

**CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
DRAFT INITIAL STUDY/MITIGATED NEGATIVE
DECLARATION**

for the

**Hirschdale Pipeline Project
Nevada County, California**

March 2023



Prepared by:

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

With technical assistance from:

Inland Ecosystems, Inc.
6155 Plumas Street, #290
Reno, NV 89519

Table of Contents

Project Title	1
Lead Agency Name and Address	1
Lead Agency Contact Person	1
Project Location	1
Land Use Designation	1
Zoning	1
1.0 Introduction	1
2.0 Project Location	4
3.0 Proposed Project Elements	5
4.0 Project Implementation Schedule	5
5.0 Alternatives to the Proposed Project	5
6.0 Public Participation	6
7.0 Required Public Agency Permits and Approvals	6
8.0 Environmental checklist categories potentially affected by the proposed Hirschdale pipeline project	6
9.0 EVALUATION OF ENVIRONMENTAL IMPACTS	10
9.1. Aesthetics	11
9.2. Agricultural Resources	12
9.3. Air Quality	13
9.4. Biological Resources	16
9.5. Cultural Resources	21
9.6. Energy	23
9.7. Geology and Soils	24
9.8. Greenhouse Gases	26
9.9. Hazards and Hazardous Materials	27
9.10. Hydrology and Water Quality	29
9.11. Land Use and Planning	31
9.12. Mineral Resources	31
9.13. Noise	32
9.14. Population	33
9.15. Public Services	34
9.16. Recreation	35
9.17. Transportation/Traffic	35
9.18. Tribal Cultural Resources	37

9.19. Utilities and Service Systems	38
9.20. Wildfire	40
9.21. Mandatory Findings of Significance	41
10.0 Mitigation Monitoring and Reporting Program	42
11.0 Preparers	42
12.0 References Cited	42

List of Figures

Figure 1. Location of the Hirschdale community in eastern Nevada County, CA.	2
Figure 2. Location of the proposed original (<i>red</i>) and alternative (<i>blue</i>) pipeline alignments which would be considered by contractors.	3
Figure 3. Aerial view of the proposed original (<i>red</i>) and alternative (<i>blue</i>) pipeline alignments which would be considered by contractors.	4
Figure 4. CNDDDB listings of special-status species within a 5-mile radius of project site.	18

List of Tables

Table 1. Environmental checklist categories affected by the Hirschdale pipeline project.	7
Table 2. Nevada County criteria pollutants and attainment status.	14

List of Appendices

Appendix A. CalEEMod Construction Emissions Report - Hirschdale Pipeline Project
Appendix B. Biological Resources Assessment - Hirschdale Pipeline Project
Appendix C. Cultural Resources Assessment - Hirschdale Pipeline Project
Appendix D. Mitigation Monitoring and Reporting Program -Hirschdale Pipeline Project

**CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY/PROPOSED MITIGATED NEGATIVE DECLARATION
for the
Hirschdale Pipeline Project**

Project Title:	Hirschdale Pipeline Project
Lead Agency Name and Address:	Truckee Donner Public Utility District 11570 Donner Pass Road Truckee, CA 96161
Lead Agency Contact Person:	Neil Kaufman, Water System Engineer (530) 582-3950 neilkaufman@tdpud.org
Project Location:	Hirschdale, Nevada County, California
Land Use Designation:	Planned Development (PD)
Zoning:	Interim Development Reserve (IDR)

1.0 Introduction

The Truckee Donner Public Utility District (District) provides water service to portions of the Town of Truckee along with adjacent unincorporated areas of Nevada and Placer Counties. The District operates two separate water systems in the Truckee area: the Truckee System and the Hirschdale System with a distance of approximately 1,700 feet separating the two systems.

Hirschdale is an unincorporated community in eastern Nevada County characterized by a mix of publically owned resource lands (Nevada County, California Fish and Wildlife, USFS), larger privately owned tracts and a small residential neighborhood approximately 6 miles northeast of downtown Truckee (Figure 1).

Potable water service to the Hirschdale community is provided from a small water system that consists of a 35 gpm well, a 100,000 gallon storage tank and about 3,100 feet of pipeline. The water produced by the well has high levels of naturally occurring arsenic and manganese. The District operates a treatment system to remove the arsenic and manganese and water supplied to customers complies with State and Federal requirements. However, the treatment system is expensive to operate and requires constant District supervision.

When the Hirschdale well must be taken out of service to perform periodic maintenance, it is necessary for the District to implement temporary measures such as using potable water trucks or an aboveground pipe to supply water to the Hirschdale customers. The District has identified the need to

construct a pipeline to connect the Truckee and Hirschdale water systems (Figure 2, *red line*). This pipeline will allow the District to provide Hirschdale customers with a more cost effective and reliable water supply.

The proposed pipeline would connect to an existing water main at the intersection of Glenshire Drive and Martis Peak Road and then run eastward to Hirschdale. The pipeline alignment includes approximately 1,200 feet of undisturbed forest land on private property (APN 048-240-001) where the District has been granted permission to place the pipeline. Another approximate 1,830 feet of pipe would be installed along an existing rutted dirt road (also on private property) to the Hirschdale water tank site (APN 048-110-014) for a total of 3,030 feet of pipeline. An alternate cross-country route (Figure 2, *blue line*) about 665 feet long and connecting the Hirschdale water tank and existing dirt road is also proposed. The alternative pipeline alignment proposed allows a considerable reduction (of about 1,000 feet) in the length of pipeline needed by going directly northeast from the dirt road directly to the District’s Hirschdale tank site. Pipeline project photos are provided in Photos 1-4.

