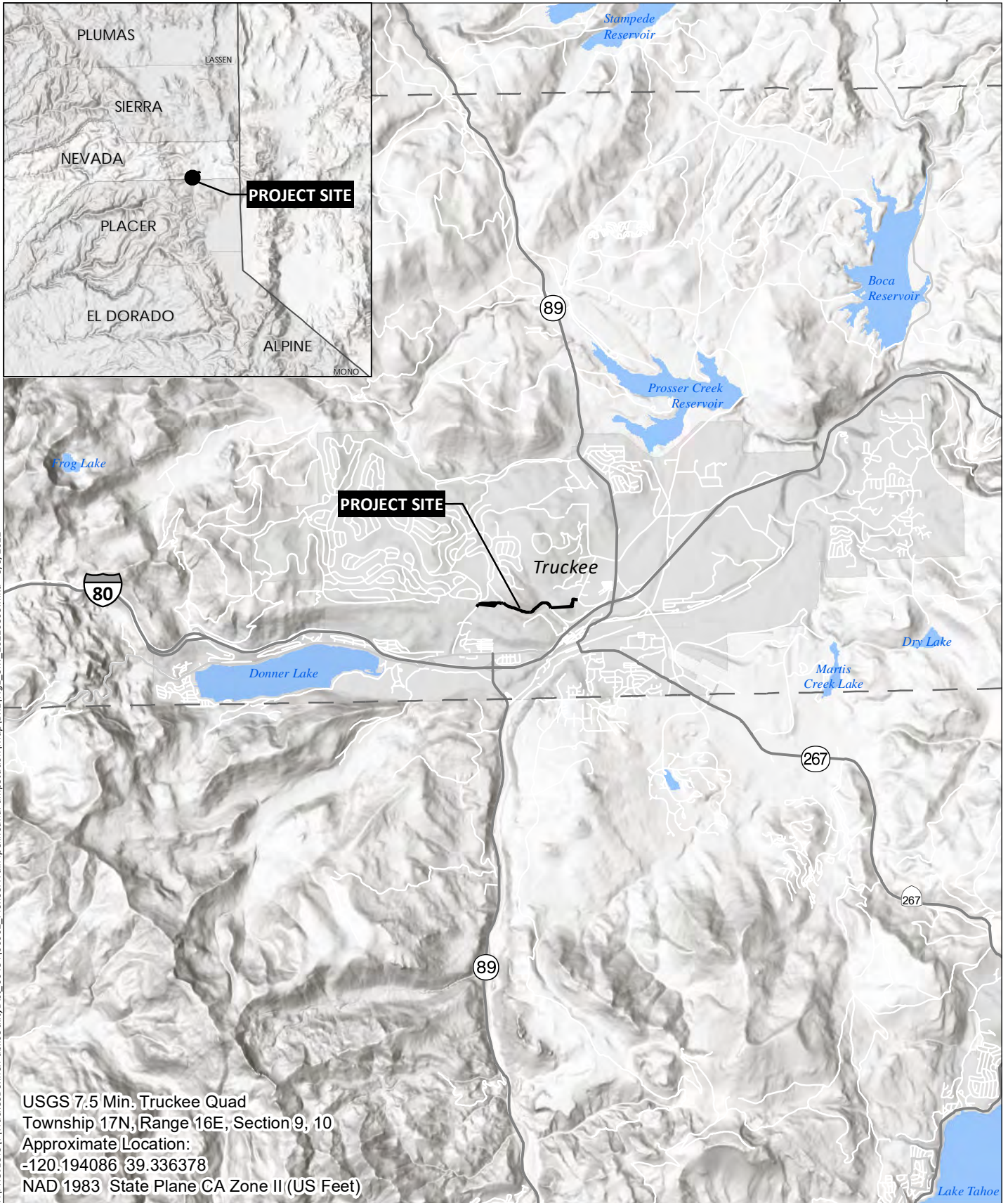
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# Attachment A

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







Figures





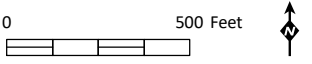


**Legend**

-  25-ft Buffer
-  Alignment A
-  Alignment B
-  Creek Crossing on Existing Pedestrian Bridge
-  Trout Creek Recreational Trail
-  Existing Dirt Road and Sewer Pipeline
-  Existing Overhead Electrical Transmission Lines
-  Existing Paved Driveway and Water Pipeline
-  New Pump Station
-  Existing Paved Roadway





T:\PROJECTS\1\TruckeeDonnerPublicUtilityDist\_06484\00002\_PioneerTrailPipelineandPumpStation\Map\BREFig2\_Aerial\_20220201.mxd 3/9/2022



Source: Aerial (DigitalGlobe, 6/2/2021).

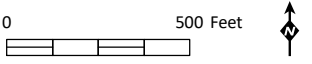


**Legend**

-  25-ft Buffer
-  Potential Impact Area







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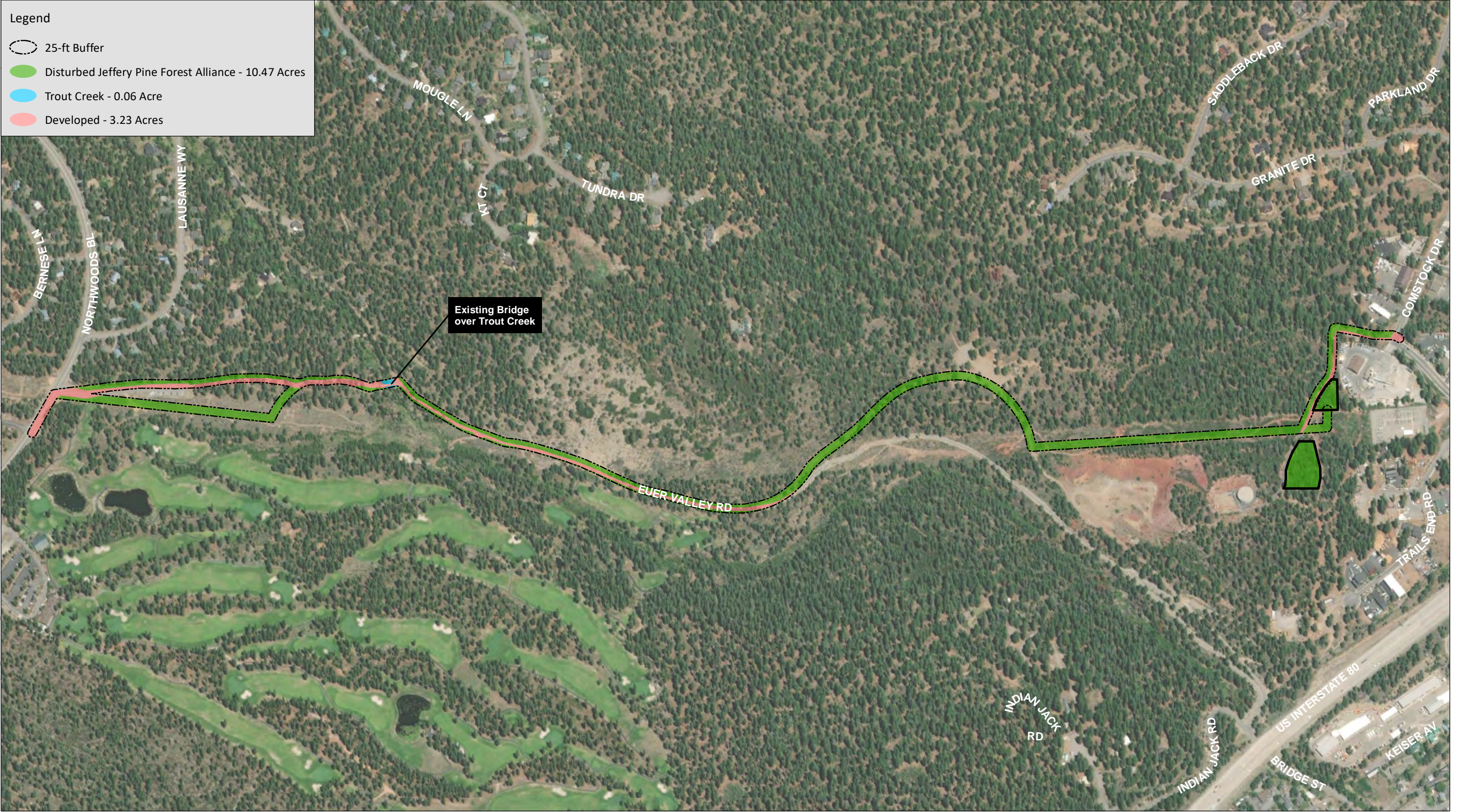


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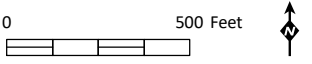


**Legend**

-  25-ft Buffer
-  Disturbed Jeffery Pine Forest Alliance - 10.47 Acres
-  Trout Creek - 0.06 Acre
-  Developed - 3.23 Acres



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Source: Aerial (DigitalGlobe, 6/2/2021).





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Source: Aerial (DigitalGlobe, 6/2/2021).



# Attachment B

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Regulatory Context

## Regulatory Context

Policies, regulations, and plans pertaining to the protection of biological resources in the Study Area are summarized in the following sections.

### Federal Regulations

#### Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) enforces the provisions stipulated within the Federal Endangered Species Act of 1973 (FESA; 16 USC 1531 *et seq.*). Species identified as federally threatened or endangered (50 CFR 17.11, and 17.12) are protected from take, defined as direct or indirect harm, unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally-listed species may be present in the study area and determine whether the proposed project will jeopardize the continued existence of or result in the destruction or adverse modification of critical habitat of such species (16 USC 1536 (a)[3], [4]). Other federal agencies designate species of concern (species that have the potential to become listed), which are evaluated during environmental review under the National Environmental Protection Act (NEPA) or California Environmental Quality Act (CEQA) although they are not otherwise protected under FESA.

#### Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 established federal responsibilities for the protection of nearly all species of birds, their eggs, and nests. The Migratory Bird Treaty Reform Act of 2004 further defined species protected under the act and excluded all non-native species. Section 16 U.S.C. 703–712 of the Act states “unless and except as permitted by regulations, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill” a migratory bird. A migratory bird is any species or family of birds that live, reproduce or migrate within or across international borders at some point during their annual life cycle. Currently, there are 836 migratory birds protected nationwide by the Migratory Bird Treaty Act, of which 58 are legal to hunt. The U.S. Court of Appeals for the 9<sup>th</sup> Circuit (with jurisdiction over California) has ruled that the MBTA does not prohibit incidental take (952 F 2d 297 – Court of Appeals, 9<sup>th</sup> Circuit 1991).

#### Wild and Scenic Rivers Act of 1968

The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. 1271 *et seq.*) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act safeguards the special character of these rivers, while also recognizing the potential for their appropriate use and development. Rivers may be designated by Congress or the Secretary of the Interior. Each river is administered by either a federal or state agency. Designated segments need not include the entire river and may include tributaries. For federally administered rivers, the designated boundaries generally average one-quarter mile on either bank in the lower 48 states and one-half mile on rivers outside national parks in Alaska in order to protect river-related values.

## State Jurisdiction

### California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050 to 2097) is similar to the FESA. The California Fish and Wildlife Commission is responsible for maintaining lists of threatened and endangered species under CESA. CESA prohibits the take of listed and candidate (petitioned to be listed) species. “Take” under California law means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch capture, or kill (California Fish and Game Code, Section 86). The California Department of Fish and Wildlife (CDFW) can authorize take of a state-listed species under Section 2081 of the California Fish and Game Code if the take is incidental to an otherwise lawful activity, the impacts are minimized and fully mitigated, funding is ensured to implement and monitor mitigation measures, and CDFW determines that issuance would not jeopardize the continued existence of the species. A CESA permit must be obtained if a project will result in the “take” of listed species, either during construction or over the life of the project. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

### California Code of Regulations Title 14 and California Fish and Game Code

The official listing of endangered and threatened animals and plants is contained in the California Code of Regulations Title 14 §670.5. A state candidate species is one that the California Fish and Game Code has formally noticed as being under review by CDFW to include in the state list pursuant to Sections 2074.2 and 2075.5 of the California Fish and Game Code.

Legal protection is also provided for wildlife species in California that are identified as “fully protected animals.” These species are protected under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species at any time. CDFW is unable to authorize incidental take of fully protected species unless any such take authorization is issued in conjunction with the approval of a Natural Community Conservation Plan that covers the fully protected species (California Fish and Game Code Section 2835).

### California Environmental Quality Act

Under the California Environmental Quality Act of 1970 (CEQA; Public Resources Code Section 21000 *et seq.*), lead agencies analyze whether projects would have a substantial adverse effect on a candidate, sensitive, or special-status species (Public Resources Code Section 21001(c)). These “special-status” species generally include those listed under FESA and CESA, and species that are not currently protected by statute or regulation, but would be considered rare, threatened, or endangered under the criteria included CEQA Guidelines Section 15380. Therefore, species that are considered rare are addressed under CEQA regardless of whether they are afforded protection through any other statute or regulation. The California Native Plant Society (CNPS) inventories the native flora of California and ranks species according to rarity; plants ranked as 1A, 1B, 2A, 2B, and 3 are generally considered special-status species under CEQA.<sup>1</sup>

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<sup>1</sup> The California Rare Plant Rank system can be found online at < <http://www.cnps.org/cnps/rareplants/ranking.php>>



Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (*i.e.*, candidate species) would occur.

### Native Plant Protection Act

The California Native Plant Protection Act of 1977 (California Fish and Game Code Sections 1900-1913) empowers the Fish and Game Commission to list native plant species, subspecies, or varieties as endangered or rare following a public hearing. To the extent that the location of such plants is known, CDFW must notify property owners that a listed plant is known to occur on their property. Where a property owner has been so notified by CDFW, the owner must notify CDFW at least 10 days in advance of any change in land use (other than changing from one agricultural use to another), in order that CDFW may salvage listed plants that would otherwise be destroyed. Currently, 64 taxa of native plants have been listed as rare under the act.

### Nesting Birds

California Fish and Game Code Subsections 3503 and 3800 prohibit the possession, take, or needless destruction of birds, their nests, and eggs, and the salvage of dead nongame birds. California Fish and Game Code Subsection 3503.5 protects all birds in the orders of Falconiformes and Strigiformes (birds of prey). Fish and Game Code Subsection 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act. The Attorney General of California has released an opinion that the Fish and Game Code prohibits incidental take.

## Jurisdictional Waters

### Federal Jurisdiction

Any person, firm, or agency planning to alter or work in “waters of the U.S.,” including the discharge of dredged or fill material, must first obtain authorization from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403).

Waters of the U.S. generally include:

- The territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries to those waters;
- Certain lakes, ponds, and impoundments; and
- Wetlands adjacent to jurisdictional waters.

The following types of aquatic resources are generally not considered waters of the U.S.:

- Groundwater
- Ephemeral features
- Diffuse stormwater run-off
- manmade ditches dug in uplands
- Prior converted cropland (PCC)
- Artificially irrigated areas
- Artificial lakes and ponds
- Water-filled depressions incidental to mining or construction activity
- Stormwater control features
- Groundwater recharge, water reuse, and wastewater recycling structures
- Waste treatment systems

With non-tidal waters, in the absence of adjacent wetlands, the extent of USACE jurisdiction extends to the ordinary high water mark (OHWM) – the line on the shore established by fluctuations of water and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, or the presence of litter and debris. Wetlands are defined in 33 CFR Part 328 as:

*“those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”*

Federal and state regulations pertaining to waters of the U.S., including wetlands, are discussed below.

Clean Water Act (33 USC 1251-1376). The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. must obtain a state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there is no practicable alternative that would have less adverse impacts. State Jurisdiction

### Regional Water Quality Control Board

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Federal CWA. Although the Clean Water Act is a Federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water

Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE's permits for fill and dredge discharges within Waters of the United States, and now also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. The Office of Administrative Law approved the Procedures on August 28, 2019, and the Procedures became effective May 28, 2020.

Under the Procedures and the State Water Code (Water Code §13050(e)), "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals.

## California Department of Fish and Wildlife

The CDFW is a trustee agency that has jurisdiction under Section 1600 et seq. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of streambeds...except when the department has been notified pursuant to Section 1601." Additionally, CDFW asserts jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over four inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures. Generally, CDFW recommends submitting an application for a Streambed Alteration Agreement (SAA) for any work done within the lateral limit of water flow or the edge of riparian vegetation, whichever is greater.

## Local Regulations

### Tree Protection Ordinance

The Town of Truckee regulates the preservation of trees through Section 18.30.155 of the Town Development Code. The regulations require that a tree removal permit be obtained for tree removal unless one or more exemption criteria are applicable. Section 18.30.155.C.4 of the Town Development Code specifically exempts tree removal permit requirements for “Removal of trees within public rights-of-way or easements by the Town or public or private utilities as necessary to perform maintenance, repairs, modifications and/or construct infrastructure, as well as to protect public health and safety”.

# Attachment C

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Database Query Results



# Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Independence Lake (3912043) OR Hobart Mills (3912042) OR Truckee (3912032) OR Boca (3912041) OR Norden (3912033) OR Martis Peak (3912031) OR Granite Chief (3912023) OR Tahoe City (3912022) OR Kings Beach (3912021))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Accipiter gentilis</i> northern goshawk	ABNKC12060	None	None	G5	S3	SSC
<i>Ambystoma macrodactylum sigillatum</i> southern long-toed salamander	AAAAA01085	None	None	G5T4	S3	SSC
<i>Antigone canadensis tabida</i> greater sandhill crane	ABNMK01014	None	Threatened	G5T5	S2	FP
<i>Aplodontia rufa californica</i> Sierra Nevada mountain beaver	AMAF01013	None	None	G5T3T4	S2S3	SSC
<i>Arabis rigidissima var. demota</i> Galena Creek rockcress	PDBRA061R1	None	None	G3T3Q	S1	1B.2
<i>Artemisia tripartita ssp. tripartita</i> threetip sagebrush	PDAST0S1S2	None	None	G5T4T5	S2	2B.3
<i>Astragalus austiniae</i> Austin's astragalus	PDFAB0F120	None	None	G2G3	S2S3	1B.3
<i>Bombus morrisoni</i> Morrison bumble bee	IIHYM24460	None	None	G4G5	S1S2	
<i>Bombus occidentalis</i> western bumble bee	IIHYM24250	None	None	G2G3	S1	
<i>Botrychium ascendens</i> upswept moonwort	PPOPH010S0	None	None	G3G4	S2	2B.3
<i>Botrychium crenulatum</i> scalloped moonwort	PPOPH010L0	None	None	G4	S3	2B.2
<i>Botrychium lunaria</i> common moonwort	PPOPH01080	None	None	G5	S2	2B.3
<i>Botrychium minganense</i> Mingan moonwort	PPOPH010R0	None	None	G4G5	S3	2B.2
<i>Bruchia bolanderi</i> Bolander's bruchia	NBMUS13010	None	None	G3G4	S3	4.2
<i>Capnia lacustra</i> Lake Tahoe benthic stonefly	IIPLE03200	None	None	G1	S1	
<i>Carex davyi</i> Davy's sedge	PMCYP033H0	None	None	G3	S3	1B.3
<i>Carex lasiocarpa</i> woolly-fruited sedge	PMCYP03720	None	None	G5	S2	2B.3



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b>Carex limosa</b> mud sedge	PMCYP037K0	None	None	G5	S3	2B.2
<b>Catostomus lahontan</b> Lahontan mountain sucker	AFCJC02330	None	None	GNR	S2	SSC
<b>Claytonia megarhiza</b> fell-fields claytonia	PDPOR030A0	None	None	G5	S2	2B.3
<b>Cryptochia excella</b> Kings Canyon cryptochian caddisfly	IITRI11010	None	None	G1G2	S1S2	
<b>Cypseloides niger</b> black swift	ABNUA01010	None	None	G4	S2	SSC
<b>Desmona bethula</b> amphibious caddisfly	IITRI77010	None	None	G2G3	S2S3	
<b>Drosera anglica</b> English sundew	PDDRO02010	None	None	G5	S2	2B.3
<b>Ecclisomyia bilera</b> Kings Creek ecclisomyian caddisfly	IITRI12010	None	None	G1G2	S1S2	
<b>Empidonax traillii</b> willow flycatcher	ABPAE33040	None	Endangered	G5	S1S2	
<b>Erethizon dorsatum</b> North American porcupine	AMAFJ01010	None	None	G5	S3	
<b>Erigeron miser</b> starved daisy	PDAST3M2K0	None	None	G3?	S3?	1B.3
<b>Eriogonum umbellatum var. torreyanum</b> Donner Pass buckwheat	PDPGN086U9	None	None	G5T2	S2	1B.2
<b>Fen</b> Fen	CTT51200CA	None	None	G2	S1.2	
<b>Glyceria grandis</b> American manna grass	PMPOA2Y080	None	None	G5	S3	2B.3
<b>Goeracea oregona</b> Sagehen Creek goeracean caddisfly	IITRI0X010	None	None	G3	S1S2	
<b>Great Basin Cutthroat Trout/Paiute Sculpin Stream</b> Great Basin Cutthroat Trout/Paiute Sculpin Stream	CARC2320CA	None	None	GNR	SNR	
<b>Great Basin Sucker/Dace/Redside Stream With Cutthroat Trout</b> Great Basin Sucker/Dace/Redside Stream With Cutthroat Trout	CARC2331CA	None	None	GNR	SNR	
<b>Gulo gulo</b> wolverine	AMAJF03010	None	Threatened	G4	S1	FP
<b>Haliaeetus leucocephalus</b> bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
<b>Helisoma newberryi</b> Great Basin rams-horn	IMGASM6020	None	None	G1	S1S2	
<b>Ivesia sericoleuca</b> Plumas ivesia	PDR0S0X0K0	None	None	G2	S2	1B.2