The District plans to route the pipeline through open corridors between the existing trees to avoid the removal of any trees and minimize environmental impacts. Pipeline installation requires a 2.5-foot wide by 4-foot deep excavated trench and a construction width along the alignment of approximately 25 feet. Following construction all soils would be backfilled with material removed from the excavated trench and erosion controls measures implemented to facilitate restoration of the disturbed construction area. A temporary construction staging area would operate on the privately-owned land east of Martis Peak Road.

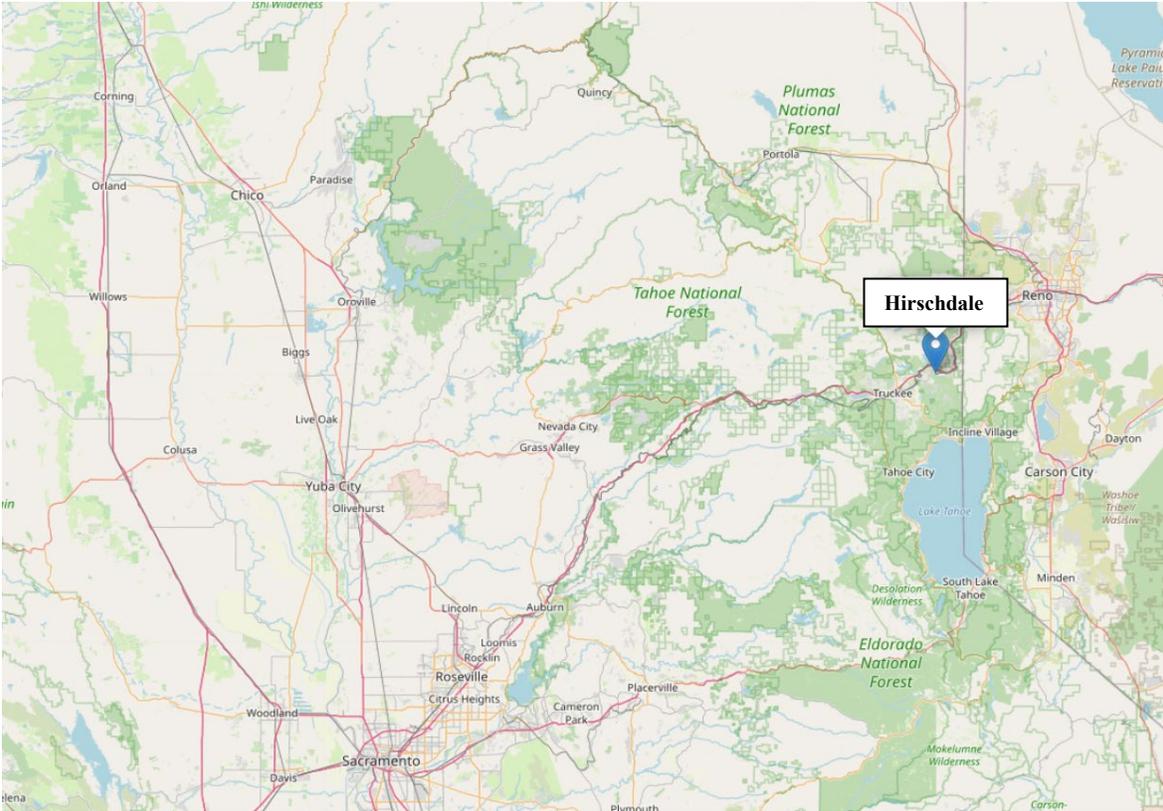


Figure 1. Location of the Hirschdale community in eastern Nevada County, CA.