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Juncus luciensis</i></b> Santa Lucia dwarf rush	PMJUN013J0	None	None	G3	S3	1B.2
<b><i>Lasionycteris noctivagans</i></b> silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
<b><i>Lepidostoma ermanae</i></b> Cold Spring caddisfly	IITRI01050	None	None	G1G2	S1S2	
<b><i>Lepus americanus tahoensis</i></b> Sierra Nevada snowshoe hare	AMAEB03012	None	None	G5T3T4Q	S2	SSC
<b><i>Lepus townsendii townsendii</i></b> western white-tailed jackrabbit	AMAEB03041	None	None	G5T5	S3?	SSC
<b><i>Lewisia longipetala</i></b> long-petaled lewisia	PDPOR040K0	None	None	G2	S2	1B.3
<b><i>Lithobates pipiens</i></b> northern leopard frog	AAABH01170	None	None	G5	S2	SSC
<b><i>Lomatium grayi</i></b> Gray's lomatium	PDAP11B0Q0	None	None	G5	S1S2	2B.3
<b><i>Margaritifera falcata</i></b> western pearlshell	IMBIV27020	None	None	G4G5	S1S2	
<b><i>Martes caurina sierrae</i></b> Sierra marten	AMAJF01014	None	None	G4G5T3	S3	
<b><i>Meesia triquetra</i></b> three-ranked hump moss	NBMUS4L020	None	None	G5	S4	4.2
<b><i>Meesia uliginosa</i></b> broad-nerved hump moss	NBMUS4L030	None	None	G5	S3	2B.2
<b><i>Mertensia oblongifolia var. oblongifolia</i></b> sagebrush bluebells	PDBOR0N0G2	None	None	G5T5	S3	2B.2
<b><i>Myotis volans</i></b> long-legged myotis	AMACC01110	None	None	G4G5	S3	
<b><i>Nardia hiroshii</i></b> Hiroshi's flapwort	NBHEP2A080	None	None	G4G5	S1	2B.3
<b><i>Ochotona princeps schisticeps</i></b> gray-headed pika	AMAEA0102L	None	None	G5T4	S2S4	
<b><i>Oncorhynchus clarkii henshawi</i></b> Lahontan cutthroat trout	AFCHA02081	Threatened	None	G5T3	S1	
<b><i>Pandion haliaetus</i></b> osprey	ABNKC01010	None	None	G5	S4	WL
<b><i>Pekania pennanti</i></b> Fisher	AMAJF01020	None	None	G5	S2S3	SSC
<b><i>Phacelia stebbinsii</i></b> Stebbins' phacelia	PDHYD0C4D0	None	None	G3	S3	1B.2
<b><i>Picoides arcticus</i></b> black-backed woodpecker	ABNYF07090	None	None	G5	S2	





**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Potamogeton epihydrus</i></b> Nuttall's ribbon-leaved pondweed	PMPOT03080	None	None	G5	S2S3	2B.2
<b><i>Potamogeton robbinsii</i></b> Robbins' pondweed	PMPOT030Z0	None	None	G5	S3	2B.3
<b><i>Prosopium williamsoni</i></b> mountain whitefish	AFCHA03060	None	None	G5	S3	SSC
<b><i>Rana sierrae</i></b> Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	G1	S1	WL
<b><i>Rhamnus alnifolia</i></b> alder buckthorn	PDRHA0C010	None	None	G5	S3	2B.2
<b><i>Rorippa subumbellata</i></b> Tahoe yellow cress	PDBRA270M0	None	Endangered	G1	S1	1B.1
<b><i>Scutellaria galericulata</i></b> marsh skullcap	PDLAM1U0J0	None	None	G5	S2	2B.2
<b><i>Setophaga petechia</i></b> yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC
<b><i>Sidalcea multifida</i></b> cut-leaf checkerbloom	PDMAL110G0	None	None	G3	S2	2B.3
<b><i>Siphoteles bicolor pectinifer</i></b> Lahontan Lake tui chub	AFCJB1303P	None	None	G4T3	S1S2	SSC
<b><i>Sphaeralcea munroana</i></b> Munro's desert mallow	PDMAL140F0	None	None	G4	S1	2B.2
<b><i>Stuckenia filiformis ssp. alpina</i></b> northern slender pondweed	PMPOT03091	None	None	G5T5	S2S3	2B.2
<b><i>Stygobromus lacicolus</i></b> Lake Tahoe amphipod	ICMAL05970	None	None	G1	S1	
<b><i>Stygobromus sheldoni</i></b> Sheldon's amphipod	ICMAL05A40	None	None	G1	S1	
<b><i>Stygobromus tahoensis</i></b> Lake Tahoe stygobromid	ICMAL05A70	None	None	G1	S1	
<b><i>Taxidea taxus</i></b> American badger	AMAJF04010	None	None	G5	S3	SSC
<b><i>Vulpes vulpes necator</i></b> Sierra Nevada red fox	AMAJA03012	None	Threatened	G5T1T2	S1	

**Record Count: 77**

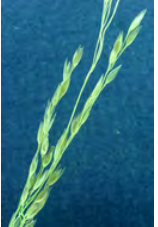



## Inventory of Rare and Endangered Plants of California



## Search Results

47 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3912042:3912032:3912021:3912023:3912022:3912041:3912031:3912043:3912033]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
<a href="#"><u><i>Agrostis humilis</i></u></a>	mountain bent grass	Poaceae	perennial herb	Jul-Sep	None	None	G4Q	S2	2B.3	 © 2004 Steve Matson
<a href="#"><u><i>Arabis rigidissima</i></u> var. <u><i>demota</i></u></a>	Galena Creek rockcress	Brassicaceae	perennial herb	Jul-Aug	None	None	G3T3Q	S1	1B.2	No Photo Available
<a href="#"><u><i>Artemisia tripartita</i></u> ssp. <u><i>tripartita</i></u></a>	threetip sagebrush	Asteraceae	perennial shrub	Aug	None	None	G5T4T5	S2	2B.3	No Photo Available
<a href="#"><u><i>Astragalus austiniae</i></u></a>	Austin's astragalus	Fabaceae	perennial herb	(May)Jul-Sep	None	None	G2G3	S2S3	1B.3	No Photo Available
<a href="#"><u><i>Astragalus whitneyi</i></u> var. <u><i>lenophyllus</i></u></a>	woolly-leaved milk-vetch	Fabaceae	perennial herb	Jul-Aug	None	None	G5T4	S4	4.3	No Photo Available
<a href="#"><u><i>Botrychium ascendens</i></u></a>	upswept moonwort	Ophioglossaceae	perennial rhizomatous herb	(Jun)Jul-Aug	None	None	G3G4	S2	2B.3	 © 2005 Steve Matson
<a href="#"><u><i>Botrychium crenulatum</i></u></a>	scalloped moonwort	Ophioglossaceae	perennial rhizomatous herb	Jun-Sep	None	None	G4	S3	2B.2	 © 2016 Steve Matson
<a href="#"><u><i>Botrychium lunaria</i></u></a>	common moonwort	Ophioglossaceae	perennial rhizomatous herb	Aug	None	None	G5	S2	2B.3	No Photo Available
<a href="#"><u><i>Botrychium minganense</i></u></a>	Mingan moonwort	Ophioglossaceae	perennial rhizomatous herb	Jul-Sep	None	None	G4G5	S3	2B.2	

<u><i>Bruchia bolanderi</i></u>	Bolander's bruchia	Bruchianaceae	moss		None	None	G3G4	S3	4.2		©2021 Scot Loring
<u><i>Carex davyi</i></u>	Davy's sedge	Cyperaceae	perennial herb	May-Aug	None	None	G3	S3	1B.3		No Photo Available
<u><i>Carex lasiocarpa</i></u>	woolly-fruited sedge	Cyperaceae	perennial rhizomatous herb	Jun-Jul	None	None	G5	S2	2B.3		© 2011 Sierra Pacific Industries
<u><i>Carex limosa</i></u>	mud sedge	Cyperaceae	perennial rhizomatous herb	Jun-Aug	None	None	G5	S3	2B.2		Steve Matson 2009
<u><i>Ceanothus fresnensis</i></u>	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	(Apr)May-Jul	None	None	G4	S4	4.3		No Photo Available
<u><i>Claytonia megarhiza</i></u>	fell-fields claytonia	Montiaceae	perennial herb	Jul-Sep	None	None	G5	S2	2B.3		No Photo Available
<u><i>Cryptantha glomeriflora</i></u>	clustered-flower cryptantha	Boraginaceae	annual herb	Jun-Sep	None	None	G4Q	S4	4.3		No Photo Available
<u><i>Drosera anglica</i></u>	English sundew	Droseraceae	perennial herb (carnivorous)	Jun-Sep	None	None	G5	S2	2B.3		Barry Rice 2007
<u><i>Epilobium howellii</i></u>	subalpine fireweed	Onagraceae	perennial stoloniferous herb	Jul-Aug	None	None	G4	S4	4.3		No Photo Available
<u><i>Erigeron miser</i></u>	starved daisy	Asteraceae	perennial herb	Jun-Oct	None	None	G3?	S3?	1B.3		No Photo Available
<u><i>Erigeron petrophilus</i></u> var. <u><i>sierrensis</i></u>	northern Sierra daisy	Asteraceae	perennial rhizomatous herb	Jun-Oct	None	None	G4T4	S4	4.3		No Photo Available
<u><i>Eriogonum umbellatum</i></u> var. <u><i>torreyanum</i></u>	Donner Pass buckwheat	Polygonaceae	perennial herb	Jul-Sep	None	None	G5T2	S2	1B.2		No Photo Available
<u><i>Eriophorum gracile</i></u>	slender cottongrass	Cyperaceae	perennial rhizomatous	May-Sep	None	None	G5	S4	4.3		

[glycine](#)

cottongrass

rhizomatous

herb




(emergent)



©2011

Steven Perry

<a href="#">Eurybia merita</a>	subalpine aster	Asteraceae	perennial herb		None	None	G5	SH	2B.3	No Photo Available
<a href="#">Glyceria grandis</a>	American manna grass	Poaceae	perennial rhizomatous herb	Jun-Aug	None	None	G5	S3	2B.3	No Photo Available
<a href="#">Hackelia amethystina</a>	amethyst stickseed	Boraginaceae	perennial herb	Jun-Jul(Aug)	None	None	G4	S4	4.3	 © 2018 John Doyen
<a href="#">Ivesia sericoleuca</a>	Plumas ivesia	Rosaceae	perennial herb	May-Oct	None	None	G2	S2	1B.2	 © 2003 Steve Matson
<a href="#">Juncus hemiendytus</a> var. <a href="#">abjectus</a>	Center Basin rush	Juncaceae	annual herb	May-Jun(Jul)	None	None	G5T5	S4	4.3	 ©2008 Steve Matson
<a href="#">Juncus luciensis</a>	Santa Lucia dwarf rush	Juncaceae	annual herb	Apr-Jul	None	None	G3	S3	1B.2	 © 2009 Keir Morse
<a href="#">Lewisia kelloggii</a> ssp. <a href="#">hutchisonii</a>	Hutchison's lewisia	Montiaceae	perennial herb	(Apr)May-Aug	None	None	G3G4T3Q	S3	3.2	 Dean Wm. Taylor 2006
<a href="#">Lewisia longipetala</a>	long-petaled lewisia	Montiaceae	perennial herb	Jul-Aug(Sep)	None	None	G2	S2	1B.3	 © 2009 Gary A. Monroe
<a href="#">Lomatium grayi</a>	Gray's lomatium	Apiaceae	perennial herb	Apr-Jun	None	None	G5	S1S2	2B.3	No Photo Available
<a href="#">Meesia triquetra</a>	three-ranked hump moss	Meesiaceae	moss	Jul	None	None	G5	S4	4.2	 Steve Matson 2008
<a href="#">Meesia uliginosa</a>	broad-nerved hump moss	Meesiaceae	moss	Jul-Oct	None	None	G5	S3	2B.2	 ©2013 Scot Loring
<a href="#">Mertensia oblongifolia</a>	sagebrush bluebells	Boraginaceae	perennial herb	Apr-Jul	None	None	G5T5	S3	2B.2	No Photo Available

<u>var.</u> <u>oblongifolia</u>											Available
<u>Nardia hiroshii</u>	Hiroshi's flapwort	Jungermanniaceae	liverwort		None	None	G4G5	S1	2B.3		No Photo Available
<u>Phacelia stebbinsii</u>	Stebbins' phacelia	Hydrophyllaceae	annual herb	May-Jul	None	None	G3	S3	1B.2		No Photo Available
<u>Potamogeton epihydus</u>	Nuttall's ribbon-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	(Jun)Jul- Sep	None	None	G5	S2S3	2B.2		Louis-M. Landry, 2010
<u>Potamogeton robbinsii</u>	Robbins' pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	Jul-Aug	None	None	G5	S3	2B.3		No Photo Available
<u>Primula pauciflora</u>	beautiful shootingstar	Primulaceae	perennial herb	Apr-Jun	None	None	G5	S3	4.2		No Photo Available
<u>Rhamnus alnifolia</u>	alder buckthorn	Rhamnaceae	perennial deciduous shrub	May-Jul	None	None	G5	S3	2B.2		No Photo Available
<u>Rorippa subumbellata</u>	Tahoe yellow cress	Brassicaceae	perennial rhizomatous herb	May-Sep	None	CE	G1	S1	1B.1		No Photo Available
<u>Scutellaria galericulata</u>	marsh skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Sep	None	None	G5	S2	2B.2		© 2021 Scot Loring
<u>Sidalcea multifida</u>	cut-leaf checkerbloom	Malvaceae	perennial herb	May-Sep	None	None	G3	S2	2B.3		No Photo Available
<u>Solidago lepida var. salebrosa</u>	Rocky Mountains Canada goldenrod	Asteraceae	perennial rhizomatous herb	Jul-Sep	None	None	G5T5	S1	3.2		No Photo Available
<u>Sphaeralcea munroana</u>	Munro's desert mallow	Malvaceae	perennial herb	May-Jun	None	None	G4	S1	2B.2		No Photo Available
<u>Stellaria obtusa</u>	obtuse starwort	Caryophyllaceae	perennial rhizomatous herb	May- Sep(Oct)	None	None	G5	S4	4.3		No Photo Available
<u>Stuckenia filiformis ssp. alpina</u>	northern slender pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	May-Jul	None	None	G5T5	S2S3	2B.2		Dana York (2016)

Showing 1 to 47 of 47 entries

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**CONTACT US**

Send questions and comments to [rareplants@cnps.org](mailto:rareplants@cnps.org).

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# IPaC resource list

This resource contains a list of species that are known to occur in the project area. Official Species Lists generated before 01/31/2022 are not available for download. We are working to resolve this issue. We apologize for any inconvenience this may cause. The list

may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Nevada County, California



## Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
  2. [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.

The following species are potentially affected by activities in this location:

## Amphibians



NAME	STATUS
Sierra Nevada Yellow-legged Frog <i>Rana sierrae</i> Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/9529">https://ecos.fws.gov/ecp/species/9529</a>	Endangered

## Fishes

NAME	STATUS
Lahontan Cutthroat Trout <i>Oncorhynchus clarkii henshawi</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/3964">https://ecos.fws.gov/ecp/species/3964</a>	Threatened

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the [FAQ below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

**Bald Eagle** *Haliaeetus leucocephalus*

Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

<p><b>Black-throated Gray Warbler</b> <i>Dendroica nigrescens</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds May 1 to Jul 20
<p><b>California Spotted Owl</b> <i>Strix occidentalis occidentalis</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/7266">https://ecos.fws.gov/ecp/species/7266</a></p>	Breeds Mar 10 to Jun 15
<p><b>Cassin's Finch</b> <i>Carpodacus cassinii</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9462">https://ecos.fws.gov/ecp/species/9462</a></p>	Breeds May 15 to Jul 15
<p><b>Clark's Grebe</b> <i>Aechmophorus clarkii</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jun 1 to Aug 31
<p><b>Evening Grosbeak</b> <i>Coccothraustes vespertinus</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 15 to Aug 10
<p><b>Golden Eagle</b> <i>Aquila chrysaetos</i>  This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  <a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a></p>	Breeds Dec 1 to Aug 31
<p><b>Olive-sided Flycatcher</b> <i>Contopus cooperi</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a></p>	Breeds May 20 to Aug 31

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be

used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

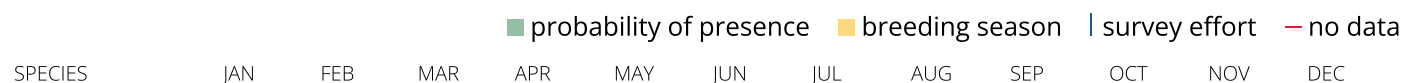
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.

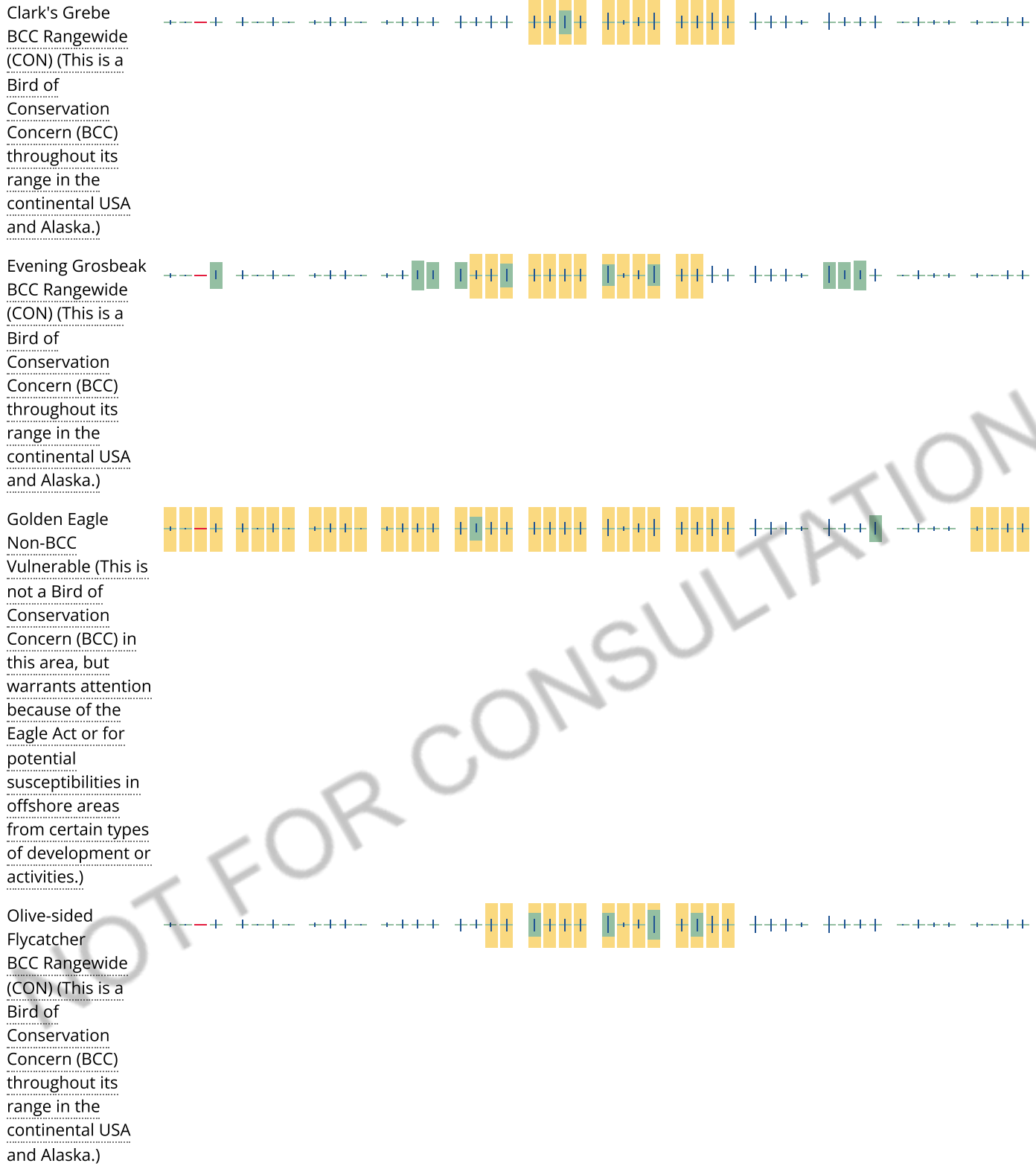
### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





NOT FOR CONSULTATION



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

### What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

### What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects



For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.



# Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in

activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

## Attachment D

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Potential for Regionally Occurring  
Special-Status Species to Exist on  
the Project Site

## Attachment D

### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
<b>Invertebrates</b>				
<p><i>Bombus occidentalis</i> western bumble bee</p>	<p>--/Candidate CE/--</p>	<p>Bumble bees are primitively eusocial insects that live in underground colonies made up of one queen, female workers, and reproductive members of the colony. New colonies are initiated by solitary queens, generally in the early spring, which typically occupy abandoned rodent burrows (Thorp et al. 1983). This species is a generalist forager and have been reported visiting a wide variety of flowering plants. A short-tongued bumble bee; select food plants include <i>Melilotus</i> spp., <i>Cirsium</i> spp., <i>Trifolium</i> spp., <i>Centaurea</i> spp., <i>Eriogonum</i> spp., and <i>Chrysothamnus</i> spp. (Koch et al. 2012). This species has a short tongue and typically prefers open flowers with short corollas but is known to chew through the base of flowers with long corollas. The flight period for queens in California is from early February to late November, peaking in late June and late September. New queens hibernate over the winter and initiate a new colony the following spring (Thorp et al. 1983). Rare throughout its range and in decline west of the Sierra Nevada crest.</p>	<p>Not expected</p>	<p>The majority of the select food plants preferred by the species are not present in the Study Area. The nearest reported occurrence in the CNDDDB is approximately 5 miles northeast of the site near Boca Reservoir and it is a record from 1958 (CDFW 2022). There are no recent records (post 1978) of this species within 10 miles of the Study Area (CDFW 2022).</p>
<p><i>Danaus plexippus</i> monarch butterfly</p>	<p>Candidate FE/--/--</p>	<p>The federal listing on December 17, 2020, was for overwintering populations of Monarch butterflies that roost in wind protected tree groves along the coast from Mendocino County to Baja California. As caterpillars, monarchs feed exclusively on the leaves of milkweed (<i>Asclepias</i> sp.) (Nial et al. 2019 and USFWS 2020). Monarch butterfly migration routes pass east over the Sierra Nevada in the fall and back to the</p>	<p>Not expected</p>	<p>The project site is outside of this species winter roosting range. Monarch could migrate through the Study Area as Truckee is along a migration route and could breed in the Study Area and vicinity but would not remain in the area for an extended period of time.</p>

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
		California coast in the spring (USFWS 2020). The overwintering population is located along the Coast while summer breeding areas occur in interior California and North America with spring breeding areas located further east (USFWS 2020).		
<b>Fishes</b>				
<i>Catostomus lahontan</i> Lahontan mountain sucker	--/--/SSC	The mountain sucker tends to favor clear water streams with a moderate gradient, with widths of 3 – 15 m and depths of less than 2 m, and rocky or gravelly bottoms. Although not exclusive to high elevations, they are frequently observed in cool mountain streams, being found as high as 2,800 m, and in waters just above freezing temperatures. Found in pools or eddies behind or under rocks and logs (Moyle 2002).	<b>May Occur</b>	Although this species has not been documented in Trout Creek, the segment of Trout Creek within the Study Area may provide suitable aquatic habitat. The nearest reported occurrence of the species is in the Truckee River approximately 0.5 mile south of the Study Area (CDFW 2022). Trout Creek flows into the Truckee River approximately 1 mile southeast of the Study Area and this species could move upstream into Trout Creek, at least occasionally.
<i>Oncorhynchus clarkii henshawi</i> Lahontan cutthroat trout	FT/--/--	This species is found in a wide variety of cold-water habitats including large terminal alkaline lakes, alpine lakes, slow meandering rivers, mountain rivers, and small headwater tributary streams. Lahontan cutthroat trout are found in cool flowing water with available cover of well-vegetated and stable stream banks, in areas where there are stream velocity breaks, and in relatively silt free, rocky riffle-run areas (USFWS 2009).	Will not occur	This species is not known to occur in Trout Creek or the segment of the Truckee River through the Town of Truckee and is likely extirpated in the region. It was reintroduced to Martis Creek, approximately 5 miles southwest of the Study Area, but has been extirpated from Martis Creek since 1993 (CDFW 2022). The nearest reported extant

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
				occurrence of the species is 9.1 miles northwest of the Study Area in Independence Lake and Independence Creek (CDFW 2022).
<i>Prosopium williamsoni</i> mountain whitefish	--/--/SSC	Mountain whitefish generally inhabit clear, cool waters (< 20° C) of high elevation streams, rivers, and lakes (Moyle 2002). Spawning occurs during late fall to early winter (October - December) in shallow areas of small tributaries or shoreline areas of lakes, primarily over gravel, rubble, or cobble bottoms.	<b>May Occur</b>	Trout Creek within the Study Area may provide suitable aquatic habitat. The nearest reported occurrence of the species is approximately 0.5 mile south of the Study Area in the Truckee River. Trout Creek flows into the Truckee River approximately 1 mile southeast of the Study Area and this species could move into Trout Creek at least occasionally. The species was also recorded 3.6 miles northwest of the Study Area in the south fork of Prosser Creek (CDFW 2022).
<i>Siphateles bicolor pectinifer</i> Lahontan Lake tui chub	--/--/SSC	The only verified population in California occurs in Lake Tahoe. Schooling fish that inhabit large, deep lakes and feed mostly on zooplankton (Moyle 2002).	Will not occur	The Study Area is outside of the species known range within Lake Tahoe.
<b>Amphibians</b>				
<i>Ambystoma macrodactylum sigillatum</i> southern long-toed salamander	--/--/SSC	Inhabits alpine meadows, high mountain ponds and lakes. Adults spend much of their lives underground, often utilizing the tunnels of burrowing mammals such as moles and ground squirrels (Stebbins and McGinnis 2012).	Will not occur	The Study Area does not provide suitable meadow, pond, or lake habitat.
<i>Lithobates pipiens</i> northern leopard frog	--/--/SSC	The northern leopard frog is highly aquatic and found in or near quiet, permanent and semi-	Will not occur	The Study Area does not provide suitable habitat and is outside of

## Attachment D

### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
		<p>permanent water in many habitats with shoreline cover and submerged and emergent aquatic vegetation. In the southern part of the state, this species occurs along the Colorado River and in irrigated portions of Imperial, Tulare and Kern cos. In northern California, the leopard frog is established in Modoc Co. and possibly eastern Lassen Co (Zeiner et al. 1990).</p>		<p>the species known range. There is one reported occurrence in the vicinity from 1934, when six individuals were transplanted outside of their native range to the Kings Beach area on the shore of Lake Tahoe, approximately 11.3 miles southwest of the Study Area (CDFW 2022).</p>
<p><i>Rana sierrae</i> Sierra Nevada yellow-legged frog</p>	<p>FE/CT/WL</p>	<p>A high elevation frog that requires permanent water bodies that do not freeze solid over winter, which may include lakes, streams, tarns, and perennial plunge pools in intermittent streams. Aquatic habitat for overwintering must be a minimum of 5.6 feet in depth, but 8.2 feet or deeper or other habitat structures is preferred to avoid freezing conditions and must be free of fish (USFWS 2016). Tadpoles require two years to develop, so water bodies that do not freeze solid or dry up during normal years are essential (USFWS 2016). This species has a maximum known upland movement of 82 feet from streams and up to 984 feet between water bodies around lakes (USFWS 2016).</p>	<p>Will not occur</p>	<p>The Study Area does not provide aquatic habitat of a suitable depth. Trout Creek has a depth of 1 to 2 feet where it intersects the Study Area with no pools a minimum of 5.6 feet in depth. There are no reported occurrences of Sierra Nevada yellow-legged frog in Trout Creek or the Truckee River in the vicinity of the Study Area. The closest reported occurrence in the CNDDDB (and the only occurrence documented in the last 50 years in the project region) is approximately 2 miles north of the Study Area where this species was documented in Alder Creek, a tributary of Prosser Reservoir, in 1997 (CDFW 2022).</p>
<b>Birds</b>				
<p><i>Accipiter cooperii</i></p>	<p>--/--/WL</p>	<p>Nests in woodlands and urban trees. Preys on</p>	<p><b>May Occur</b></p>	<p>The Jeffrey pine forest habitat</p>

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
Cooper's hawk		medium-sized birds and small mammals. Forages in open woodland and habitat edges (Zeiner et al. 1990).		provides suitable habitat for the species. The nearest recorded occurrence is located 9.2 miles southwest of the Study Area in a grove of white fir trees near Cedar Creek (CDFW 2022).
<i>Accipiter gentilis</i> northern goshawk	--/--/SSC	Nests and forages in mature and old-growth forest stands in a broad range of conifer and coniferous hardwood types, including Pacific Ponderosa, Jeffrey and lodgepole pine, mixed conifer, firs, and pinyon-juniper with relatively dense canopies. May also forage in meadow edges and open sagebrush. Nesting and fledgling period: March 1 – August 15 (Woodbridge and Hargis 2006).	<b>May occur</b>	The coniferous forest habitat in and adjacent to the Study Area provides potential nesting habitat for northern goshawk. The closest reported occurrence of this species in the CNDDDB is approximately 3 miles southwest where this species was documented nesting in red fir forest between 1995 and 1997 (CDFW 2022).
<i>Antigone canadensis tabida</i> greater sandhill crane	--/CT/FP	Breed and forage in wetlands, grasslands and other open habitats. Typically roost in deeper water to avoid predators (Zeiner et al. 1990). Populations that breed in extreme northern California typically overwinter in the Central Valley (Zeiner et al. 1990).	Will not occur	The Study Area does not provide suitable wetland, grassland, or open habitat.
<i>Cypseloides niger</i> black swift	--/--/SSC	Nests in moist crevice or cave on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons. Forages widely over many habitats. In migration, rare and irregular outside the breeding range; does not winter in California (Zeiner et al. 1990).	Will not occur	The Study Area does not provide suitable sea cliff or canyon habitat.
<i>Empidonax traillii</i> willow flycatcher	--/CE/--	Inhabits extensive thickets of low dense willows on the edge of wet meadows, ponds, or backwaters. Requires dense willow thickets for nesting and roosting. Low exposed branches are	Will not occur	The riparian habitat around Trout Creek in and immediately adjacent to the Study Area is fairly sparse lacking dense willow



## Attachment D

### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
		used for singing posts and hunting perches (CDFW 2022). Forages in willow thickets or in adjacent meadows (Zeiner et al. 1990). Typically found nesting between 600 – 2,500 m amsl (Zeiner et al. 1990).		thickets and does not provide suitable habitat for this species. There is a historic occurrence of willow flycatcher in the CNDDDB that is a non-specific polygon that overlaps the eastern half of the Study Area. Willow flycatcher was documented in the general vicinity of Truckee in 1915 (CDFW 2022). The nearest reported recent occurrence is located approximately 3.8 miles southeast along Martis Creek where 3-4 adults were last detected in 2008 (CDFW 2022).
<i>Haliaeetus leucocephalus</i> bald eagle	--/CE/FP	Requires large bodies of water with an abundant fish population. Feeds on fish, carrion, small mammals, and water-fowl. Nests are usually located within a 1-mile radius of water. Nests are most often situated in large trees with a commanding view of the area (Zeiner et al. 1990).	Will not occur	There are no large bodies of water within a one-mile radius of the Study Area (Donner Lake is approximately 1.7 miles southwest) and no reported occurrences of this species in or adjacent to the Study Area in the CNDDDB. The nearest reported occurrence of nesting bald eagle in the CNDDDB is along the south shore of Donner Lake (CDFW 2022).
<i>Pandion haliaetus</i> osprey	--/--/WL	Osprey breed in Northern California from the Cascade Ranges southward to Lake Tahoe, and along the coast south to Marin County. They prey primarily on fish but also predate small mammals, birds, reptiles, and invertebrates. Foraging areas include open, clear waters of	Will not occur	There is no suitable nesting or foraging habitat in or adjacent to the Study Area.

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
		rivers, lakes, reservoirs, bays, estuaries, and surf zones. Habitat and nesting requirements include large trees, snags, and dead-topped trees in open forest habitats for cover and nesting (Zeiner et al. 1988-1990).		
<i>Setophaga petechia</i> yellow warbler	--/--/SSC	Found in riparian areas in close proximity to water, also nests in montane shrubbery in open conifer forests in the Cascades and Sierra Nevada. Nests and forages in willow ( <i>Salix</i> sp.) shrubs and thickets and in other riparian plants including cottonwoods ( <i>Populus</i> sp.), sycamores ( <i>Platanus</i> sp.), ash ( <i>Fraxinus</i> sp.), and alders ( <i>Alnus</i> sp.) (Browning 1994).	<b>High</b>	The riparian habitat of Trout Creek in and adjacent to the Study Area provides moderate quality habitat for the species. The nearest reported occurrence in the CNDDDB is located 1.9 miles southwest of the Study Area in riparian habitat dominated by quaking aspen immediately east of Donner Lake (CDFW 2022). Yellow warbler were documented in the immediate vicinity of the Study Area during surveys for the Trout Creek Trail (Town of Truckee 2014).

## Attachment D

### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
<b>Mammals</b>				
<i>Aplodontia rufa californica</i> Sierra Nevada mountain beaver	--/--/SSC	Sierra Nevada mountain beaver has a limited range in the Sierra Nevada, California and Nevada. This subspecies is patchily distributed in cool, moist habitats from 1,675 to 3,050 meters elevation. Typically maintains burrow systems through the narrow willow fringes along streams. Meadow areas with deep soils for burrowing adjacent to streams are preferred (Beier 1989). This species requires dense growth of small deciduous trees and shrubs with a dense understory for food and cover as well as soft soil for burrowing (CDFW 2022).	Not expected	The segment of Trout Creek in and adjacent to the Study Area has a fairly sparse riparian corridor lacking dense growth of deciduous trees and shrubs and does not provide suitable riparian habitat. The nearest reported occurrence is located 3.3 miles south of the Study Area in the vicinity of Cabin Creek in the Tahoe National Forest (CDFW 2022) where this species was documented in 1985 and again in 1988. There are no reported occurrences of this species within the last 30 years in the project region (CDFW 2022).
<i>Gulo gulo</i> California wolverine	--/CT/FP	Found in alpine, subalpine and riparian habitats in remote areas with low levels of human use. In the Sierra Nevada may also use red fir, mixed conifer and lodgepole forests, typically above 1,311 m amsl in areas that typically support deep snow through May in most years. Dens in caves, cliffs, log hollows and/or burrows (Zeiner et al. 1990). Considered to be extirpated from California (Moriarity et al. 2009). Recent wolverine detections were determined to be dispersers from Idaho (Moriarity et al. 2009).	Will not occur	The Study Area is too developed to provide suitable habitat and this species is considered extirpated from California.
<i>Lepus americanus tahoensis</i> Sierra Nevada snowshoe hare	--/--/SSC	The Sierra Nevada snowshoe hare occurs in riparian communities characterized by thickets of deciduous trees and shrubs such as willows and alders (Williams 1986). During the summer,	Not expected	The riparian habitat along Trout Creek in and adjacent to the Study Area is fairly sparse lacking dense thickets and does not

## Attachment D

### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
		<p>snowshoe hares in the Lake Tahoe area are associated with brush situated close to meadows or deciduous riparian vegetation rather than on ridgetops or brush-covered upper slopes.</p>		<p>provide suitable habitat for the species. There are no recent occurrences (within the last 100 years) within 5 miles of the Study Area. There is a reported occurrence of Sierra Nevada snowshoe hare (non-specific polygon) that overlaps the eastern half of the Study Area. This record documents a specimen collected in the general vicinity of Truckee in 1915 (CDFW 2022). The nearest, recent reported occurrence is located 7.8 miles south of the Study Area in subalpine conifer forest habitat (CDFW 2022).</p>
<p><i>Lepus townsendii townsendii</i> western white-tailed jackrabbit</p>	<p>--/--/SSC</p>	<p>An uncommon to rare year-round resident of the crest and upper eastern slope of the Sierra Nevada, primarily from the Oregon border south to Tulare and Inyo counties. Preferred habitats include sagebrush, subalpine conifer, juniper, alpine dwarf-shrub, and perennial grassland. Found in open areas with scattered shrubs and exposed flat-topped ridges above 2600 meters. Open meadows and flat-topped hills with open stands of trees, some brush, and herbaceous understory are preferred for summer feeding. Young or stunted conifers, or shrubs, are required for day-time cover. Winters are spent in areas with sagebrush, or in thickets of young trees (Zeiner et al. 1990).</p>	<p>Not expected</p>	<p>The Study Area does not contain suitable subalpine shrub, sagebrush, or grassland habitat. The only reported occurrence in the region in CNDDDB is over 10 miles south of the Study Area in Tahoe City and is from 1920 (CDFW 2022).</p>

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
<i>Pekania pennanti</i> Fisher	--/--/SSC	Occupy late-successional conifer and mixed conifer-hardwood forests with an abundance of downed wood, snags, large trees, and a dense canopy (Zielinski 2014). Typically found at elevations from 1,070 – 2,135 m amsl, where persistent snow does not accumulate and impede movement (Zielinski 2014). Riparian forests and habitat close to open water such as streams are important. Cavities and branches in trees, snags, stumps, rock piles, and downed timber are used as resting sites, and large diameter live, or dead trees are selected for natal and maternal dens (Zielinski 2014). There is a significant gap in the range of fisher between the southern Sierra Nevada population and the northern Sierra Nevada/southern Cascade population that stretches approximately 400 km wide (Zielinski 2014).	Will not occur	The Study Area does not provide suitable old-growth forest habitat with downed wood, snags, or large trees and contains persistent snow through the winter. The project site is outside of the current known range of this species. The nearest reported occurrences are 14 to 15 miles west of the Study Area (CDFW 2022)
<i>Taxidea taxus</i> American badger	--/--/SSC	Inhabits drier open stages of grasslands, parklands, farms, and other treeless areas with loose, friable soils. Preys on a wide variety of mammals, reptiles, birds, and carrion, and hunts mostly by digging out fossorial prey. Occasionally takes prey on the surface. Not tolerant of cultivation. No longer occur in the Central Valley except in the extreme western edge (Williams 1986).	Will not occur	The Study Area does not provide suitable treeless grassland, parkland or farm habitat.
<i>Vulpes vulpes necator</i> Sierra Nevada red fox	Candidate FE/CT/--	Found in high elevation barren, conifer and shrub habitats; montane meadows; subalpine woodlands and fell-fields. Use dense vegetation and rocky areas for cover and den sites and prefer forests interspersed with meadows or alpine fell-fields (CDFW 2022). Dens are found in	Not expected	The Study Area does not provide suitable dense vegetation or rocky areas for cover and denning and lacks suitable habitat for this species. There are no recent (within 25 years)

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/ CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
		natural cavities in talus slopes or rockslides. Sierra Nevada red foxes are seldom observed below 4,900 ft elevation and are most frequently observed between 6,900 ft and 11,800 ft (Weber and Meia, 1996).		reported occurrences of this species in the CNDDDB in the project region. The closest reported occurrence is less than one mile northeast of the Study Area where this species was documented in 1971 and observed again in 1994 crossing Highway 89 north of Truckee (CDFW 2022). There is one other reported occurrence in the CNDDDB approximately 4 miles northwest of the site where this species was documented in 1941. There are no other reported occurrences in the CNDDDB within 20 miles of the Study Area (CDFW 2022).
<b>Plants</b>				
<i>Agrostis humilis</i> mountain bentgrass	--/--/2B.3	A perennial herb found in alpine boulder and rock fields, meadows, seeps, and subalpine coniferous forest from 2,670 – 3,200 meters elevation. May be synonymous with <i>A. thurberiana</i> , a common species. Blooms July – September (CNPS 2022).	Will not occur	The Study Area elevation is lower than the species preferred elevation range.
<i>Arabis rigidissima</i> var. <i>demota</i> Galena Creek rockcress	--/--/1B.2	A perennial herb found on rocky soils in broadleaf upland forest and upper montane coniferous forests from 2255-2560 meters elevation. Blooms July- August (CNPS 2022)	Will not occur	The Study Area elevation is lower than the species preferred elevation range.
<i>Artemisia tripartita</i> ssp. <i>tripartita</i> threetip sagebrush	--/--/2B.3	A perennial shrub found on rocky volcanic soils in openings in upper montane coniferous forest from 2,200 -2,600 meters elevation. Taxonomic status is uncertain; not in Baldwin et al. (2012).	Will not occur	The Study Area elevation is lower than the species preferred elevation range.

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
		Blooms in August (CNPS 2022).		
<i>Astragalus austiniiae</i> Austin's astragalus	--/--/1B.3	A perennial herb found in rocky sites in alpine boulder and rock fields, and subalpine coniferous forest from 2,440 – 2,970 meters elevation. Known only from the Lake Tahoe region. Blooms (May) July – September (CNPS 2022).	Will not occur	The Study Area elevation is lower than the species preferred elevation range.
<i>Botrychium ascendens</i> upswept moonwort	--/--/2B.3	A perennial non-flowering plant (pteridophyte) found in mesic lower montane coniferous forest and meadows and seeps from 1,115 – 3,045 meters elevation. Reproduces (June) July – August (CNPS 2022).	Will not occur	There is no mesic lower montane coniferous forest, meadow, or seep habitat in the Study Area.
<i>Botrychium crenulatum</i> scalloped moonwort	--/--/2B.2	A perennial rhizomatous non-flowering plant (pteridophyte) found in bogs, fens, meadows and seeps, freshwater marshes, and swamps from 1,258 – 3,280 meters elevation. Reproduces June – September (CNPS 2022).	Will not occur	There is no bog, fen, marsh, meadow, seep or swamp habitat in the Study Area.
<i>Botrychium lunaria</i> common moonwort	--/--/2B.3	A perennial rhizomatous herb found in grassy openings (Christenhusz et al. 2017) in subalpine forest, upper montane coniferous forest, meadows and seeps from 1,980 to 3,400 meters elevation. Reproduces in August (CNPS 2022).	Will not occur	There are no grassy openings in the Study Area.
<i>Botrychium minganense</i> Mingan moonwort	--/--/2B.2	A perennial rhizomatous non-flowering plant (pteridophyte) found in mesic conditions in bogs and fens, meadow and seep edges, and lower and upper montane coniferous forests from 1,455 – 2,180 meters elevation. Reproduces July – September (CNPS 2022).	Will not occur	There are no bogs, fens, meadows, seeps, or mesic forest habitat in the Study Area.
<i>Carex davyi</i> Davy's sedge	--/--/1B.3	A perennial herb found in mesic areas in subalpine coniferous forest and upper montane coniferous forest from 1,500 – 3,200 meters elevation. Blooms May – August (CNPS 2022).	Will not occur	There is no mesic forest habitat in the Study Area.
<i>Carex lasiocarpa</i> woolly-fruited sedge	--/--/2B.3	A perennial rhizomatous herb found in bogs, fens, marshes, swamps, freshwater and lake	Will not occur	There is no suitable marshy aquatic habitat in the Study Area.

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
		margins from 1700 – 2100 meters elevation. Blooms June – July (CNPS 2022).		
<i>Carex limosa</i> mud sedge	--/--/2B.2	A perennial rhizomatous herb found in bogs, fens, meadows, seeps, marshes, swamps in lower- and upper montane coniferous forest from 1,200 – 2,700 meters elevation. Blooms June – August (CNPS 2022).	Will not occur	There is no suitable marshy aquatic habitat in the Study Area.
<i>Claytonia megarhiza</i> fell-fields claytonia	--/--/2B.3	A perennial herb found in crevices between rocks in alpine boulder and rock fields, and rocky sites in subalpine coniferous forest from 2,600 – 3,532 meters elevation. Blooms July – September (CNPS 2022).	Will not occur	The Study Area elevation is lower than the species preferred elevation range and lacks rocky sites.



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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
<i>Drosera anglica</i> English sundew	--/--/2B.3	A perennial carnivorous herb found in bogs, fens, mesic meadows, and seeps from 1,300 – 2,255 meters elevation. Blooms June – September (CNPS 2022).	Will not occur	There is no suitable marshy aquatic habitat in the Study Area.
<i>Erigeron miser</i> starved daisy	--/--/1B.3	A perennial herb found on granite outcrops in rocky soils in upper montane coniferous forest from 1,840 – 2,620 meters elevation. Blooms June – October (CNPS 2022).	Will not occur	There are no granite outcrops in the Study Area.
<i>Eriogonum umbellatum</i> var. <i>torreyanum</i> Donner Pass buckwheat	--/--/1B.2	A perennial herb found on rocky volcanic soils in mesic microsites in upper montane coniferous forests from 1,855 – 2,620 meters elevation. Found on steep, rocky slopes with limited vegetation. Blooms July – September (CNPS 2022).	Will not occur	There are no suitable mesic rocky slopes with limited vegetation in the Study Area.
<i>Eurybia merita</i> subalpine aster	--/--/2B.3	A perennial herb found in openings in upper montane coniferous forest from 1300 - 2000 meters elevation. Known in California from only two historical occurrences in Siskiyou County.	Will not occur	The project site is outside of the range of this species; the only known occurrences in California are from Siskiyou County, the species was last observed in California more than twenty years ago. The Study Area lacks suitable forest habitat with openings.
<i>Glyceria grandis</i> American manna grass	--/--/2B.3	A perennial rhizomatous herb found in bogs, fens, meadows, seeps, marshes, swamps, streambanks and lake margins at 15 – 1,980 meters elevation. Found in slower moving pools and backwater areas in streams. Blooms June – August (CNPS 2022).	May Occur	The banks of Trout Creek may provide suitable habitat for the species. The nearest recorded occurrence is located 8 miles south of the Study Area along the Truckee River (CDFW 2022).
<i>Ivesia sericoleuca</i> Plumas ivesia	--/--/1B.2	A perennial herb found in vernal mesic, usually volcanic, microsites including vernal pools and seeps, in Great Basin scrub and lower montane coniferous forest from 1,310 – 2,200 meters	Will not occur	There is no suitable vernal mesic habitat in the Study Area.

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
		elevation. Blooms May – October (CNPS 2022).		
<i>Juncus luciensis</i> Santa Lucia dwarf rush	--/--/1B.2	An annual herb found in vernal pools and mesic microsites in chaparral, Great Basin scrub, and lower montane coniferous forest from 300 – 2,040 meters elevation. Blooms April – July (CNPS 2022).	Will not occur	There is no suitable vernal mesic habitat in the Study Area.
<i>Lewisia kelloggii</i> ssp. <i>hutchisonii</i> Hutchison's lewisia	--/--/3.2	A perennial herb found along ridgetops in upper montane coniferous forest, often on slate or rhyolite substrates, from 765 – 2,365 meters elevation. Blooms (April) May – August (CNPS 2022).	Will not occur	There is no suitable ridgetop habitat in the Study Area.
<i>Lewisia longipetala</i> long-petaled lewisia	--/--/1B.3	A perennial herb found on granitic alpine boulder and rock fields and mesic, rocky subalpine coniferous forest from 2,500 – 2,925. Blooms July – August (September) (CNPS 2022).	Will not occur	The Study Area elevation is lower than the species preferred elevation range and lacks suitable rocky habitat.
<i>Lomatium grayi</i> Gray's lomatium	--/--/2B.3	A perennial herb found in Great Basin scrub, and pinyon and juniper woodland from 1390 - 1415 meters elevation. Blooms April – June. Known in CA only from near Lake City and Surprise Valley.	Will not occur	There is no Great Basin scrub or pinyon and juniper woodland habitat in the Study Area.
<i>Meesia uliginosa</i> broad-nerved hump moss	--/--/2B.2	A moss found in damp soil in bogs and fens, meadows and seeps in subalpine forest and upper montane coniferous forest from 1,210 – 2,804 meters elevation. No blooming period (CNPS 2022).	Will not occur	There are no bogs, fens, meadows or seeps in the Study Area.
<i>Mertensia oblongifolia</i> var. <i>oblongifolia</i> sagebrush bluebells	--/--/2B.2	A perennial herb found in mesic microsites in Great Basin scrub, lower montane coniferous forest, and subalpine coniferous forest from 1,000 – 3,000 meters elevation. Known in California only from the Warner and Sweetwater mountains. Blooms April – July (CNPS 2022).	Will not occur	There are no mesic microsites in the Study Area. Additionally, the Study Area is outside the known range of the species.
<i>Nardia hiroshii</i> Hiroshi's flapwort	--/--/2B.3	A liverwort (nonvascular plant) found on damp soil with granitic bedrock. Known in California from a single location near Norden. No blooming	Will not occur	The Study Area is outside of the species known limited range.

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
		period (CNPS 2022).		
<i>Phacelia stebbinsii</i> Stebbins' phacelia	--/--/1B.2	An annual herb found on steep rocky sites in cismontane woodland, lower montane coniferous forest, meadows and sweeps from 610 – 2,010 meters elevation. Blooms May – July (CNPS 2022).	Will not occur	There are no steep rocky sites in the Study Area.
<i>Potamogeton epihydrus</i> Nuttall's ribbon-leaved pondweed	--/--/2B.2	An aquatic herb found in assorted slow moving shallow freshwater habitats from 369 – 2,172 meters elevation. Blooms (June) July – September (CNPS 2022).	Will not occur	There are no slow-moving bodies of water in the Study Area.
<i>Potamogeton robbinsii</i> Robbins' pondweed	--/--/2B.3	A perennial, aquatic rhizomatous herb found in deep water, lakes, marshes and swamps from 1,530 – 3,300 meters elevation. Blooms July – August (CNPS 2022).	Will not occur	There are no deep bodies of water found in the Study Area.
<i>Rhamnus alnifolia</i> alder buckthorn	--/--/2B.2	A perennial deciduous shrub found in lower and upper montane coniferous forest, meadows, seeps, and riparian scrub from 1,370 – 2,130 meters elevation. Blooms May – July (CNPS 2022).	<b>May Occur</b>	Riparian areas surrounding Trout Creek provide suitable habitat. The nearest reported occurrence of the species is 0.9 miles south of the Study Area in a degraded riparian zone along Donner Creek where this species was documented as “common” in 2000 (CDFW 2022).
<i>Rorippa subumbellata</i> Tahoe yellow cress	--/CE/1B.1	A perennial rhizomatous herb found on sandy, decomposed granitic beaches in lower montane coniferous forest, meadows and seeps from 1,890 – 1,905 meters elevation. Blooms May – September (CNPS 2022)	Will not occur	There are no sandy beaches in the Study Area.

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
<i>Scutellaria galericulata</i> marsh skullcap	--/--/2B.2	A perennial herb found in mesic (wet) meadows and seeps, and marshes and swamps in lower montane coniferous forest from 0 – 2,100 meters elevation. Blooms June – September (CNPS 2022).	Will not occur	There is no meadow, seep, marsh, or swamp habitat in the Study Area.
<i>Sidalcea multifida</i> cut-leaf checkerbloom	--/--/2B.3	A perennial herb found in dry sites in Great Basin scrub, lower montane coniferous forest, and pinyon-juniper woodland or meadows and seeps from 1,750 – 2,800 meters elevation. Blooms May – September (CNPS 2022).	Will not occur	There is no suitable dry scrub, pine forest, or woodland habitat, or meadows or seeps in the Study Area. Additionally, the only reported occurrence in the vicinity is dated to 1925 (CDFW 2022).
<i>Solidago lepida</i> var. <i>salebrosa</i> Rocky Mountains Canada goldenrod	--/--/3.2	A perennial rhizomatous herb found in mesic meadows and seeps, lake margins, marshes, swamps, and streambanks from 1080 - 1390 meters elevation. Blooms July – September (CNPS 2022).	Will not occur	The Study Area elevation is higher than the species preferred elevation range.
<i>Sphaeralcea munroana</i> Munro's desert mallow	--/--/2B.2	A perennial herb found in Great Basin scrub. Known in California only from a single occurrence in Squaw Creek. Blooms May – June (CNPS 2022).	Will not occur	There is no Great Basin scrub habitat in the Study Area.
<i>Stuckenia filiformis</i> ssp. <i>alpina</i> northern slender pondweed	--/--/2B.2	A perennial rhizomatous aquatic herb found in marshes, swamps, and other shallow freshwater habitats from 300 – 2,150 meters elevation. Blooms May – July (CNPS 2022).	Will not occur	There is no slow-moving body of the water in the Study Area.
<b>Sensitive Natural Communities</b>				
Fen		Fens are peat-forming wetlands, supported by nearly constant groundwater inflow (Bedford and Godwin 2003). They often occur in meadow complexes consisting of areas of wet meadow intermixed with fens that stay saturated for most or all of the year. Meadows are dominated by herbaceous plants, while fens may	Not Present	There is no fen habitat present in the Study Area.

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### Potential for Regionally Occurring Special-Status Species to Exist on the Project Site

Scientific Name/Common Name	FESA/CESA/ CRPR or Other State Status*	General Habitat Description	Potential to Occur	Rationale
		also have high cover of woody vegetation and/or mosses. Most fens in California are less than a hectare in size.		

*Note:* Bold font indicates a species with the potential to occur in the Study Area; these species are evaluated in detail in the body of the report.

\*FESA=Federal Endangered Species Act; CESA=California Endangered Species Act; FE – FESA endangered; FT – FESA threatened; FC – FESA candidate; FD – FESA delisted; CE – CESA endangered; CT – CESA threatened; FP – Fully Protected; SSC – state species of special concern; CRPR – California Rare Plant Rank (see definitions of CRPR rankings below)

CNPS ratings: 1A = Presumed extirpated in California and rare elsewhere

1B = Rare, threatened, or endangered in California and elsewhere

1B.1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

1B.2 = Fairly endangered in California (20-80% occurrences threatened)

1B.3 = Not very endangered in California (fewer than 20% of occurrences threatened)

2B = Rare, threatened, or endangered in California but more common elsewhere.

2B.2 = Fairly endangered in California (20-80% occurrences threatened)

3 – more information needed

Global and State rankings in descending order of sensitivity (1=critically imperiled; 5=demonstrably secure).

Status in the Study Area is assessed as follows. **Will Not Occur:** Species is either sessile (i.e., plants) or so limited to a particular habitat that it cannot disperse on its own and/or habitat suitable for its establishment and survival does not occur in the Study Area; **Not Expected:** Species moves freely and might disperse through or across the Study Area, but suitable habitat for residence or breeding does not occur in the Study Area, potential for an individual of the species to disperse through or forage in the site cannot be excluded with 100% certainty; **Presumed Absent:** Habitat suitable for residence and breeding occurs in the Study Area; however, focused surveys conducted for the current project were negative; **May Occur:** Species was not observed on the site and breeding habitat is not present but the species has the potential to utilize the site for dispersal; **High:** Habitat suitable for residence and breeding occurs in the Study Area and the species has been recorded recently in or near the Study Area, but was not observed during surveys for the current project; **Present:** The species was observed during biological surveys for the current project and is assumed to occupy the Study Area or utilize the Study Area during some portion of its life cycle.

## Attachment D

### Potential for Special-Status Species to Occur in the Study Area

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## Attachment D

### Potential for Special-Status Species to Occur in the Study Area

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# Attachment E

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Species Observed  
on the Project Site



Table F-1. Plant Species Observed on the Project Site

Family	Species Name	Common Name	Status <sup>1</sup>
<b>Native</b>			
Asteraceae	<i>Artemisia tridentata</i>	big sagebrush	--
	<i>Ericameria nauseosa</i>	rubber rabbitbrush	
	<i>Wyethia mollis</i>	woolly mule's ears	--
Betulaceae	<i>Alnus incana</i>	mountain alder	--
Cupressaceae	<i>Calocedrus decurrens</i>	incense cedar	--
Ericaceae	<i>Arctostaphylos patula</i>	greenleaf manzanita	--
	<i>Gaultheria hispidula</i>	creeping snowberry	--
Fabaceae	<i>Lupinus polyphyllus</i>	large-leaved lupine	--
Grossulariaceae	<i>Ribes cereum</i>	wax currant	--
Melanthiaceae	<i>Veratrum californicum</i>	California corn lily	--
Pinaceae	<i>Abies concolor</i>	white fir	--
	<i>Pinus contorta</i>	lodgepole pine	--
	<i>Pinus jeffreyi</i>	Jeffrey pine	--
Poaceae	<i>Elymus elymoides</i>	squirreltail grass	--
Rhamnaceae	<i>Ceanothus prostratus</i>	mahala mat	--
	<i>Ceanothus velutinus</i>	snowbrush ceanothus	--
Rosaceae	<i>Amelanchier utahensis</i>	Utah serviceberry	--
	<i>Rosa californica</i>	California wildrose	--
Salicaceae	<i>Populus tremuloides</i>	quaking aspen	--
	<i>Salix laevigata</i>	red willow	--
	<i>Salix scouleriana</i>	Scouler's willow	
<b>Non-native</b>			
Asteraceae	<i>Achillea millefolium</i>	common yarrow	--
	<i>Hypochaeris glabra</i>	smooth cat's ear	Limited
	<i>Solidago canadensis</i>	Canada goldenrod	--
Fabaceae	<i>Astragalus cicer</i>	chickpea milkvetch	--
Polygonaceae	<i>Rumex crispus</i>	curly dock	Limited
Rosaceae	<i>Sanguisorba officinalis</i>	great burnet	--
Scrophulariaceae	<i>Verbascum thapsus</i>	great mullein	Limited

<sup>1</sup>Status of native species is federal listing/state listing/California Rare Plant Rank; Status for non-native species is California Invasive Species Council invasiveness rating.

Table F-2. Wildlife Species Observed in the Study Area

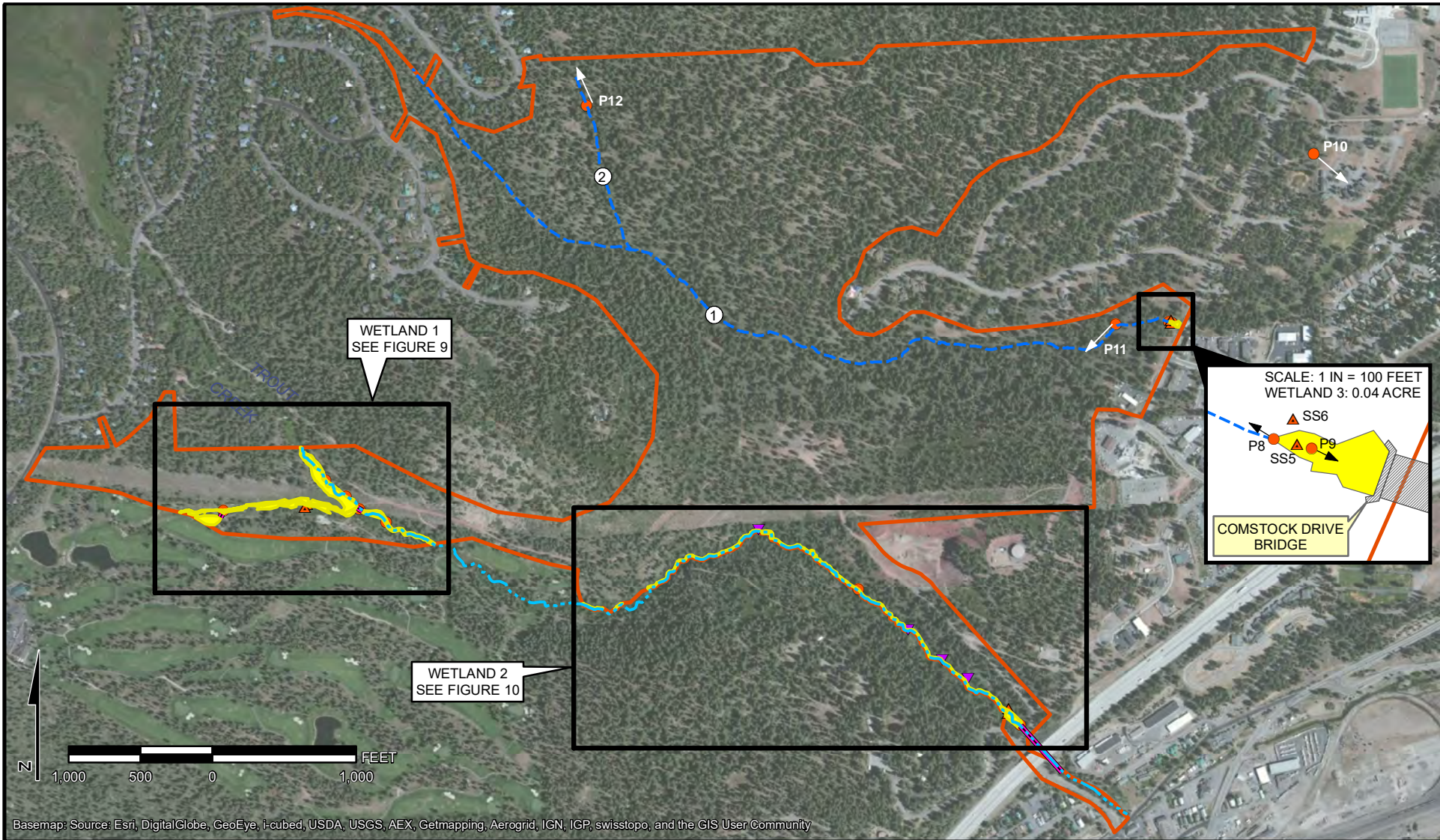
Order/Family	Species Name	Common Name	Status <sup>1</sup>
<b>Birds</b>			
Accipitriformes			
Accipitridae	<i>Buteo jamaicensis</i>	red-tailed hawk	--
Cathartiformes			
Cathartidae	<i>Cathartes aura</i>	turkey vulture	--
Passeriformes			
Corvidae	<i>Corvus brachyrhynchos</i>	American crow	--
	<i>Cyanocitta stelleri</i>	Stellar's jay	--
Paridae	<i>Poecile gambeli</i>	mountain chickadee	--
	<i>Poecile rufescens</i>	chestnut-backed chickadee	--
Passerelidae	<i>Junco hyemalis</i>	dark-eyed junco	--
	<i>Melospiza crissalis</i>	California towhee	--
Picidae	<i>Colaptes auratus</i>	northern flicker	--
Sittidae	<i>Sitta carolinensis</i>	white-breasted nuthatch	--
<b>Mammals</b>			
Artiodactyla			
Cervidae	<i>Odocoileus hemionus</i>	mule deer (scat)	--
Carnivora			
Canidae	<i>Canis familiaris</i>	domestic dog	--
	<i>Canis latrans</i>	coyote (scat)	--
Rodentia			
Sciuridae	<i>Callospermophilus lateralis</i>	golden-mantled ground squirrel	
	<i>Neotamias amoenus</i>	yellow-pine chipmunk	--
	<i>Otospermophilus beecheyi</i>	California ground squirrel	--

<sup>1</sup>Status for animal species is ESA/CESA listing or other sensitivity.