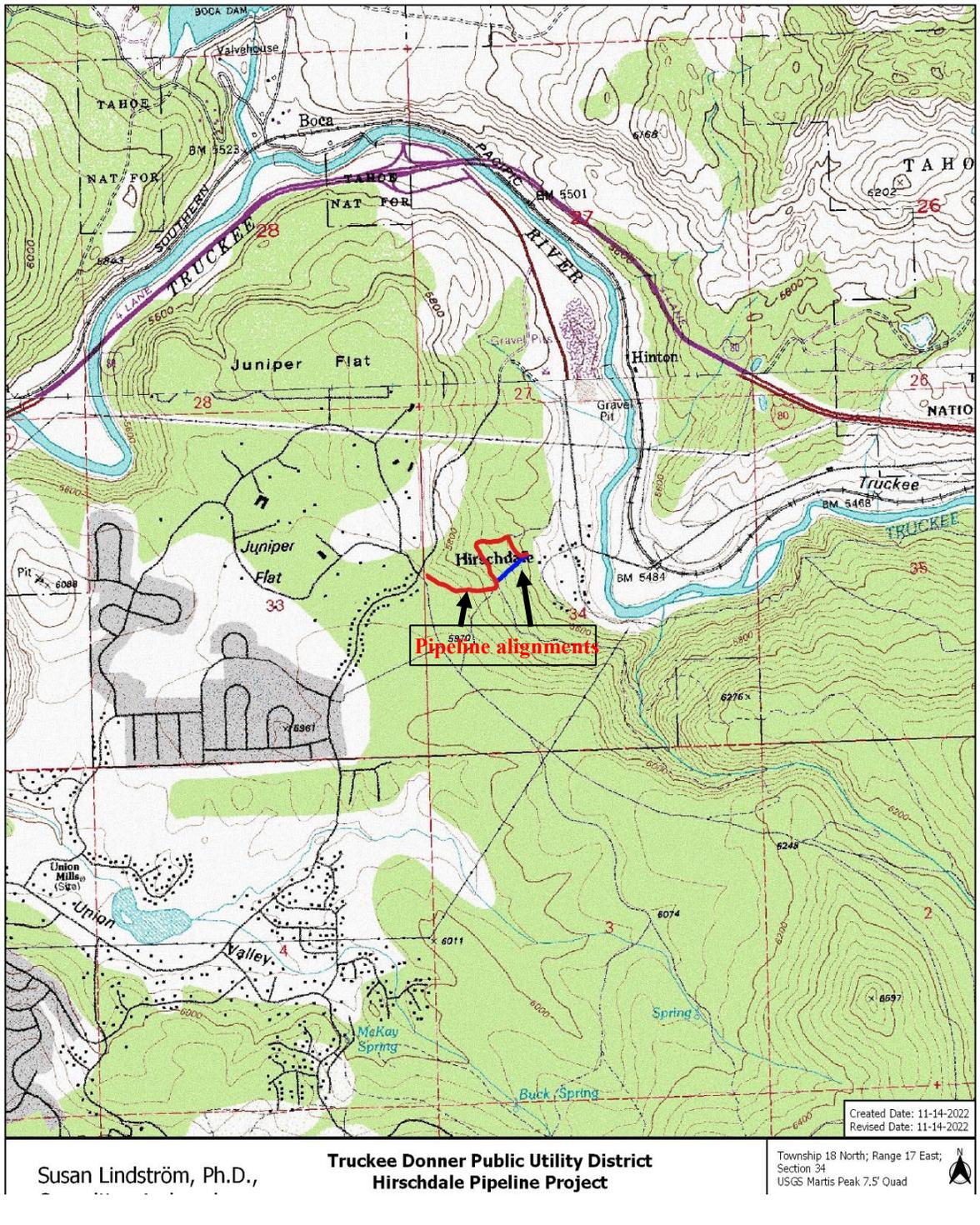


Figure 2. Location of the proposed original (*red*) and alternative (*blue*) pipeline alignments which would be considered by contractors.

2.0 Project Location

The community of Hirschdale is located approximately 6.5 miles east of Truckee in Nevada County (Figure 2). The project area falls within Township 18 North, Range 17 East, Section 44, USGS Martis Peak 7.5 Quad (Figure 2). The project area is situated in the Truckee Basin approximately 900 feet west of the Truckee River which runs in a north-south direction east of the project site.

Hirschdale was once bisected by the transcontinental highway (Highway 40) but essentially became the hamlet at the end of a dead end road when Interstate 80 was completed and the remnant of Highway 40 turned over to Nevada County in the mid 1960's. The project area lies within Storer and Usinger's (1971) native Yellow Pine/Jeffrey Pine Belt where Jeffrey pine (*Pinus jeffreyi*) shares dominance with ponderosa pine (*P. ponderosa*) and lodgepole pine (*P. murrayana*). Understory species include sagebrush (*Artemisia tridentata*), bitterbrush (*Purshia tridentata*), rabbit brush (*Chrysothamnus nauseosus*), and assorted forbs and grasses. The proposed project area is surrounded by mostly undeveloped private forestry land (Figure 3).