# Attachment F

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Wetland Map (JBR Environmental  
Consultants 2012)



Basemap: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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SCALE: 1 IN = 100 FEET  
WETLAND 3: 0.04 ACRE

SS6  
P8 P9  
SS5  
COMSTOCK DRIVE  
BRIDGE

- PERENNIAL WATERWAY (1.30 ACRES)
- EXISTING CULVERT
- EPHEMERAL WATERWAY (0.53 ACRE)
- WETLAND (2.3 ACRES)
- ▼ 2013 WETLAND SAMPLE SITE
- ▲ 2011 WETLAND SAMPLE SITE
- PHOTO POINT AND CAMERA DIRECTION
- STUDY AREA (332.29 ACRES)



## TOWN OF TRUCKEE TROUT CREEK TRAIL PROJECT

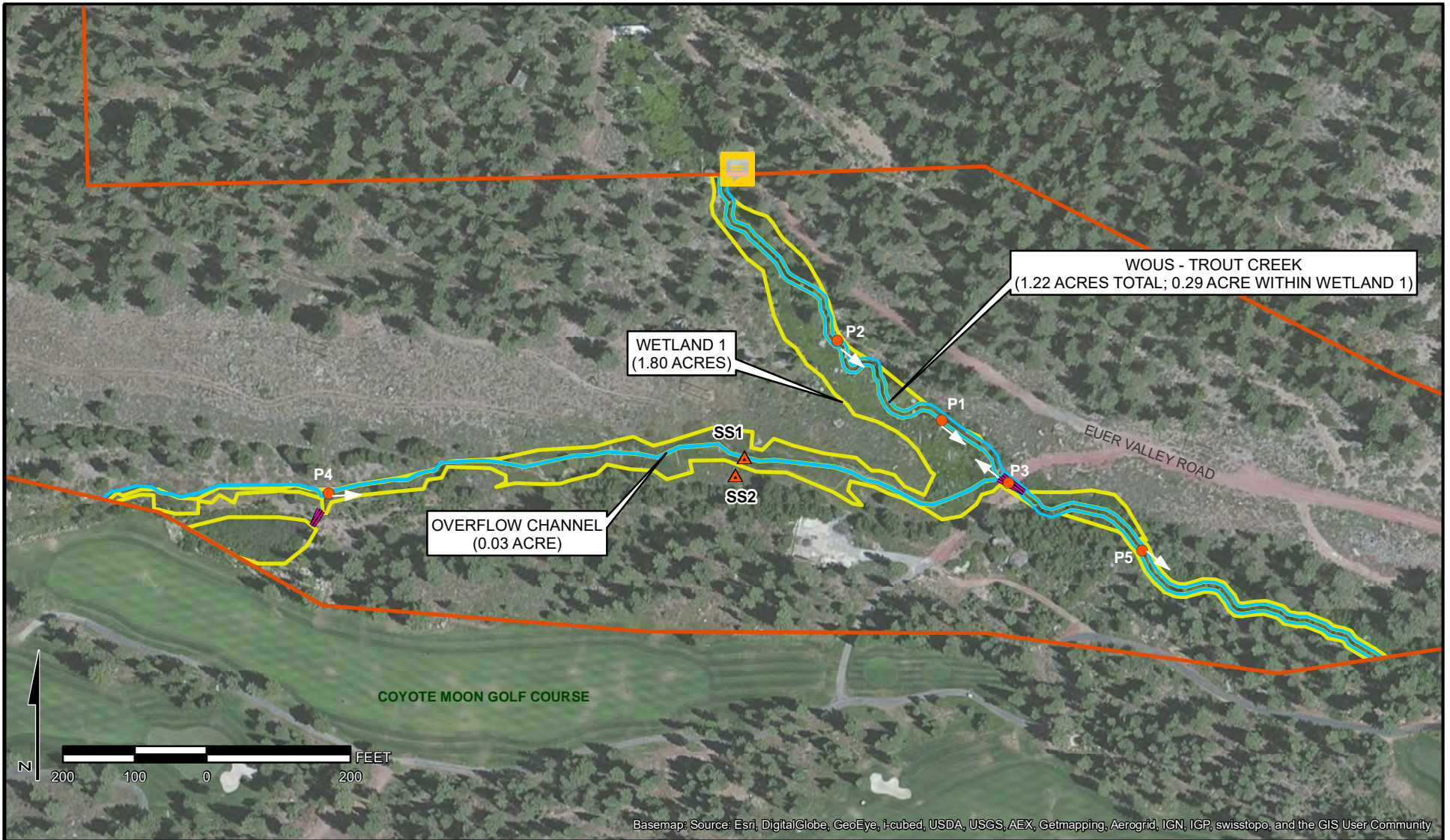
FIGURE 8  
WETLAND DELINEATION



DRAWN BY	GD	DATE DRAWN	1/3/2014
SCALE	1 IN = 1,000 FEET		
PROJECT	B.A13128.00		

This document is for reference purposes only and should not be used as a legal document. JBR makes no guarantees to the accuracy of the data contained herein or any loss resulting therefrom.





Basemap: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

X:\Clients\Lumos\_Engineering\Truckee\Fishbone\Donner\Pioneer\Trail\_BA1312800\MXD\Wetland\Wetland\Figure\_8\_WL\_1.mxd

- PERENNIAL WATERWAY (1.30 ACRES)
- EXISTING CULVERT
- WETLAND (2.3 ACRES)
- ▼ 2013 WETLAND SAMPLE SITE
- ▲ 2011 WETLAND SAMPLE SITE
- → PHOTO POINT AND CAMERA DIRECTION
- STUDY AREA (332.29 ACRES)



## TOWN OF TRUCKEE TROUT CREEK TRAIL PROJECT

### FIGURE 8 WETLAND 1






	DRAWN BY	GD	DATE DRAWN	1/3/2014
	SCALE	1 IN = 200 FEET		
	PROJECT	B.A13128.00		

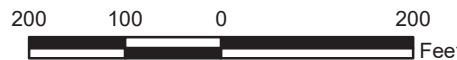
This document is for reference purposes only and should not be used as a legal document. JBR makes no guarantees to the accuracy of the data contained herein or any loss resulting therefrom.





BASE MAP:2009 NAIP Imagery

-  Survey Area
-  Wetland Data Point
-  Photo Point
-  Culvert
-  Perennial Tributary - Trout Creek



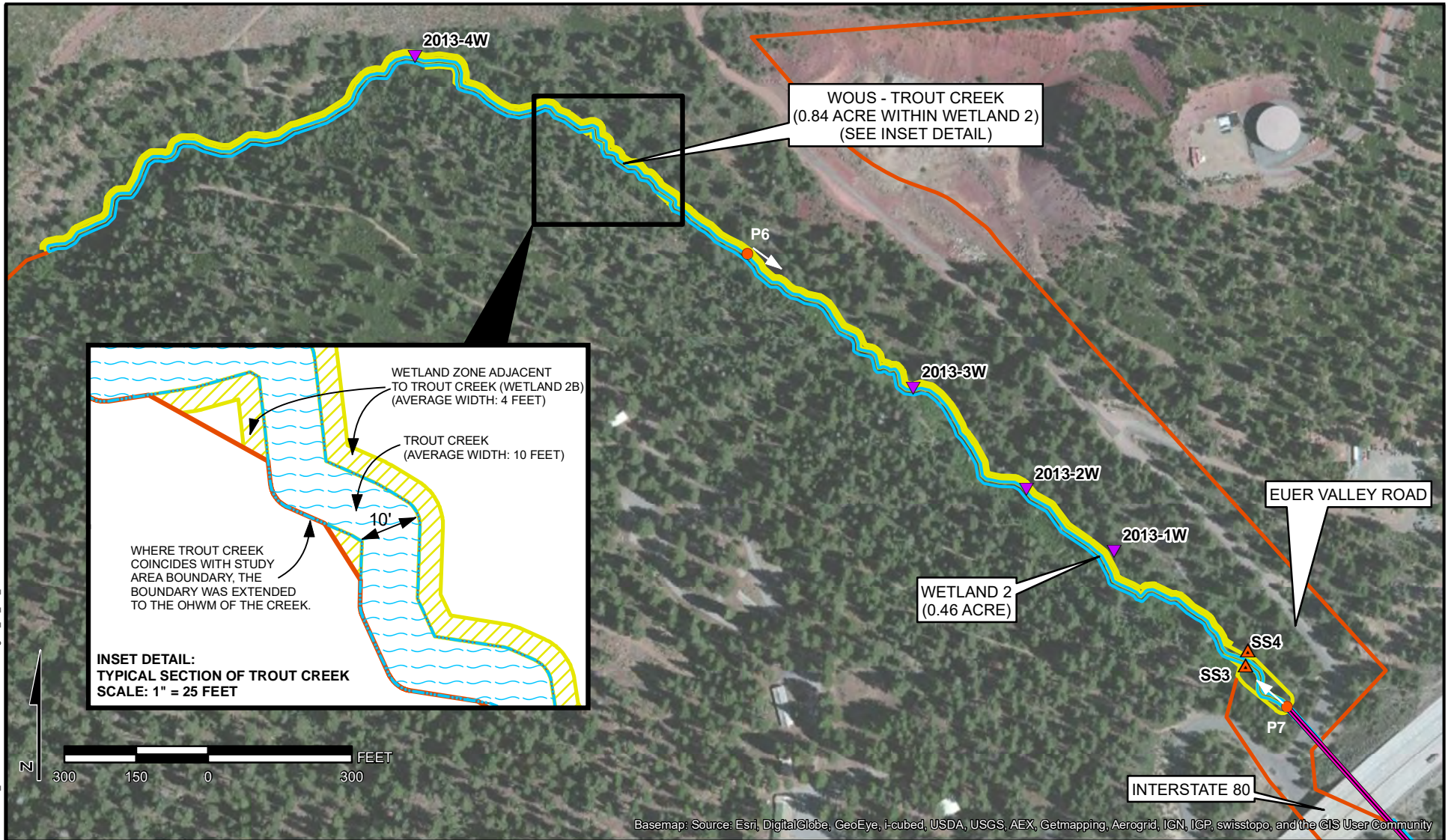
TOWN OF TRUCKEE  
TRUCKEE DONNER TO DOWNTOWN TRAIL

FIGURE 9  
WETLAND 2



DRAWN BY	CHJ	DATE DRAWN	1/4/2012
SCALE	1 in = 200 feet		





Basemap: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

- PERENNIAL WATERWAY (1.30 ACRES)
- EXISTING CULVERT
- WETLAND (2.3 ACRES)
- ▼ 2013 WETLAND SAMPLE SITE
- ▲ 2011 WETLAND SAMPLE SITE
- → PHOTO POINT AND CAMERA DIRECTION
- STUDY AREA (332.29 ACRES)



## TOWN OF TRUCKEE TROUT CREEK TRAIL PROJECT

FIGURE 10  
WETLAND 2 (2A & 2B)



DRAWN BY	GD	DATE DRAWN	1/3/2014
SCALE	1 IN = 300 FEET		
PROJECT	B.A13128.00		

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This document is for reference purposes only and should not be used as a legal document. JBR makes no guarantees to the accuracy of the data contained herein or any loss resulting therefrom.

# Attachment G

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Site Photographs





**Photo 1:** View of the existing paved driveway at the eastern terminus of the Study Area. Photo taken October 13, 2021.



**Photo 2:** View of the proposed pipeline location passing beneath existing overhead electrical transmission lines in the eastern portion of the Study Area. Photo taken October 13, 2021.





**Photo 3:** View of the existing pedestrian bridge on the trail crossing Trout Creek looking upstream. Photo taken October 13, 2021.



**Photo 4:** View of the paved recreation trail proposed as a segment of the corridor for the proposed pipeline. Photo taken October 13, 2021.





**Photo 5:** View of the existing dirt road proposed as a segment of the corridor for the proposed pipeline. Photo taken October 13, 2021.



**Photo 6:** View of a small staging area used by Pacific Gas and Electric. The staging area is located along the dirt access road where a segment of the pipeline is proposed. Photo taken October 13, 2021.





**Photo 7:** View of the proposed pipeline location passing beneath existing overhead electrical transmission lines. Photo taken October 13, 2021.



**Photo 8:** View of the location of the southernmost proposed pump station. Photo taken October 13, 2021.





**Photo 9:** View of the location of the northernmost proposed pump station. Photo taken October 13, 2021.

# Appendix D

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## Cultural Resources Assessment

February 28, 2022

Project # 06484.00002.001

Neil Kaufman  
Water System Engineer  
Truckee Donner Public Utility District  
11570 Donner Pass Road  
Truckee, CA 96161

**Subject: Cultural Resource Assessment Letter Report for the Pioneer Trail Pipeline and Pump Station Project, Placer County, California**

Dear Mr. Kaufman,

HELIX Environmental Planning, Inc. (HELIX) has prepared this cultural resources assessment letter report for the Pioneer Trail Pipeline and Pump Station Project in Placer County, California (proposed project). The Tahoe Donner Subdivision is currently served by a single 14-inch welded steel pipeline with two pump stations and two storage tanks that essentially serve as forebays. These facilities were constructed in the early 1970s and some of the infrastructure is approaching the end of their utility. The Truckee Donner Public Utility District (District) has identified the need to construct a second pipeline to provide water to the subdivision. The purpose of the proposed project is to construct a second, 1.7-mile long pipeline and a single pumpstation to transport potable water to the Tahoe Donner Subdivision. The project also proposes to construct an additional conduit for electrical and communication services for the Tahoe Donner subdivision.

This letter report presents the results of a cultural resources assessment intended to evaluate the potential for the proposed project to significantly impact *historical resources* (i.e., archaeological or built-environment resources that qualify for listing in the California Register of Historical Resources) and/or *historic properties* (i.e., archaeological or built-environment resources that qualify for listing in the National Register of Historic Places). The conclusions and recommendations presented here are based on data from an archival records search, Native American outreach, and an intensive pedestrian survey of the project area.

## PROJECT LOCATION

The proposed project is located in the Town of Truckee in Nevada County, California, north of U.S. Interstate 80. The proposed project is located within Township 11 North, Range 7 East, Section 28 of the U.S. Geological Survey 7.5 Rocklin, California quadrangle topological map. The 1.7-mile long pipeline alignment (project area) would pass through five Assessor's Parcel Numbers (APN), including: 019-400-028; 019-400-029; 019-400-031; 018-010-051; and 018-010-052. Refer to Figure 1 for a project area vicinity map, and Figure 2 for the project area boundary depicted on a topographic background. All referenced figures are included in **Attachment A**.

## PROJECT DESCRIPTION

### Pipeline Components

The project is proposing an approximately 1.7-mile-long pipeline alignment running from Northwoods Boulevard to the west and terminating near the intersection of Comstock Drive and Pioneer Trail to the east. The proposed pipeline would supply water, electrical and communications utilities to the Truckee Donner Subdivision. The proposed pipelines' western terminus would be on Northwoods Boulevard and the pipelines' eastern terminus would be at the intersection of Comstock Drive and Pioneer Trail.

In addition to the water pipeline, the District intends to install underground electrical and communications conduits in the pipeline trench. These conduits would provide for additional connections within the District's electrical distribution system, increasing the reliability and redundancy. This project would be a combined effort involving potable water, electrical and communications facilities. The point of connection for the electrical and communications facilities would be adjacent to the pump station.

### Pipeline Route Options

The pipeline would begin on Northwoods Boulevard and move east towards the Comstock Drive and Pioneer Trail. There are two pipeline alignment options for the proposed project, Alignment A and Alignment B. Both alignments are included in the impact analysis throughout the remaining sections of this document to allow for flexibility with final design and permitting. Both alignments as evaluated in this report would be 6-feet-wide by 6-feet-deep. Each alignment option is described below.

#### Alignment A

Alignment A would begin on Northwoods Boulevard and move north on Northwoods Boulevard for 0.05-mile before turning east on the paved Trout Creek Trail. The alignment would continue east along Trout Creek Trail for 0.35-mile until it would reach the existing pedestrian bridge that crosses over Trout Creek. Trout Creek Trail, a Class I bike and pedestrian trail, is a 12-foot-wide paved trail and is lined with trees and large boulders and can be very busy with cyclists and pedestrians primarily during the warmer months.

#### Alignment B

Alignment B would begin on Northwoods Boulevard and move north on Northwoods Boulevard for 0.05-mile before turning east on the existing overhead utility corridor. After moving 0.23-mile along the utility corridor, the alignment would move northeast for 0.04-mile through disturbed habitat with no jurisdictional features before reaching the paved Trout Creek Trail. The alignment would then move east along Trout Creek Trail for 0.09-mile until it would reach the existing pedestrian bridge spanning Trout Creek.

The remaining description of the pipeline would reflect both Alignment A and Alignment B.

When the pipeline alignment would reach the pedestrian bridge crossing, the pipeline would be attached to the 0.02-mile bridge to avoid impacts to Trout Creek. After crossing Trout Creek, the



pipeline alignment would continue along the paved Trout Creek Trail for 0.47-mile before making a slight turn northwards to join an existing dirt utility access road for 0.31-mile. From the dirt road, the alignment would re-enter the existing overhead utility corridor for 0.3-mile. From the end of the utility corridor, the alignment would join an existing paved driveway that travels 0.17-mile to the intersection of Comstock Drive and Pioneer Trail, the eastern terminus of the pipeline alignment. Both Alignment A and Alignment B would be the same size and would excavate to the same depth.

Total length of Alignment A and Alignment B would each be approximately 1.7 miles in length.

## Pumpstation Components

Two pump station locations are proposed for the construction of a single pumpstation. The proposed sites would be located at the end of the eastern existing overhead electrical transmission utility corridor near the eastern terminus, on District owned property.

## Construction Staging Areas and Equipment

The total size of the proposed staging areas would be approximately the length of the pipeline, 1.7 miles, and potential impacts from the proposed staging areas have been evaluated as part of this assessment.

## AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) is defined as the geographic area or areas within which a project may directly or indirectly cause alterations in the character or use of significant archaeological or architectural resources. The APE is influenced by the scale and nature of the project as well as by the types of cultural resources in the vicinity. For the purposes of this analysis, the APE is understood to be the area that would be subjected to ground disturbance during construction and implementation of the proposed project. The APE for the Pioneer Trail Pipeline and Pump Station Project measures approximately 1.7 miles long (Figure 3) and corresponds to the two pipeline alignment options described above, with a 25-foot buffer from the centerline on either side of the proposed alignments. The APE's vertical dimension may extend as much as 6-feet below the current ground surface. Because the majority of the pipeline alignment alternatives along the paved Trout Creek Trail and existing overhead utility corridors, visual impacts are expected to be negligible and a separate APE to address secondary impacts was considered unnecessary.

## ARCHIVAL RECORDS SEARCH

On October 14, 2021, an archival records search in support of the proposed project was conducted at the North Central Information Center (NCIC) of the California Historical Resources Information System, located at California State University, Sacramento. The records searches addressed all portions of the APE and a 0.25-mile radius around the APE (hereafter referred to as the study area). Sources of information included previous survey and cultural resources files; the National Register of Historic Places (NRHP); the California Register of Historical Resources (CRHR); the Office of Historic Preservation (OHP) Archaeological Determinations of Eligibility; the OHP Directory of Properties in the Historic Property Data File; historical topographic maps; and historical aerial photographs.

## Previous Studies

The records search identified 28 studies that have previously been conducted within the study area (**Table 1**). Six of these studies resulted in 100 percent survey coverage of the current APE; they are shown in bold and discussed briefly below.

**Table 1**  
**PREVIOUS STUDIES CONDUCTED WITHIN THE STUDY AREA**

Report	Year	Author(s)	Title	Affiliation
000544	2001	Jensen, Peter	Archaeological Inventory Survey: Proposed Boca Sierra Estates Residential Subdivision Project, c. 238 Acres on Alder Hill, above Truckee, Nevada County	Jensen & Associates
003380	2000	Jensen, Peter	Archaeological Survey, APN 19-42-34	Jensen & Associates
003385	1997	Banka, William J.	Confidential Archaeological Addendum For Timber Operations On Non-Federal Lands In California Marsh Conversion THP	None
003412	1991	Jensen, Sean	Archaeological Inventory Survey Of The Proposed Coachland Mobile Home Park, c. 30 acres near Truckee, Nevada County, California	None
003434	1993	Jensen, Sean	Archaeological Inventory Survey Proposed Subdivision of AP# 19-400-10 c. 110 ac on Lower Alder Mountain near Trout Creek, Truckee, Nevada County, California	None
003467	1979	Johnson, Gary	Archaeological Reconnaissance Report Land Exchange #1 Hopkins Land Exchange	USFS
<b>003503</b>	<b>2001</b>	<b>Lindström, Susan</b>	<b>Third Tahoe Donner Connection Project</b>	<b>None</b>
003579	2000	Lindström, Susan	Mancuso Commercial Project Heritage Resource Inventory	None
<b>003602</b>	<b>2001</b>	<b>Lindström, Susan</b>	<b>6160 Water Storage Tank Project, Heritage Resource Inventory, Truckee, California, Nevada County</b>	<b>None</b>
003657	1994	Lindström, Susan	Truckee Falls Golf Course Heritage Resource Evaluation of Significance 1865 Road (IF-1) and Elle Ellen's Lumber Flume (TF-1) Truckee, California, Nevada County	None
003662	1996	Lindström, Susan	Eighty-Nine Eighty TNT Building Center Project	None
003665	1991	Lindström, Susan	Ronald Grider Euer Valley Road Subdivision	None
004391	1997	Betts, John	Bullshead Analysis Area Archaeological Inventory 05-17-1038	USFS
003602	2002	Lindström, Susan	Tahoe Donner 32-Acre Project: Heritage Resource Inventory Truckee, California	None
005485	1996	Houdyschell, W. H.	Archaeological and Historical Survey for Tahoe Donner Thinning	None
008229	2004	Christensen, T. H., M. Hufstetler, R. Kautz, and M. Kimball	Town of Truckee Historic Resources and Architectural Inventory	Kautz Environmental Consultants, Inc.
008919	2001	Crosland, Richard	A Cultural Resource Inventory of the I-80 Corridor from Bridge Street to the State Highway 89 Interchange at Truckee, California CalTrans Project No. 03-291003	JBR Environmental Consultants, Inc.
008920	2004	Carr, Rick	An Archaeological Survey Report for the Donner Crest Timber Harvesting Plan	Graduate Forester, Applied Forest Management

Report	Year	Author(s)	Title	Affiliation
008927	2003	Bunse, R., B. Larson, and C. Toffelmier	National Register of Historic Places Inventory and Evaluation of the Truckee Ranger District Work Center; Tahoe National Forest Heritage Report No. TNF 1807/ R-2003-0517-00068	JRP Historical Consulting Services
009119	1980	Lord, Paul A., Jr.	Completion Report; Truckee Historical Survey Project	None
009280	2007	Jensen, Peter	Archaeological Survey, 82.64- acre Indian Jack Project	Jensen & Associates
010454	2010	Waechter, S. A., D. J. Andolina, S. G. Lindstrom, J. Garibaldi, and E. Romanski	Revised Cultural Resources Inventory for the Proposed 625 and 650 Line Upgrade Project, Nevada and Placer Counties, California. LTBMU Report no. TB-2007-043/R2007051900068	Far Western Anthropological Research Group, Inc.
<b>010762</b>	<b>1995</b>	<b>Lindström, S., and H. C. Bunt</b>	<b>Steele Enterprises</b>	<b>None</b>
011075	2011	Houdyschell, William H.	An Archaeological Survey Report for the Alder Creek Community Fuel Break Exemption Grant # 10USFS-ES0533 Nevada County, California	None
<b>011083</b>	<b>2012</b>	<b>Waechter, Sharon A., and Allen McCabe</b>	<b>Phase II Evaluation for the Tahoe Donner to Downtown Recreation Trail, Truckee, Nevada County, California</b>	<b>Far Western Anthropological Research Group, Inc.</b>
<b>011797</b>	<b>1994</b>	<b>Lindström, Susan</b>	<b>Truckee Falls Heritage Resource Inventory, 225-Acre Parcel, Truckee, CA, Nevada County</b>	<b>None</b>
<b>012544</b>	<b>2015</b>	<b>Lindström, Susan</b>	<b>Phase 1A Historical and Archaeological Resources Inventory Report Tahoe Donner Trails Project Five-Year Implementation Plan Truckee, California Nevada County</b>	<b>None</b>
012545	2017	Lindström, S., and D. Blom	Donner Lake Rim Trail Project Cultural Resource Inventory	Battle Born GIS Consulting

Of these 28 studies, six directly addressed portions of the current APE and are briefly described below.

- **Report 003503** is a study conducted in 2001 to support the Town of Truckee in its environmental review of alternative road connections to the Truckee Donner Subdivision. This study, which examined the central portion of the current APE, resulted in the documentation of two sites within the APE, including P-29-001236 (Euer Valley Road) and P-29-001238 (a single-pole utility line).
- **Report 003602** documents a study conducted in 2001 to support planned construction of a water storage tank and a 1,200-foot pipeline by the District. The report's study area, which intersected the current APE near its eastern end, did not result in the documentation of any cultural resources.
- **Report 010762** is a study conducted in 1995 to support a Timber Harvesting Plan. The report's study area, which intersected the current APE near its eastern end, did not result in the documentation of any cultural resources within the APE.
- **Report 011083** was conducted in 2012 to support the Tahoe Donner to Downtown Recreation Trail, which includes the Trout Creek Trail. Surveys conducted for the study characterized the entire current APE and provided eligibility recommendations for three previously unevaluated resources.

- **Report 011797** documents a study conducted in 1994 to support development of the Coyote Moon Golf Course. The report’s study area included the area south of the current APE’s western half, but the study did not result in the documentation of any cultural resources.
- **Report 012544** was conducted in 2015 to support the Tahoe Donner Association’s plans to rehabilitate existing hiking trails and construct new trails over an approximately 22-mile area. Only the far western portion of the current APE was investigated by this study, which did not result in the documentation of any cultural resources.

## Previously Documented Resources

The records search also determined that there are 29 previously recorded cultural resources located within the study area (**Table 2**). Five of these resources are located within the current APE; they are shown in bold and discussed briefly below.

**Table 2**  
**PREVIOUSLY DOCUMENTED RESOURCES WITHIN THE STUDY AREA**

Primary	Trinomial	Description	Year	Author(s)	Affiliation
P-29-000169	CA-NEV-000111	Low-density lithic scatter with tools	1973	Peak, A., and P. Johnson	None
P-29-000171	CA-NEV-000113	Lithic scatter	1973	Peak, A., and P. Johnson	None
P-29-000514	CA-NEV-000456H	Historic campsite	1980	Rush, Alex	None
P-29-000515	CA-NEV-000457H	Small scatter of historic debris	1980	Rush, Henton	None
<b>P-29-000732</b>	<b>CA-NEV-000701H</b>	<b>Overland Emigrant Trail</b>	<b>1976</b>	<b>Wilford, Paul</b>	<b>None</b>
P-29-001059		Trout Creek Dump	2001	Lindstrom, S., and L. Bennett	None
P-29-001128	CA-NEV-000793	Lithic scatter with tools	1993	Jensen, Sean	Jensen & Associates
P-29-001130	CA-NEV-000794H	Scatter of 1920s – 1950s refuse	1993	Jensen, Sean	Jensen & Associates
P-29-001233	CA-NEV-000857H	Historic and modern refuse scatter	2000	Crosland, Richard	JBR Environmental Consultants
P-29-001234	CA-NEV-000858	Lithic scatter	2001	Lindstrom, S., and L. Bennett	None
P-29-001235	CA-NEV-000859H	Cinder quarry pit	2001	Lindstrom, S., and L. Bennett	None
<b>P-29-001236</b>	<b>None</b>	<b>Euer Valley Road (Bridge Street Extension)</b>	<b>1994</b>	<b>Lindstrom, S., and C. B. Blanchard</b>	<b>None</b>
P-29-001237	None	Historic flume	1994	Lindstrom, S., and C. B. Blanchard	None
<b>P-29-001238</b>	<b>None</b>	<b>Historic single-pole utility line</b>	<b>2001</b>	<b>Lindstrom, S., and L. Bennett</b>	<b>None</b>
P-29-001239	None	Historic road segment	2001	Lindstrom, S., and L. Bennett	None
P-29-001241	None	Historic fenceline	2001	Lindstrom, S., and L. Bennett	None
P-29-001242	CA-NEV-000861H	Concrete water intake structure	2001	Lindstrom, S., and L. Bennett	None
P-29-001243	None	High-cut stump with axe marks	2001	Lindstrom, S., and L. Bennett	None
P-29-001248	CA-NEV-000865H	Sawmill and associated outbuilding	2000	Lindstrom, S.	None

Primary	Trinomial	Description	Year	Author(s)	Affiliation
P-29-001249	None	Historic refuse deposit	2000	Lindstrom, S.	None
P-29-001250	None	Emigrant Trail marker	2000	Lindstrom, S.	None
P-29-001492	CA-NEV-000971H	Truckee Ranger District Work Name: Center/ Old Truckee Ranger Station	2003	Larson, Bryan, and Cindy Toffelmier	JRP
P-29-004231	None	Historic dirt road	1994	Lindstrom, S.	None
P-29-004232	None	Numerous historic-era isolated artifacts	1994	Bunt, Herbert C., and Susan G. Lindstrom	None
<b>P-29-004341</b>	<b>None</b>	<b>Lithic scatter with tools and historic refuse</b>	<b>2012</b>	<b>McCabe, A., and A. Garner</b>	<b>Far Western Anthropological Research Group, Inc.</b>
<b>P-29-004342</b>	<b>None</b>	<b>Historic dirt road</b>	<b>2012</b>	<b>McCabe, A., and A. Garner</b>	<b>Far Western Anthropological Research Group, Inc.</b>
P-29-004343	None	Mid-20 <sup>th</sup> century refuse scatter	2011	McCabe, A., and A. Garner	Far Western Anthropological Research Group, Inc.
P-29-004344	None	Historic dirt road	2011	McCabe, A., and A. Garner	Far Western Anthropological Research Group, Inc.
P-29-004345	None	Mid-20 <sup>th</sup> century dump site	2011	McCabe, A., and A. Garner	Far Western Anthropological Research Group, Inc.

Of these 29 resources, five intersect portions of the current APE and are briefly described below.

- **P-29-000732 (CA-NEV-000701H)** represents the Overland Emigrant Trail. The trail was designated a California Registered Historical Landmark No. 799 in 1964, and as such it has automatically been listed as a historical resource on the CRHR. P-29-000732 intersects the current APE at its far eastern end, near the intersection of Comstock Drive and Pioneer Trail.
- **P-29-001236** is a section of Euer Valley Road, which was constructed in the 1880s to reach Sophary Euer’s mountain dairy ranch in Euer Valley. The road has not been evaluated for eligibility to the CRHR or NRHP; in her 1994 study (Report 003503) Susan Lindström noted that although the road is associated with events and personalities of local importance, it is “typical and (does) not incorporate any unique or unusual engineering aspects.” The road has been altered by subsequent grading and alterations of its original alignment, leading Lindström to recommend that the road does not meet criteria for listing in the CRHR. A portion of the road in the center of the current APE has been repurposed as the Trout Creek Recreational Trail.
- **P-29-001238** represents an east-to-west trending single-pole utility line that was constructed some time prior to 1955. In her 1994 study (Report 003503), Lindström recommended that the utility line was ineligible for the CRHR because all of its “potentially significant information will have been recovered with the completion of the heritage inventory report and no further research or project constraints are necessary.” The eastern portion of the current APE and the far western portion of Alignment B are located within P-29-001238’s corridor.
- **P-29-004341** represents a sparse, surface and near-surface scatter of basalt tools and debitage, historic-period refuse, and modern trash on a western terrace above Trout Creek. The site was found ineligible for the CRHR through survey evaluation (Report 011083). Originally located adjacent to Trout Creek in the western portion of the current APE, the majority of the site

appears to have been destroyed during construction of the pedestrian bridge that crosses the creek.

- **P-29-004342** is a dirt road that is depicted on 1940 and 1955 maps of the Truckee area, and is currently used as a recreational trail. The road cuts diagonally through the western portion of the current APE. In 2012 Sharon Waechter and Allen McCabe recommended that the site is ineligible for inclusion in the CRHR (Report 011083).

## NATIVE AMERICAN OUTREACH

On October 8, 2021, HELIX requested that the Native American Heritage Commission (NAHC) conduct a search of their Sacred Lands File for the presence of Native American sacred sites or human remains in the vicinity of the proposed project area. A written response received from the NAHC on November 16, 2021, stated that the Sacred Lands File was negative for the presence of Native American cultural resources in the immediate project area.

On February 24, 2022, HELIX sent letters to eight Native American contacts who were recommended by the NAHC as potential sources of information related to cultural resources in the vicinity of the project area:

- Darryl Cruz, Tribal Historic Preservation Officer, Washoe Tribe of Nevada and California
- Pamela Cubbler, Treasurer, Colfax-Todds Valley Consolidated Tribe
- Steven Hutchason, Tribal Historic Preservation Officer, Wilton Rancheria
- Clyde Prout, Chairperson, Colfax-Todds Valley Consolidated Tribe
- Don Ryberg, Chairperson, Tsi Akim Maidu
- Serrell Smokey, Chairperson, Washoe Tribe of Nevada and California
- Jesus Tarango, Chairperson, Wilton Rancheria
- Gene Whitehouse, Chairperson, United Auburn Indian Community of the Auburn Rancheria

The letters advised the tribes and specific individuals of the proposed project and requested information regarding cultural resources in the immediate area, as well as any feedback or concerns related to the proposed project. As of the date of this report, no responses have been received. Documentation related to Native American coordination is included as **Attachment B**.

## INTENSIVE PEDESTRIAN SURVEY

### Survey Methods

On October 19, 2021, HELIX Senior Archaeologist, Clarus Backes, RPA, conducted a pedestrian survey to characterize any prehistoric or historic-era archaeological resources located within the APE. During the survey the ground surface throughout the APE was examined for the presence of historic-era artifacts (e.g., metal, glass, ceramics), prehistoric artifacts (e.g., flaked stone tools, tool-making debris), and other features that might represent human activity that took place more than 50 years ago. Survey conditions were generally good in all areas where the pipeline alignment alternatives follow paved or graded roads and trails, and moderate to poor in surrounding areas where thick vegetation and patchy snow limited ground surface visibility. Survey photographs are presented in **Attachment C**.



## Survey Results

The APE is generally bordered by residential parcels and forested land to the north and west, industrial land uses to the east, and the Coyote Moon Golf Course to the south. The 1.7-mile long APE follows disturbed areas along its entire length and is generally characterized by a moderate level of human disturbance. The recreational trail and dirt roads in the APE are subject to regular recreational uses including walking, jogging, bicycling, and cross-country skiing. The utility corridor contains overhead utility lines and utility poles and the vegetation is regularly maintained to prevent interference with the power lines. Terrain within the APE ranges from steeply sloping to gently sloping, with elevations varying from approximately 6,235-feet above mean sea level (amsl) at the western end of the APE to approximately 5,980-feet amsl near the eastern end of the APE. Soils in the APE generally consist of a 20- to 70-inch-thick stratum of gravelly or sandy clay loam overlying unweathered bedrock.

Both Alignment A and Alignment B begin at an approximately 0.05-mile section of Northwoods Boulevard, located at the west end of the APE. Alignment A would turn east through the Trout Creek trailhead parking lot, and continue east along the Trout Creek Trail (Photograph 1) for 0.35-mile until it would reach the existing pedestrian bridge that crosses over Trout Creek (Photograph 2). The approximately 12-foot-wide Trout Creek Trail is heavily used by cyclists and pedestrians, and its entire length is fully paved. Alignment B would turn east onto the existing overhead utility corridor (Photograph 3), and follow the corridor approximately 0.23-mile until it jogs north to connect with Trout Creek Trail (and Alignment A) on the west side of the pedestrian bridge. The utility corridor is approximately 200-foot-wide and heavily disturbed by regular, ongoing maintenance and vegetation management activities. The area west of the bridge was once the location of archaeological site P-29-004341, a scatter of prehistoric basalt tools and debitage, historic-period refuse, and modern trash that was destroyed by construction of the bridge.

Both pipeline alignments share a common path east of Trout Creek. In the central portion of the APE the alignments continue along the paved Trout Creek Trail for 0.47-mile before making a slight turn northwards to join an existing dirt utility access road. This paved section of the APE represents Euer Valley Road (P-29-001236), a historic-era road that has been recommended ineligible for listing in the CRHR (Photograph 4). The alignments then follow the heavily disturbed dirt utility access road (Photograph 5) approximately 0.31-mile before re-entering the existing overhead utility corridor for 0.3-mile (Photograph 6). From the end of the utility corridor, the alignments join an existing paved driveway that travels 0.17-mile to the intersection of Comstock Drive and Pioneer Trail, the eastern termini of the two pipeline alignment alternatives.

The two proposed pumpstation location alternatives were also surveyed for cultural resources (Photographs 7 and 8). Visibility in both areas was moderate to poor due to thick undergrowth and snow, although both show evidence of recent disturbance in the form of borrow pits and push piles (Photograph 9).

No evidence for undocumented prehistoric or historic-era cultural resources was found during the survey of the pipeline alignments and pumpstation location alternatives. The survey found that the majority of the APE is paved, graded, or heavily disturbed by ongoing maintenance activities; ground visibility was poor in the two pumpstation location alternatives, but both appear to be recently disturbed. In summary, the proposed project would not affect previously recorded cultural resources, and no undocumented resources were found during the survey.

## CONCLUSIONS AND RECOMMENDATIONS

The records search determined that the entirety of the APE has previously been surveyed for cultural resources, and five previously documented resources are located within the boundaries of the APE. These resources are almost all linear, historic-era resources, many of which have been repurposed into modern recreational trails and access roads. The sole previously documented prehistoric resource, site P-29-004341, was destroyed by construction of the pedestrian bridge over Trout Creek.

The results of HELIX's Native American outreach remain inconclusive – a search of the Sacred Lands File by the NAHC did not indicate the presence of sensitive Native American resources in the area, and as of the date of this report no responses have been received from the Native American tribes and individuals contacted by HELIX for additional information.

The majority of the two pipeline alignment alternatives consist of paved trails, graded dirt access roads, and a regularly maintained transmission corridor. As such, neither corridor shows evidence of undocumented cultural resources. Ground visibility was moderate to poor during the survey of the two pumpstation location alternatives, but the terrain and previous disturbances in these areas suggest that the likelihood of encountering cultural resources in either is low.

No historical resources or historic properties will be affected by the proposed project. However, because previous studies have demonstrated that the region has a long history of occupation and land use throughout the prehistoric and historic eras, the APE should be considered moderately sensitive for cultural resources if excavations or trenching extend below previously disturbed areas. The recommendations provided below are intended to minimize the potential for buried cultural resources to be significantly impacted during project implementation.

### Inadvertent Discoveries

In the event that cultural resources are exposed during ground-disturbing activities, construction activities should be halted in the immediate vicinity of the discovery. If the site cannot be avoided during the remainder of construction, an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards should then be retained to evaluate the find's significance under the California Environmental Quality Act (CEQA). If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted.

### Treatment of Human Remains

Although there is no evidence to suggest the presence of human remains, their discovery is always a possibility during a project. If such an event did occur, the specific procedures outlined by the NAHC, in accordance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code, will be followed:


1. All excavation activities within 60-feet of the remains will immediately stop, and the area will be protected with flagging or by posting a monitor or construction worker to ensure that no additional disturbance occurs.
2. The project owner or their authorized representative will contact the County Coroner.



3. The coroner will have two working days to examine the remains after being notified in accordance with HSC 7050.5. If the coroner determines that the remains are Native American and are not subject to the coroner's authority, the coroner will notify NAHC of the discovery within 24 hours.
4. NAHC will immediately notify the Most Likely Descendant (MLD), who will have 48 hours after being granted access to the location of the remains to inspect them and make recommendations for treatment of them. Work will be suspended in the area of the find until the senior archaeologist approves the proposed treatment of human remains.
5. If the coroner determines that the human remains are neither subject to the coroner's authority nor of Native American origin, then the senior archaeologist will determine mitigation measures appropriate to the discovery.

Should you have any questions regarding our approach, methodology, results or conclusions, please do not hesitate to contact me.

Sincerely,



Clarus J. Backes, Jr., RPA  
Senior Archaeologist  
HELIX Environmental Planning, Inc.