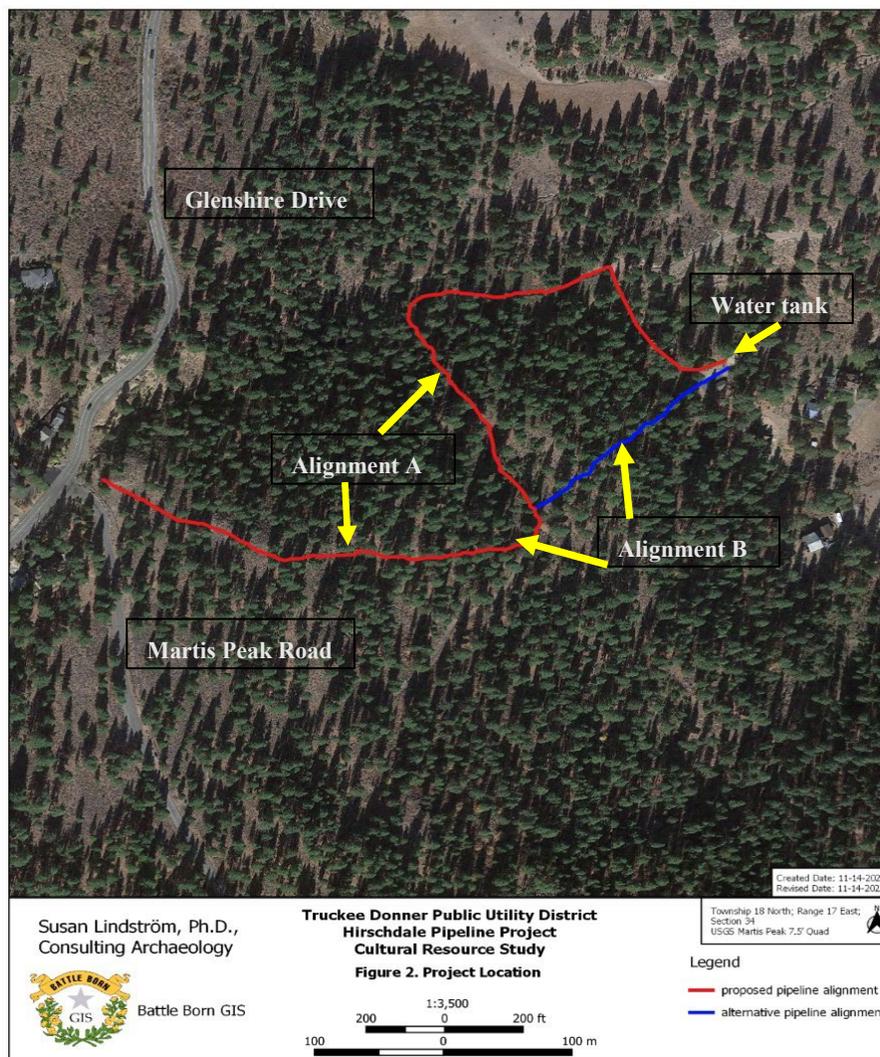


Figure 3. Aerial view of the proposed original (red) and alternative (blue) pipeline alignments which would be considered by contractors. Alternative 2 (blue) saves the District about 1,000 feet of pipeline and construction costs.

3.0 Proposed Project Elements

The Hirschdale system is rather small, consisting of one pressure zone; one well; one storage tank; approximately 3,100 feet of pipeline; and 26 customer accounts. In contrast, the Truckee System is a reasonably complicated system, consisting of 46 pressure zones; 12 active potable water wells; 3 active non-potable wells; 34 active storage tanks; 25 pumping stations; approximately 235 miles of pipeline ranging from 2-inches to 24-inches in diameter; 40 control valve stations; and about 13,600 customer accounts. The following elements for the proposed Hirschdale pipeline project consist of:

- Install up to 3,100 feet of 4-inch pipe within 6-inch casing to connect the Hirschdale system with the Truckee system.
- All soils would be backfilled on-site and any woody vegetation removed would be chipped and placed back on top of the disturbed ground as part of the post-construction erosion control plan.
- Connect to station site piping at the District's Hirschdale water tank and treatment facility.
- Complete pavement work after water system connection at the intersection of Glenshire Drive and Martis Peak Road.

4.0 Project Implementation Schedule

Construction of the project is expected to commence in mid-summer 2023 and finish in October 2023.

5.0 Alternatives to the Proposed Project

The Truckee Donner Public Utility District is committed to providing customers with the information about the water supply as customers who are well informed are key to the collaborative process in identifying improvements that are necessary to maintain the highest drinking water standards.

The most viable long-term solution to the water supply and treatment requirements faced by the Hirschdale community is to consolidate the Truckee and Hirschdale water systems. The proposed pipeline alignment allows for use of excavation equipment with minimal footprint. The pipeline is located away from any potential contamination hazards such as sanitary sewers, drainage ponds and areas of potential flooding. The consolidation of the systems with the proposed pipeline alignments A or B will provide needed drinking water redundancy as required by drinking water standards and good engineering and operational practice.

The Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) and State CEQA Guidelines, Title 14 California Code of Regulations (CCR) 15000 *et seq.* An Initial Study is prepared by a lead agency to determine if a project may have a significant effect on the environment. The lead agency for the proposed project is the Truckee Donner Public Utility District.

6.0 Public Participation

This Initial Study is available for a 30-day public review period beginning March 20, 2023 and ending on May 1, 2023. Written comments may be submitted by 4:00 p.m. on May 1, 2023 addressed to:

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

Phone: (530) 530- 3950 e-mail:
neilkaufman@tdpud.org

This Initial Study is also available for public review online at the District’s website located at www.tdpud.org and available at District headquarters public counter at 11570 Donner Pass Road, Truckee, CA 96161. The District encourages community participation in the public process.

7.0 Required Public Agency Permits and Approvals

The following agency approvals and/or permits are required for the proposed project:

- Truckee Donner Public Utility District - Project approval and adoption of the CEQA Initial Study/Mitigated Negative Declaration.
- Town of Truckee - Right-of-Way Encroachment Permit for pavement restoration and traffic control for the connection to the existing water pipeline at the intersection of Glenshire Drive and Martis Peak Road.
- Nevada County - Right-of-Way Encroachment Permit for pavement restoration and traffic control for the connection to the existing water pipeline at the intersection of Glenshire Drive and Martis Peak Road.

8.0 Environmental Factors Potentially Affected by the Proposed Project

Section 9.0 of this Initial Study contains the Environmental Checklist that identifies potential environmental impacts by subject area and a determination of each impact that would result from the proposed Hirschdale Pipeline project. Based on the Environmental Checklist and supporting analysis provided in Section 9.0 and respective Appendices, the project would result in eight “No Impact” categories; five “Less Than Significant Impact” categories; and eight “Less than Significant with Mitigation Impact” categories. There are no “Potentially Significant Impacts” associated with implementation of the proposed Hirschdale pipeline project (Table 1).

In accordance with State CEQA Guidelines 15070, a Mitigated Negative Declaration may be prepared if there is no substantial evidence that the proposed project would have a significant effect on the environment with mitigation measures incorporated into the project to reduce potential environmental impacts. A Mitigation Monitoring and Reporting Program (MMRP) included as Appendix D.

A Final MND (Response to Comments) will be prepared following public review and comment and proposed to be adopted by Truckee Donner Public Utility District in accordance with State CEQA Guidelines.

Table 1. Environmental checklist categories affected by the proposed Hirschdale pipeline project.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Aesthetics				X
Agriculture				X
Air Quality		X		
Biological Resources		X		
Cultural Resources		X		
Energy				X
Geology and Soils			X	
Greenhouse Gases		X		
Hazards and Hazardous Materials		X		
Hydrology and Water Quality		X		
Land Use and Planning				X
Mineral Resources				X
Noise			X	
Population				X
Public Services			X	
Recreation				X
Transportation/Traffic			X	
Tribal Cultural Resources		X		
Utilities and Service Systems				X
Wildfire			X	
Mandatory Findings of Significance		X		

Photo log Hirschdale Pipeline Project

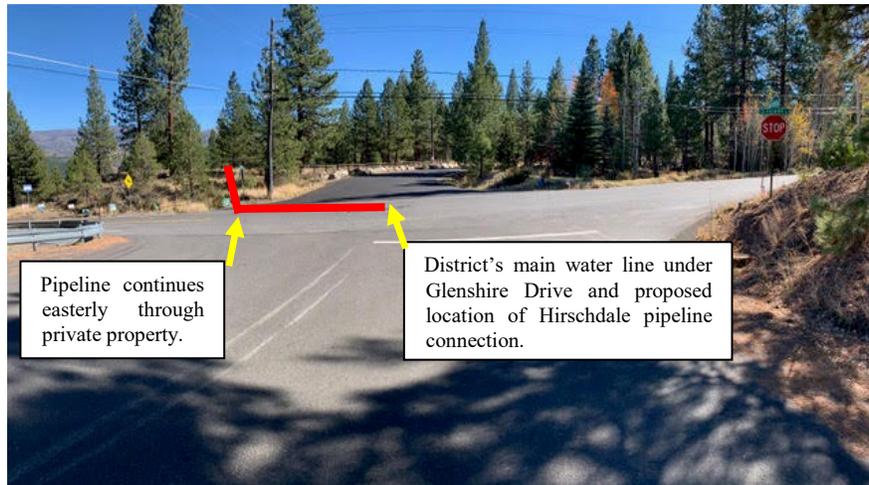
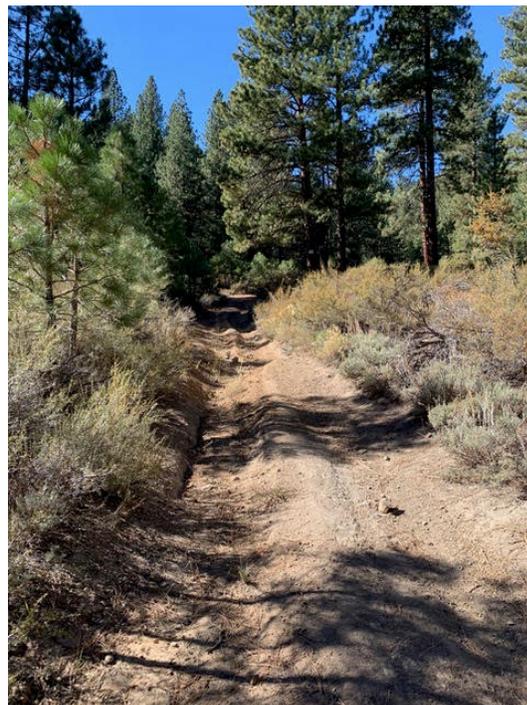


Photo 1. Pipeline connection to existing main line at intersection of Glenshire Drive (east-west roadway), Martis Peak Road (back) and Whitehorse Road (front); proposed pipeline extends cross country and easterly from the center of the intersection (back left).



Photos 2 and 3. Intersection of cross-country pipeline alignment (left) and existing dirt road (right) where pipeline will be embedded into the road grade under Alternative A or continue downslope directly to the Hirschdale tank and treatment facility under Alternative B.



Photo 4. Existing Hirschdale water tank and treatment facility and pipeline terminus.