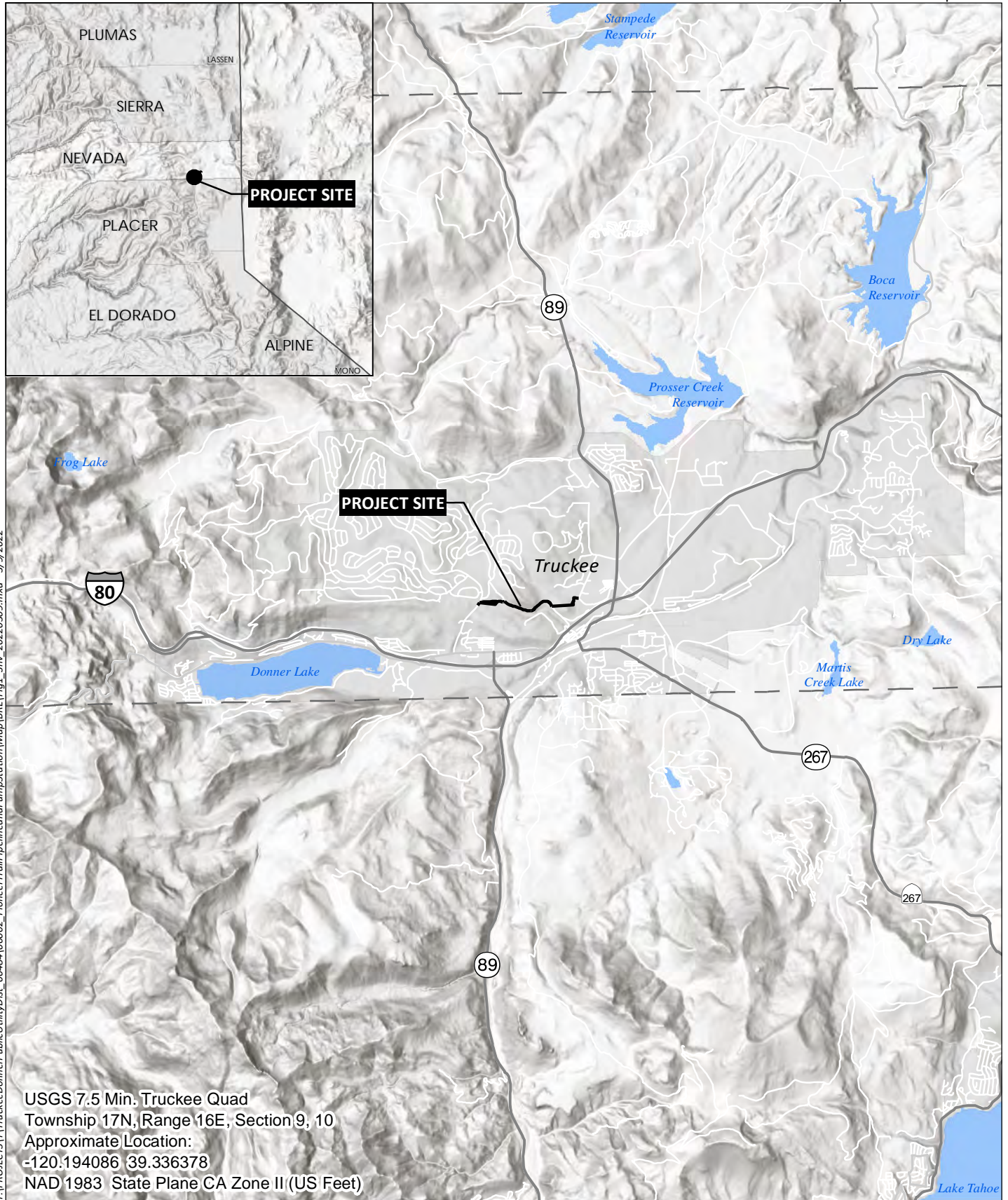
**Attachments:**

- Attachment A – Figures
- Attachment B – Native American Correspondence
- Attachment C – Survey Photographs

# Attachment A

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Figures



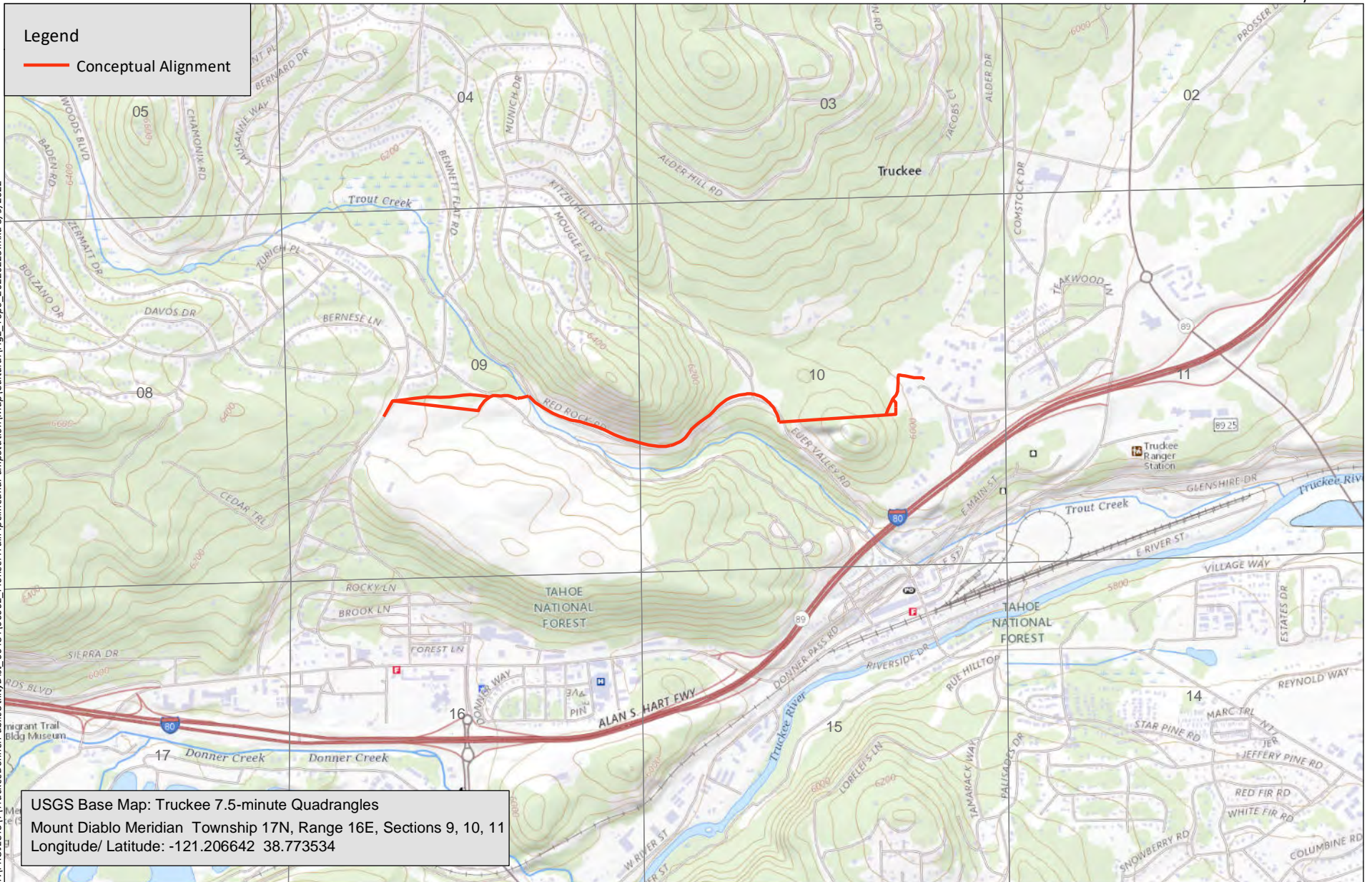
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Source: Base Map Layers (Esri, USGS, NGA, NASA)



Legend  
— Conceptual Alignment

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USGS Base Map: Truckee 7.5-minute Quadrangles  
Mount Diablo Meridian Township 17N, Range 16E, Sections 9, 10, 11  
Longitude/ Latitude: -121.206642 38.773534













Source: USGS 2021

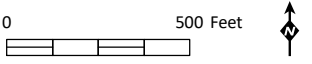




**Legend**

-  Area of Potential Effects
-  Alignment A
-  Alignment B
-  Creek Crossing on Existing Pedestrian Bridge
-  Trout Creek Recreational Trail
-  Existing Dirt Road and Sewer Pipeline
-  Existing Overhead Electrical Transmission Lines
-  Existing Paved Driveway and Water Pipeline
-  New Pump Station
-  Existing Paved Roadway

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Source: Aerial (DigitalGlobe, 6/2/2021).



# Attachment B

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Native American  
Correspondence

## NATIVE AMERICAN HERITAGE COMMISSION

November 16, 2021

Clarus Backes  
HELIX

**Submitted via Electronic Mail**  
**Via Email to: [clarusb@helixepi.com](mailto:clarusb@helixepi.com)**

**Re: Truckee Donner Public Utility District, Nevada County.**

Dear Mr. Backus:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: [katy.sanchez@nahc.ca.gov](mailto:katy.sanchez@nahc.ca.gov).

Sincerely,

Katy Sanchez  
Associate Environmental Planner

Attachment



CHAIRPERSON  
**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

PARLIAMENTARIAN  
**Russell Attebery**  
Karuk

COMMISSIONER  
**William Mungary**  
Paiute/White Mountain  
Apache

COMMISSIONER  
**Isaac Bojorquez**  
Ohlone-Costanoan

COMMISSIONER  
**Sara Dutschke**  
Miwok

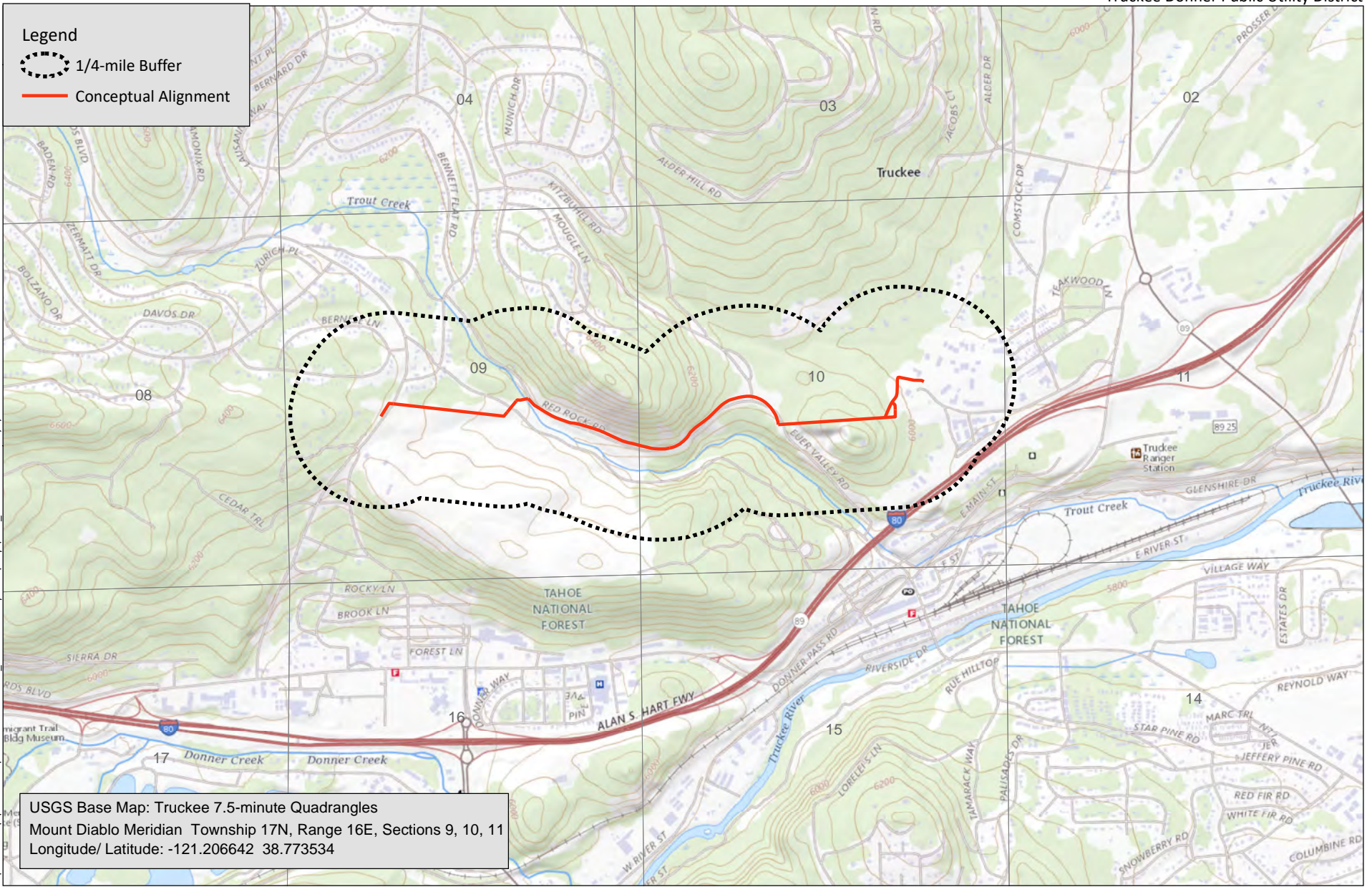
COMMISSIONER  
**Buffy McQuillen**  
Yokayo Pomo, Yuki,  
Nomlaki

COMMISSIONER  
**Wayne Nelson**  
Luiseño

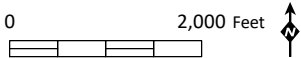
COMMISSIONER  
**Stanley Rodriguez**  
Kumeyaay

EXECUTIVE SECRETARY  
**Christina Snider**  
Pomo

**NAHC HEADQUARTERS**  
1550 Harbor Boulevard  
Suite 100  
West Sacramento,  
California 95691  
(916) 373-3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
[NAHC.ca.gov](http://NAHC.ca.gov)



USGS Base Map: Truckee 7.5-minute Quadrangles  
 Mount Diablo Meridian Township 17N, Range 16E, Sections 9, 10, 11  
 Longitude/ Latitude: -121.206642 38.773534



Source: USGS 2021

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**Native American Heritage Commission  
Native American Contacts List  
November 14, 2021**

Colfax-Todds Valley Consolidated Tribe  
Pamela Cubbler, Treasurer  
P.O. Box 4884  
Auburn CA 95604  
PCubbler@colfaxrancheria.com  
(530) 320-3943

Miwok  
Maidu

Washoe Tribe of Nevada and California  
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919 Highway 395 North  
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Darrel.Cruz@washoetribe.us  
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(775) 546-3421 Cell

Washoe

Colfax-Todds Valley Consolidated Tribe  
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Miwok  
Maidu

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(916) 683-6000 Office  
(916) 683-6015 Fax

Miwok

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Don Ryberg, Chairperson  
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Maidu

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shutchason@wiltonrancheria-nsn.gov  
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(916) 683-6015 Fax

Miwok

United Auburn Indian Community of the Auburn Rancheria  
Gene Whitehouse, Chairperson  
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Auburn CA 95603  
bguth@auburnrancheria.com  
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(530) 883-2380 Fax

Maidu  
Miwok

Washoe Tribe of Nevada and California  
Serrell Smokey, Chairperson  
919 Highway 395 North  
Gardnerville NV 89410  
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(775) 265-6240 Fax

Washoe

HELIX Environmental Planning, Inc.  
11 Natoma Street  
Suite 155  
Folsom, CA 9530  
916.365.8700 tel  
619.462.0552 fax  
www.helixepi.com



February 24, 2022

Darryl Cruz, THPO  
Washoe Tribe of Nevada and California  
919 Highway 395 North  
Gardnerville, NV 89410

Subject: Truckee Donner Public Utility District Pioneer Pipeline Project

Dear Mr. Cruz,

HELIX Environmental Planning, Inc. (HELIX) has contracted with the Truckee Donner Public Utility District (District) to provide a Cultural Resources Assessment in support of the proposed Pioneer Pipeline Project (project) located in the town of Truckee, Nevada County, California. A search of the Native American Heritage Commission's (NAHC) Sacred Lands File returned negative results, and the NAHC has suggested we contact you for information regarding Native American resources in or near the project area.

The Tahoe Donner subdivision consists of about 5,600 single family homes, about 400 multifamily residential units, a golf course, downhill ski area, cross-country ski area and other amenities. The entire subdivision is served by a single 14-inch welded steel pipeline with two pump stations and two storage tanks that essentially serve as forebays. These facilities were constructed in the early 1970s and are approaching the end of their useful life.

The District has identified the need to construct a second pipeline to provide water to the subdivision. This will be a buried, 1.7-mile long, 16-inch diameter pipeline supplying water from Northwoods Boulevard and terminating at the intersection of Comstock Drive and Pioneer Trail. Underground electrical and communications conduits would also be installed in the pipeline trench. The District has identified two potential alignments, both which traverses area previously disturbed by utilities or paved recreation trails. Alignment A would begin on Northwoods Boulevard and move north on Northwoods Boulevard for 0.05 miles before turning east on the paved Trout Creek Trail. The alignment would continue east along Trout Creek Trail for 0.35 miles until it would reach the existing pedestrian bridge that crosses over Trout Creek. Trout Creek Trail, a Class I Bike Trail, is a 12 feet wide paved trail and is lined with trees and large boulders and can be very busy with cyclists and pedestrians during the warmer months. Alignment B would begin on Northwoods Boulevard and move north on Northwoods Boulevard for 0.05 miles before turning east on the existing overhead utility corridor. After moving 0.23 miles along the utility corridor, the alignment would move northeast for 0.04 miles through

disturbed habitat with no jurisdictional features before reaching the paved Trout Creek Trail. The alignment would then move east along Trout Creek Trail for 0.09 miles until it would reach the existing pedestrian bridge the crosses over Trout Creek.

The project would be located in Sections 9 and 10 of Township 17N, Range 16E, as shown on the attached Rocklin, CA 7.5' USGS quadrangle map.

If there are sensitive resources on or near the proposed project location that could be impacted by construction activities please advise us accordingly. If you have any information, questions, or concerns regarding the proposed project, please feel free to contact me directly at (916) 365-8700 or [clarusb@helixepi.com](mailto:clarusb@helixepi.com).

Sincerely,



Clarus J. Backes Jr., M.A., RPA  
Cultural Resources Group Manager  
HELIX Environmental Planning, Inc.

HELIX Environmental Planning, Inc.  
11 Natoma Street  
Suite 155  
Folsom, CA 9530  
916.365.8700 tel  
619.462.0552 fax  
www.helixepi.com



February 24, 2022

Pamela Cubbler, Treasurer  
Colfax-Todds Valley Consolidated Tribe  
P.O. Box 4884  
Auburn, CA 95604

Subject: Truckee Donner Public Utility District Pioneer Pipeline Project

Dear Ms. Cubbler,

HELIX Environmental Planning, Inc. (HELIX) has contracted with the Truckee Donner Public Utility District (District) to provide a Cultural Resources Assessment in support of the proposed Pioneer Pipeline Project (project) located in the town of Truckee, Nevada County, California. A search of the Native American Heritage Commission's (NAHC) Sacred Lands File returned negative results, and the NAHC has suggested we contact you for information regarding Native American resources in or near the project area.

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Sincerely,



Clarus J. Backes Jr., M.A., RPA  
Cultural Resources Group Manager  
HELIX Environmental Planning, Inc.

HELIX Environmental Planning, Inc.  
11 Natoma Street  
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Folsom, CA 9530  
916.365.8700 tel  
619.462.0552 fax  
www.helixepi.com



February 24, 2022

Steven Hutchason, THPO  
Wilton Rancheria  
9728 Kent Street  
Elk Grove, CA, 95624

Subject: Truckee Donner Public Utility District Pioneer Pipeline Project

Dear Mr. Hutchason,

HELIX Environmental Planning, Inc. (HELIX) has contracted with the Truckee Donner Public Utility District (District) to provide a Cultural Resources Assessment in support of the proposed Pioneer Pipeline Project (project) located in the town of Truckee, Nevada County, California. A search of the Native American Heritage Commission's (NAHC) Sacred Lands File returned negative results, and the NAHC has suggested we contact you for information regarding Native American resources in or near the project area.

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Cultural Resources Group Manager  
HELIX Environmental Planning, Inc.



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11 Natoma Street  
Suite 155  
Folsom, CA 9530  
916.365.8700 tel  
619.462.0552 fax  
www.helixepi.com



February 24, 2022

Clyde Prout, Chairperson  
Colfax-Todds Valley Consolidated Tribe  
P.O. Box 4884  
Auburn CA 95604

Subject: Truckee Donner Public Utility District Pioneer Pipeline Project

Dear Chairperson Prout,

HELIX Environmental Planning, Inc. (HELIX) has contracted with the Truckee Donner Public Utility District (District) to provide a Cultural Resources Assessment in support of the proposed Pioneer Pipeline Project (project) located in the town of Truckee, Nevada County, California. A search of the Native American Heritage Commission's (NAHC) Sacred Lands File returned negative results, and the NAHC has suggested we contact you for information regarding Native American resources in or near the project area.

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Sincerely,



Clarus J. Backes Jr., M.A., RPA  
Cultural Resources Group Manager  
HELIX Environmental Planning, Inc.

HELIX Environmental Planning, Inc.  
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Folsom, CA 9530  
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www.helixepi.com



February 24, 2022

Don Ryberg, Chairperson  
Tsi Akim Maidu  
P.O Box 510  
Browns Valley, CA 95918

Subject: Truckee Donner Public Utility District Pioneer Pipeline Project

Dear Chairperson Ryberg,

HELIX Environmental Planning, Inc. (HELIX) has contracted with the Truckee Donner Public Utility District (District) to provide a Cultural Resources Assessment in support of the proposed Pioneer Pipeline Project (project) located in the town of Truckee, Nevada County, California. A search of the Native American Heritage Commission's (NAHC) Sacred Lands File returned negative results, and the NAHC has suggested we contact you for information regarding Native American resources in or near the project area.

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The District has identified the need to construct a second pipeline to provide water to the subdivision. This will be a buried, 1.7-mile long, 16-inch diameter pipeline supplying water from Northwoods Boulevard and terminating at the intersection of Comstock Drive and Pioneer Trail. Underground electrical and communications conduits would also be installed in the pipeline trench. The District has identified two potential alignments, both which traverses area previously disturbed by utilities or paved recreation trails. Alignment A would begin on Northwoods Boulevard and move north on Northwoods Boulevard for 0.05 miles before turning east on the paved Trout Creek Trail. The alignment would continue east along Trout Creek Trail for 0.35 miles until it would reach the existing pedestrian bridge that crosses over Trout Creek. Trout Creek Trail, a Class I Bike Trail, is a 12 feet wide paved trail and is lined with trees and large boulders and can be very busy with cyclists and pedestrians during the warmer months. Alignment B would begin on Northwoods Boulevard and move north on Northwoods Boulevard for 0.05 miles before turning east on the existing overhead utility corridor. After moving 0.23 miles along the utility corridor, the alignment would move northeast for 0.04 miles through

disturbed habitat with no jurisdictional features before reaching the paved Trout Creek Trail. The alignment would then move east along Trout Creek Trail for 0.09 miles until it would reach the existing pedestrian bridge the crosses over Trout Creek.