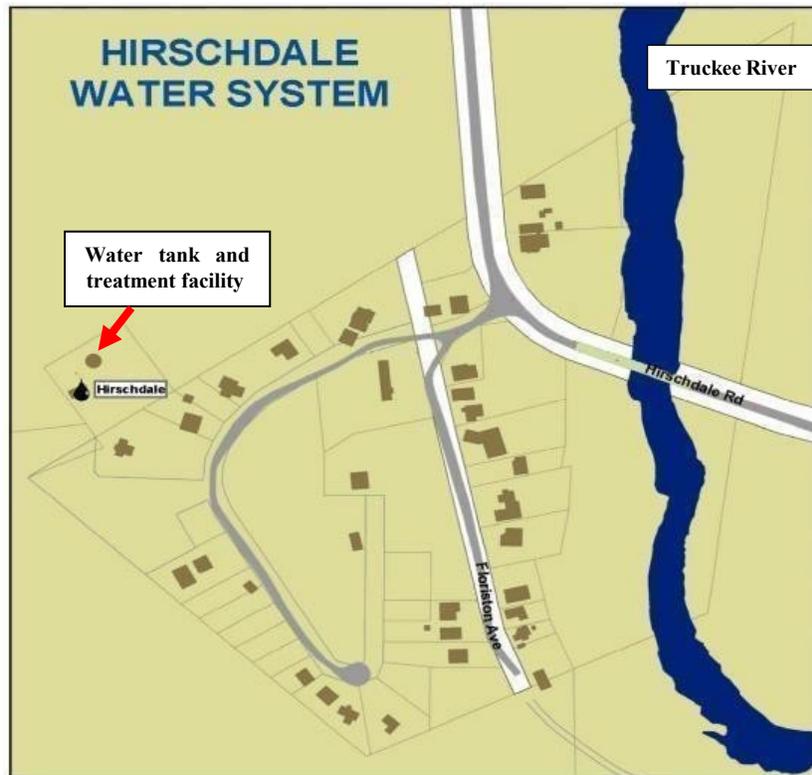


Figure of the Hirschdale water system maintained by the District.

9.0. Evaluation of Environmental Impacts

The California Environmental Quality Act (CEQA) Guidelines direct lead agencies to use an Initial Study checklist to determine the potential impacts of a proposed project on the physical environment. The checklist provides a list of questions concerning 21 environmental topic areas potentially affected by a project.

There are four possible answers to the environmental checklist questions. All answers must take into account the whole action involved, including off-site as well as on-site, cumulative, as well as project-level, indirect as well as direct, and construction as well as operational impacts. Each possible answer is explained herein:

- 1) A “**Potentially Significant Impact**” answer is appropriate if there is enough relevant information and reasonable inferences from that information that a fair argument can be made to support a conclusion that a substantial or potentially substantial adverse change may occur to any of the physical conditions within the area affected by the Proposed Project. When one or more “Potentially Significant Impact” entries are made, an EIR is required.
- 2) A “**Less Than Significant With Mitigation Incorporated**” answer is appropriate when the Applicant has agreed to incorporate a mitigation measure to reduce an impact from “Potentially Significant” to “Less Than Significant.” The lead agency must describe the mitigation measures, and briefly explain how the measures would reduce the impact to a “Less Than Significant Level.”
- 3) A “**Less Than Significant Impact**” answer is appropriate if there is evidence that one or more environmental impacts may occur, but the impacts are determined to be less than significant or the application of development policies and standards to the project will reduce the impact(s) to a “Less Than Significant Level”.
- 4) A “**No Impact**” answer is appropriate where it can be clearly seen that the impact at hand does not have the potential to adversely affect the environment. For example, a project in the center of an urbanized area will clearly not have an adverse effect on agricultural resources or operations.

Individual checklist questions are only presented a second time for specific environmental categories which required additional analysis.

9.1. AESTHETICS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock croppings, 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 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 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting:

The community of Hirschdale is located in a rural part of eastern Nevada County approximately 6 miles northeast of downtown Truckee. The visual setting of the project area is largely characterized by pine forest habitat and bitterbrush scrubland surrounded by prominent peaks and ridgelines of the Sierra Nevada mountain range.

Response to Questions:

a-b, d): The proposed Hirschdale pipeline project would not have a substantial adverse effect on a scenic vista defined as a view that possesses visual and aesthetic qualities of high value to the public. There are no officially designated scenic highways near the project area. The proposed project would not create a new source of substantial light or glare as the project would not include nighttime work or use light during day time construction. Therefore, there would be *No Impacts*.

c): During construction of the proposed project, the number of viewers with exposure or sensitivity due to the project would be minimal and from only a few residences in the community of Hirschdale or nearby residences on Glenshire Drive. Staging of construction equipment at the intersection of Glenshire Drive and Martis Peak Road would temporarily alter the visual character of the surrounding area. However, the staging area is temporary (mid-summer to October 15, 2023) and would not substantially degrade the existing visual character or quality of the area. Therefore, this impact would be *Less than Significant*.

Mitigation Measure(s) – None Required

9.2. AGRICULTURAL RESOURCES - - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime farmland, Unique farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<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 type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Questions:

a-c): There are no active farming or timber harvesting activities within the proposed Hirschdale pipeline project area. The proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use or conflict with land zoned for agricultural use or a Williamson Act contract or land use rezoning. Therefore, there would be **No Impacts**.

d-e): The project would not result in the loss or conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Neither land use occurs within the project area. Therefore, there would be **No Impacts**.

Mitigation Measure(s) - None Required

9.3. AIR QUALITY -- Where applicable, 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:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

Nevada County is within the jurisdiction of the Northern Sierra Air Quality Management District (NSAQMD). Particulate matter is a primary pollutant of concern in the NSAQMD area. Inhalable particulate or PM10 (particulate matter 10 microns or less in diameter) and PM2.5 (particulate matter 2.5 microns or less in diameter) refers to a wide variety of pollutants in the atmosphere that can lead to adverse health effects. Much 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.

According to the California Air Resources Board, Nevada County is in nonattainment for criteria pollutants PM10 (federal) relative to the State standard and unclassified for the federal standards. Additionally, the NSAQMD is listed as a federal nonattainment area for PM2.5, and listed as unclassified as a state criteria pollutant area (Table 1). The eastern portion of Nevada County remains in nonattainment for the federal 8-hour ozone standard and the state standard for 1-hour ozone.

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. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a nonattainment area. The main purpose of an air quality plan is to bring the area into compliance with the requirements of State air quality standards.

Table 2. Nevada County criteria pollutants and attainment status.

<u>Pollutant</u>	<u>State of California Status</u>	<u>Federal Status</u>
Ozone (1-hour)	Nonattainment	No Federal Standard
Ozone (8-hour)	Nonattainment	Nonattainment
Coarse Particulate Matter (PM10)	Nonattainment	Unclassified
Fine Particulate Matter (PM2.5)	Unclassified	Unclassified
Carbon Monoxide (CO)	Unclassified	Unclassified/Attainment
Nitrogen Dioxide (NO2)	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO2)	Attainment	Unclassified/Attainment
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Visibility Reducing Particles	Unclassified	No Federal Standard

Source: CARB 2020

Response to Questions:

a-c): The proposed Hirschdale pipeline project is scheduled to start in mid-summer 2023 with completion by October 15, 2023. Construction activities would include staging site preparation, excavation, and pavement restoration at the intersection of Glenshire Drive and Martis Peak Road. During construction of the proposed pipeline the use of a single, and least intrusive, excavator and contractor vehicles would generate diesel and gas exhaust emissions. The project’s emissions of criteria pollutants and precursors were modeled using California Emissions Estimator Model (CalEEMod). The sensitivity index generated by the model for a suite of air-borne pollutants generated from the project range from 1 or non-applicable on a scale of 1-5 with 5 being the most sensitive to construction emissions. The CalEEMod construction emissions report is included in Appendix A to this Initial Study.

Project emission levels with mitigation would not exceed an applicable threshold of significance for air pollutants or conflict with an applicable air quality plan, violate any air quality standard or contribute substantially to an existing air quality violation that would individually or cumulatively impact local or regional air quality. The project is not of sufficient size to, by itself, influence the nonattainment of ambient air quality standards. Construction emissions are a temporary one-time release and would not substantially contribute to the concentration of any pollutant of concern and would not exceed regulatory emissions levels. Therefore, these project impacts would be ***Less than Significant with Mitigation***.

d-e): For CEQA purposes, a sensitive receptor is generically defined as a location where human populations, especially children, seniors, or sick persons are found. Examples of sensitive receptors include residences, hospitals, and schools. The proposed project is located in a rural and largely undeveloped area and equipment emissions would be intermittent and temporary and would dissipate rapidly from the source. The emissions would not expose sensitive receptors to substantial pollutant concentrations or noxious odors during construction. The nearest sensitive receptors to the project site include residences along Juniper Way in the Hirschdale community and along a section of Glenshire Drive. Due to the relatively remote nature of pipeline construction, the project would not generate emissions affecting a substantial number of people. Therefore, the impacts would be ***Less than Significant***.

Mitigation Measure(s) - The following mitigation measures shall be incorporated into the Hirschdale pipeline project to reduce impacts to Air Quality during construction activities:

9.3. (a-c):

- The construction contractor shall ensure that construction equipment is shut down when not in use for extended periods of time to reduce emissions associated with equipment idling.
- There would be no open burning of vegetative material. All cleared soils would be sidecast and backfilled during construction. All brush and shrubs removed during excavation would be chipped as part of site restoration measures.
- All construction equipment shall be checked by a certified mechanic and determined to be running in proper condition before the start of work.
- All stockpiled material shall be sufficiently covered when not in use to prevent potential airborne dirt and sand from leaving the project site.
- All trucks hauling construction material such as gravel and sand to the project site shall be securely covered to avoid spilling.
- All trucks hauling construction material shall avoid track-out from the project area.
- Water trucks shall be used as needed to prevent airborne dust from leaving the staging area adjacent to Glenshire Drive and Martis Peak Road.
- The site shall be cleaned at the end of each working day.

9.4. BIOLOGICAL RESOURCES - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife US 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 sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native residents or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting:

Biological field surveys of the project area were carried out on September 15 and October 10, 2022. The surveys focused on special-status plant and wildlife species and habitat conditions to evaluate the potential for special-status species that may inhabit the area. The Biological Resources Assessment is provided in Appendix B.