The project would be located in Sections 9 and 10 of Township 17N, Range 16E, as shown on the attached Rocklin, CA 7.5' USGS quadrangle map.

If there are sensitive resources on or near the proposed project location that could be impacted by construction activities please advise us accordingly. If you have any information, questions, or concerns regarding the proposed project, please feel free to contact me directly at (916) 365-8700 or [clarusb@helixepi.com](mailto:clarusb@helixepi.com).

Sincerely,



Clarus J. Backes Jr., M.A., RPA  
Cultural Resources Group Manager  
HELIX Environmental Planning, Inc.

HELIX Environmental Planning, Inc.  
11 Natoma Street  
Suite 155  
Folsom, CA 9530  
916.365.8700 tel  
619.462.0552 fax  
www.helixepi.com



February 24, 2022

Serrell Smokey, Chairperson  
Washoe Tribe of Nevada and California  
919 Highway 395 North  
Gardnerville, NV 89410

Subject: Truckee Donner Public Utility District Pioneer Pipeline Project

Dear Chairperson Smokey,

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February 24, 2022

Jesus Tarango, Chairperson  
Wilton Rancheria  
9728 Kent Street  
Elk Grove, CA, 95624

Subject: Truckee Donner Public Utility District Pioneer Pipeline Project

Dear Chairperson Tarango,

HELIX Environmental Planning, Inc. (HELIX) has contracted with the Truckee Donner Public Utility District (District) to provide a Cultural Resources Assessment in support of the proposed Pioneer Pipeline Project (project) located in the town of Truckee, Nevada County, California. A search of the Native American Heritage Commission's (NAHC) Sacred Lands File returned negative results, and the NAHC has suggested we contact you for information regarding Native American resources in or near the project area.

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February 24, 2022

Gene Whitehouse, Chairperson  
United Auburn Indian Community of the Auburn Rancheria  
10720 Indian Hill Road  
Auburn, CA 95603

Subject: Truckee Donner Public Utility District Pioneer Pipeline Project

Dear Chairperson Whitehouse,

HELIX Environmental Planning, Inc. (HELIX) has contracted with the Truckee Donner Public Utility District (District) to provide a Cultural Resources Assessment in support of the proposed Pioneer Pipeline Project (project) located in the town of Truckee, Nevada County, California. A search of the Native American Heritage Commission's (NAHC) Sacred Lands File returned negative results, and the NAHC has suggested we contact you for information regarding Native American resources in or near the project area.

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# Attachment C

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Survey  
Photographs



Photograph 1. Proposed Alignment A along Trout Creek Trail, looking east.



Photograph 2. Pedestrian bridge over Trout Creek, looking east.





Photograph 3. Proposed Alignment B along the existing overhead utility corridor, looking east.

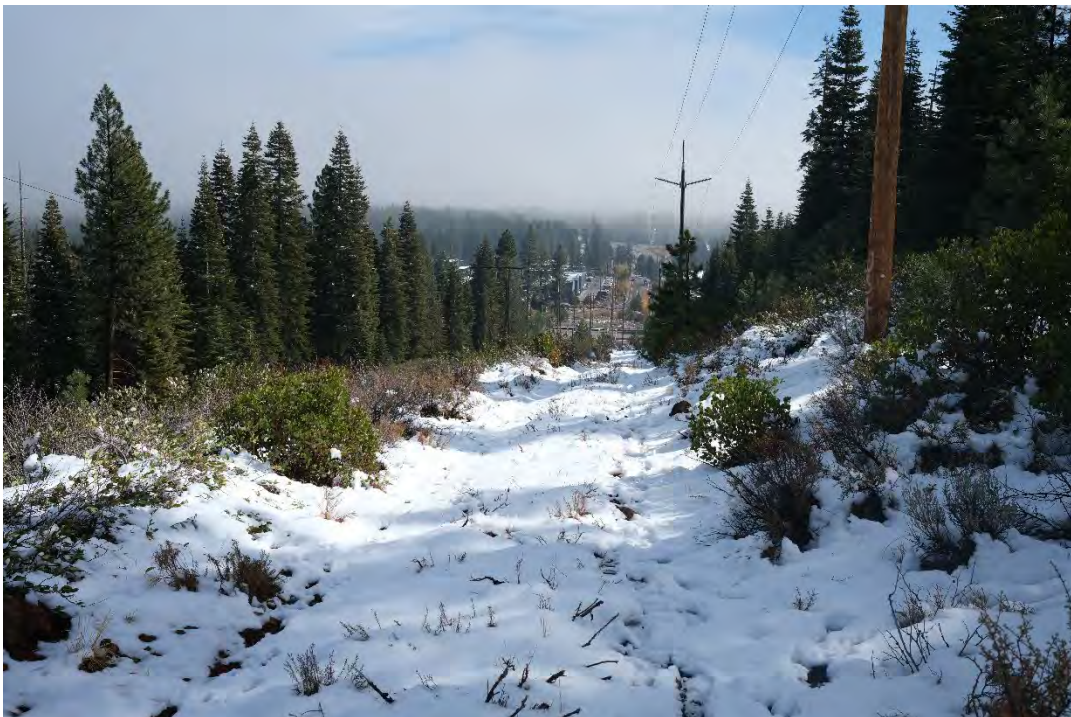


Photograph 4. Section of Euer Valley Road (P-29-001236) repurposed as Trout Creek Trail, looking northeast.





Photograph 5. Proposed alignments within the dirt utility access road, looking southwest.



Photograph 6. Proposed alignments within the overhead utility corridor, looking east.





Photograph 7. Snow and vegetation in the northern pumpstation location alternative, looking east.



Photograph 8. Vegetation in the southern pumpstation location alternative, looking northeast.





Photograph 9. Borrow pit in the northern pumpstation location alternative, looking southeast.

# Appendix E

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## Mitigation Monitoring and Reporting Program

# MITIGATION MONITORING AND REPORTING PROGRAM

## INTRODUCTION

Mitigation Monitoring and Reporting Programs (MMRP) are required by the California Environmental Quality Act (CEQA) Section 21081.6 to be adopted by CEQA Lead Agencies for projects having the potential to cause significant environmental impacts. The MMRP describes changes to the project or conditions of project approval that mitigate or avoid the project’s potential significant effects on the environment. This MMRP addresses the Pioneer Trail Pipeline and Pumpstation proposed by the Truckee Donner Public Utility District. A brief description of the proposed project is provided below. The proposed project is located in the Town of Truckee; the Truckee Donner Public Utility District (District) is the Lead Agency under CEQA and has discretionary authority over the proposed project.

## MMRP FORMAT AND IMPLEMENTATION

Mitigation measures that would reduce or eliminate potential environmental impacts of the proposed project are identified in the Pioneer Trail Pipeline and Pump Station ISMND. These mitigation measures will become conditions of project approval if the project is approved. The District is required to verify that all adopted mitigation measures are implemented properly and to ensure compliance, this MMRP (including the checklist) has been formulated. The MMRP shall be adopted, along with CEQA Findings, by the District (Lead Agency) and must be administered by District personnel. Specific responsibilities are delineated for each measure in the attached checklist table and these responsibilities may be delegated to qualified District staff or consultants.

The checklist, which follows as Table B-1, is intended to be used by the applicant, grading/construction contractors, and personnel from the above-listed District, as the appointed mitigation implementation and monitoring entities. Information contained within the checklist clearly identifies each mitigation measure, defines the conditions required to verify compliance, and delineates the monitoring schedule. Following is an explanation of the three columns that constitute each MMRP checklist.

Column 1      *Mitigation Measure:* An inventory of each mitigation measure is provided.

Column 2      *Monitoring Responsibility:* Identifies who are responsible for determining compliance with each mitigation measure (e.g., District personnel, construction contractor, project applicant, qualified biologist).

Column 3      *Implementation Schedule:* As scheduling is dependent upon the progression of the overall project, specific dates are not used within the “Schedule” column. Instead, scheduling describes a logical succession of events (e.g., prior to ground-disturbing activities, etc.) and, if necessary, delineates a follow-up program.

Column 4      *Monitoring Compliance Record Name/Date:* Column is left blank and is to be signed and dated when compliance with the mitigation measure has been met.

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Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<b>Air Quality</b>			
<p>AQ-1: Accordance with the Northern Sierra Air Quality Management's Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects</p> <p>The following restrictions shall be noted on all project construction contracts in accordance with the Northern Sierra Air Quality Management's Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects:</p> <ul style="list-style-type: none"> <li>• No open burning of vegetation shall be permitted. All vegetation cleared from the project site during construction shall be transported to a suitable local landfill, recycle/composting facility, or biomass facility.</li> <li>• Where sufficient grid electrical power is available, internal combustion engine generators shall not be used for any project construction activity.</li> <li>• The construction contractor shall coordinate with the Town of Truckee and/or Caltrans to implement traffic control whenever project construction work occurs within, or would affect the flow of traffic on, a public road right-of-way.</li> <li>• Construction activity within a public ROW, or activity requiring a high volume of haul trucks shall be scheduled to occur outside of peak traffic hours (work commute or school traffic) for the roadways affected whenever possible.</li> </ul>	District; Construction Contractor	Ongoing during construction	
<b>Biological Resources</b>			
<p>BIO-1: Measures to Avoid Impacts to Special Status Plant Species</p> <ul style="list-style-type: none"> <li>• Floristically appropriate botanical surveys shall be conducted to determine the presence or absence of special-status plant</li> </ul>	District; Qualified Biologist	Prior to commencement of construction	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>species within the riparian habitat in the Study Area prior to commencement of construction. The surveys shall be floristic in nature and shall be seasonally timed to coincide with the blooming period of regionally occurring special-status plant species (generally May through August). Surveys shall be conducted to determine the status of these species in the Study Area. If special-status plants are not found during the focused surveys, then no further action is required.</p> <ul style="list-style-type: none"> <li>• If special-status plants are documented in the project area, a report shall be submitted to CNDDDB to document the status of the species on the site. If the project is designed to avoid impacts to special-status plant individuals and habitat, no further mitigation for these species would be necessary.               <ul style="list-style-type: none"> <li>○ If special-status plants are documented in the project area and project impacts to these species are anticipated, consultation with CDFW shall be conducted to develop a mitigation strategy. The proponent shall notify CDFW, providing a complete description of the location, size, and condition of the occurrence, and the extent of proposed direct and indirect impacts to it. The project proponent shall comply with any mitigation requirements imposed by CDFW. Mitigation requirements could include but are not limited to, development of a plan to relocate the special-status plants (seed) to a suitable location outside of the impact area and monitoring the relocated population to demonstrate transplant success or preservation of this species or its habitat at an on or offsite location.</li> </ul> </li> </ul>			



Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>BIO-2: Measures to Avoid Impacts to Special Status Fish Species</p> <p>Lahontan mountain sucker and mountain whitefish have the potential to occur in Trout Creek. No direct impacts to Trout Creek would occur, however, potential indirect impacts were identified. The following mitigation shall be implemented for these special-status fish species:</p> <ul style="list-style-type: none"> <li>• <i>Measures to Reduce Impacts to Water Quality</i> <ul style="list-style-type: none"> <li>○ Activities conducted in or near Trout Creek shall be limited to summer and fall months (generally June – November) when flows are lowest.</li> <li>○ All disturbed soils will undergo erosion control treatment prior to October 15 and/ or immediately after construction is terminated. Erosion control blankets will be installed on any disturbed soils on a 2:1 slope or steeper.</li> <li>○ Standard construction BMPs will be implemented throughout construction to avoid and minimize adverse effects to water quality within Trout Creek in and adjacent to the project site. Appropriate erosion control measures will be used (e.g., hay bales, filter fences, vegetative buffer strips or other accepted equivalents) to reduce siltation and contaminated runoff from the project site. The integrity and effectiveness of the BMPs will be inspected daily. Corrective actions and repairs shall be carried out immediately.</li> </ul> </li> </ul>	District; Construction Contractor; Qualified Biologist	Prior to October 15 and/ or immediately after construction is terminated; Ongoing during construction	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<ul style="list-style-type: none"> <li>○ No construction will occur within the wetted portion of Trout Creek, including access by construction equipment or personnel. If work in the wetted portion of Trout Creek is unavoidable, the work area would need to be dewatered and the flow diverted around the work area. The flow will be diverted only once the construction of the diversion is completed. The USACE, RWQCB, and CDFW would need to be consulted prior to any diversion of Trout Creek.</li> <li>○ Construction activities and ground disturbance adjacent to Trout Creek will be confined to the minimal area necessary to facilitate construction activities. To ensure that construction equipment and personnel do not affect sensitive aquatic habitat in Trout Creek up and downstream of the project site, orange barrier fencing will be erected to clearly define the habitat to be avoided. This will delineate the Environmentally Sensitive Area (ESA) on the project. The integrity and effectiveness of ESA fencing will be inspected daily. Corrective actions and repairs shall be carried out immediately for fence breaches.</li> <li>○ Construction by-products and pollutants such as petroleum products, chemicals, or other deleterious materials shall not be allowed to enter Trout Creek or riparian habitat. A plan for the emergency clean-up of any spills of fuel or other</li> </ul>			

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>materials shall be available when construction equipment is in use.</p> <ul style="list-style-type: none"> <li>○ Construction vehicles and equipment will be maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease. Leaking vehicles and equipment shall be removed from the site.</li> <li>○ Equipment shall be re-fueled, washed, and serviced at the designated construction staging area or off-site. All construction and fill materials will be stored and contained in a designated area that is located away from Trout Creek to prevent transport of materials into the waterway. Equipment maintenance and storage, and materials storage will be 100 feet or more away from Trout Creek. In addition, a silt fence will be installed around the staging and materials storage areas to collect any discharge, and adequate materials should be available for spill clean-up and during storm events.</li> <li>○ No litter, debris, or sidecast shall be dumped or permitted to enter Trout Creek or riparian habitat. Trash and debris shall be removed from the site regularly. Following construction, all trash and construction debris shall be removed from work areas.</li> </ul>			

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<ul style="list-style-type: none"> <li>○ Building materials storage areas containing hazardous or potentially toxic materials such as herbicides and petroleum products will be located outside of the 100-year flood zone, have an impermeable membrane between the ground and the hazardous material, and will be bermed to prevent the discharge of pollutants to ground water and runoff water.</li> <li>○ Worker education and awareness training regarding sensitive habitats (e.g., aquatic and riparian habitats) and special-status species will be conducted for all construction personnel. The contractor will ensure that all new personnel will receive the mandatory training before starting work.</li> </ul>			
<p><b>BIO-3: Measures to Avoid Impacts to Nesting Birds</b></p> <p>The project site and adjacent areas provide suitable nesting habitat for a variety of native birds including native songbirds and raptors. Removal of vegetation containing active nests would potentially result in destruction of eggs and/or chicks; noise, dust, and other anthropogenic stressors in the vicinity of an active nest could lead to forced nest abandonment and mortality of eggs and/or chicks. Needless destruction of eggs or chicks would be a violation of the Fish and Game Code. Pre-construction surveys should be conducted prior to project implementation to determine if nesting birds are present on or adjacent to the site, so that measures could be implemented if needed to avoid harming nesting birds.</p>	<p>District; Construction Contractor; Qualified Biologist</p>	<p>Prior to project implementation; No more than 14 days prior to initiation of project activities and again immediately prior to construction</p>	

The following mitigation is recommended to reduce potential project impacts to nesting birds:

- If project (construction) ground-disturbing or vegetation clearing and grubbing activities commence during the avian breeding season (March 1 through August 31), a qualified biologist should conduct a pre-construction nesting bird survey no more than 14 days prior to initiation of project activities and again immediately prior to construction. The survey area should include suitable raptor nesting habitat within 500 feet of the project boundary (inaccessible areas outside of the project site can be surveyed from the site or from public roads using binoculars or spotting scopes). Pre-construction surveys are not required in areas where project activities have been continuous since prior to March 1, as determined by a qualified biologist. Areas that have been inactive for more than 14 days during the avian breeding season should be re-surveyed prior to resumption of project activities. If no active nests are identified, no further mitigation is required. If active nests are identified, the following measure should be implemented:
- A suitable buffer (e.g., 500-feet for raptors; 100-feet for passerines) should be established by a qualified biologist around active nests and no construction activities within the buffer should be allowed until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest, or the nest has failed). Encroachment into the buffer may occur at the discretion of a qualified biologist. Any encroachment into the buffer should be monitored by a qualified biologist to determine whether nesting birds are being impacted.

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<b>Cultural Resources</b>			
<p>CUL-1: In the event that cultural resources are exposed during ground-disturbing activities, construction activities should be halted in the immediate vicinity of the discovery. If the site cannot be avoided during the remainder of construction, an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards should then be retained to evaluate the find's significance under the California Environmental Quality Act (CEQA). If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted and should be discussed in consultation with the District.</p>	District; Qualified Archaeologist	Immediately upon discovery	
<p>CUL-2: Although there is no evidence to suggest the presence of human remains, their discovery is always a possibility during a project. If such an event did occur, the specific procedures outlined by the NAHC, in accordance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code, will be followed:</p> <ol style="list-style-type: none"> <li>1. All excavation activities within 60-feet of the remains will immediately stop, and the area will be protected with flagging or by posting a monitor or construction worker to ensure that no additional disturbance occurs.</li> <li>2. The project owner or their authorized representative will contact the County Coroner.</li> <li>3. The coroner will have two working days to examine the remains after being notified in accordance with HSC 7050.5. If the coroner determines that the remains are Native American and are not subject to the coroner's authority, the coroner will notify NAHC of the discovery within 24 hours.</li> <li>4. NAHC will immediately notify the Most Likely Descendant (MLD), who will have 48 hours after being granted access to the location of the remains to inspect them and make</li> </ol>	District; County Coroner	Immediately upon discovery	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<p>recommendations for treatment of them. Work will be suspended in the area of the find until the senior archaeologist approves the proposed treatment of human remains.</p> <p>5. If the coroner determines that the human remains are neither subject to the coroner’s authority nor of Native American origin, then the senior archaeologist will determine mitigation measures appropriate to the discovery.</p>			
<b>Geology and Soils</b>			
<p>GEO-1: In the event a paleontological or other geologically sensitive resources (such as fossils or fossil formations) are identified during any phase of project construction, all excavations within 100-feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the appropriate representative at the District who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the District shall implement those measures which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code Section 21083.2.</p>	District; CA Licensed Geotechnical Engineer or Engineering Geologist	Prior to issuance of a grading Permit	
<b>Noise</b>			
<p>NOI-1: The District shall incorporate the following construction noise reduction measures into project construction activities:</p> <ul style="list-style-type: none"> <li>Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.</li> </ul>	District; Construction Contractor	Ongoing during project construction	



Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
<ul style="list-style-type: none"> <li>• Locate stationary noise generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction site.</li> <li>• Utilize “quiet” air compressors and other stationary noise-generating equipment where appropriate technology exists.</li> <li>• The project sponsor shall designate a “disturbance coordinator” who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem will be implemented. The project sponsor shall also post a telephone number for excessive noise complaints in conspicuous locations in the vicinity of the project site. Additionally, the project sponsor shall send a notice to neighbors in the project vicinity with information on the construction schedule and the telephone number for noise complaints.</li> <li>• Construction shall not occur before 7:00 a.m. or after 9:00 p.m. on any day except Sunday, or before 9:00 a.m. or after 6:00 p.m. on Sunday.</li> </ul>			
<p>NOI-2: Should blasting be required on the project site, the District shall prepare a Blasting Management Plan that minimizes potential blasting effects to adjacent residences. All blast planning must be done by an appropriately licensed blasting contractor, and submitted to the District with the appropriate blasting permits, and all other applicable local, state, and federal permits, licenses, and bonding. The blasting</p>	District; Construction Contractor	Ongoing during project construction	

Mitigation Measure	Monitoring Responsibility	Implementation Schedule	Monitoring Compliance Record Name/Date
contractor or owner must conduct all notifications, inspections, monitoring, and major or minor blasting requirements planning with seismograph reports, as necessary.			
<b>Transportation</b>			
TRA-1: A Traffic Control Plan shall be developed for the proposed project to manage traffic during temporary lane closures. The plan shall be prepared by the District and submitted to the Town of Truckee for review and approval prior to the commencement of construction activities.	District; Construction Contractor	Prior to commencement of construction activities	
<b>Tribal Cultural Resources</b>			
TCR-1: If any suspected TCRs or human remains are discovered during ground disturbing construction activities, all work shall cease within 60-feet of the find, or an agreed upon distance based on the project area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a TCR (PRC §21074). The Tribal Representative will make recommendations for further evaluation and culturally appropriate treatment as necessary. If deemed necessary by the District, a qualified cultural resources specialist meeting the Secretary of Interior's Standards and Qualifications for Archaeology may also assess the significance of the find in joint consultation with Native American Representatives to ensure that Tribal values are considered. Work at the discovery location may not resume until the District, in consultation as appropriate and in good faith, determines that all necessary investigation and treatment of the discovery under the requirements of CEQA, including AB52, have been satisfied. These recommendations and actions taken (or not taken) will be documented in the project	District; Qualified Archaeologist	Immediately upon discovery	

<b>Mitigation Measure</b>	<b>Monitoring Responsibility</b>	<b>Implementation Schedule</b>	<b>Monitoring Compliance Record Name/Date</b>
record. If the discovery includes human remains, the procedures in Mitigation Measure CUL-2 shall be implemented.			