Habitat types/vegetation communities along the proposed pipeline alignment lies within Storer and Usinger's (1971) native Yellow Pine/Jeffrey Pine Belt where Jeffrey pine (*Pinus jeffreyi*) shares dominance with ponderosa pine (*P. ponderosa*) and lodgepole pine (*P. murrayana*). Understory species include big sagebrush (*Artemisia tridentata*), bitterbrush (*Pursia tridentata*), rabbit brush (*Chrysothamnus nauseosus*), greenleaf manzanita (*Arctostaphylos patula*) and assorted forbs and grasses.

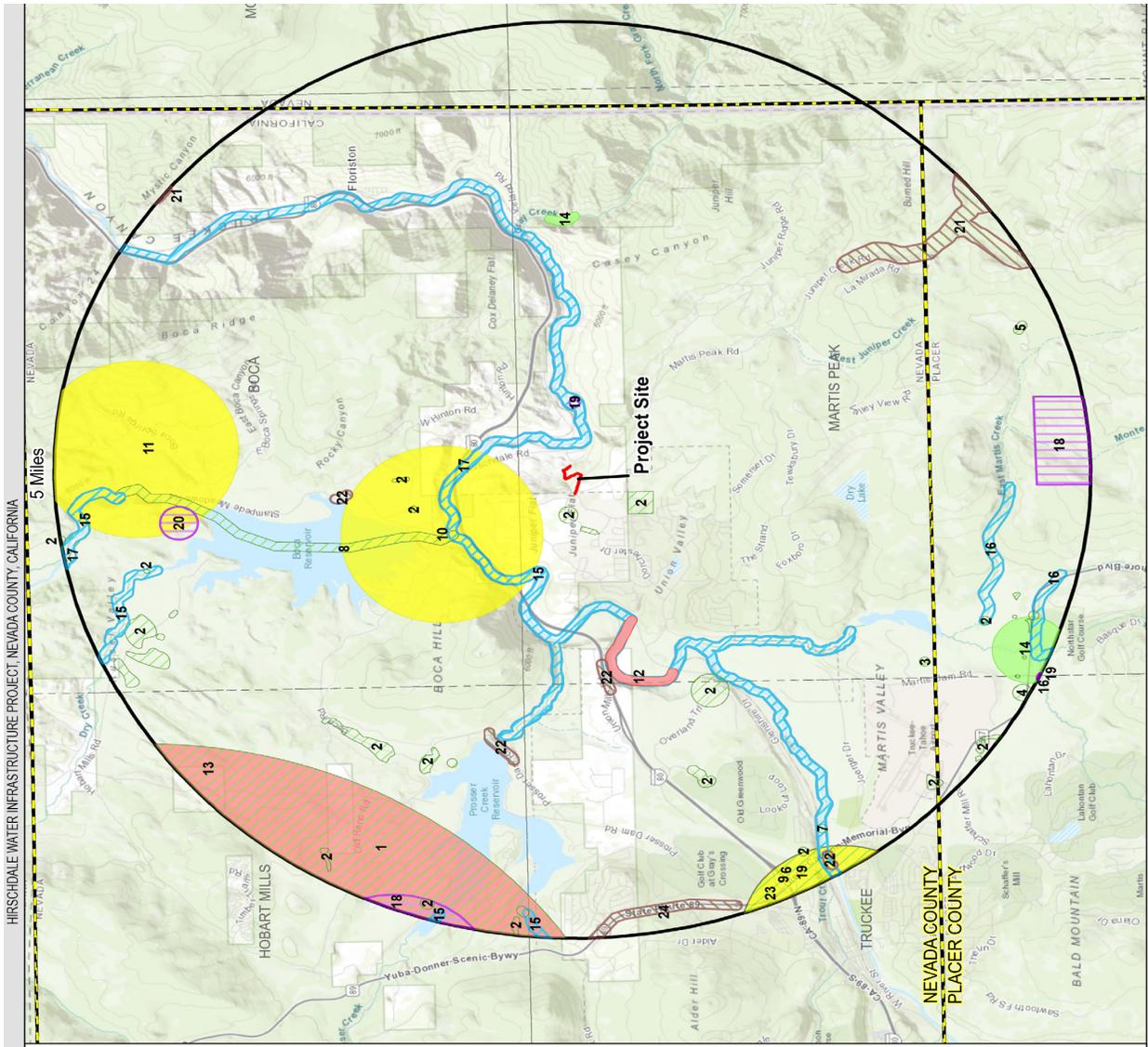
According to CEQA, any project which would affect the continued existence of an endangered or threatened species or a special status species is considered to be a significant impact. Species listed as threatened or endangered, candidate species for listing, state species of special concern, and plants listed by the California Native Plant Society (CNPS) are defined as meeting specific criteria including but not limited to:

- plant and wildlife species that are listed, or proposed for listing as threatened or endangered under the California Endangered Species Act (California Administrative Code, Title 14, Section 670.5) or listed or proposed for listing under the federal Endangered Species Act (ESA);
- plant and wildlife species identified by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS) as special-status or Species of Special Concern; and
- species protected under other regulations (e.g. Migratory Bird Treaty Act).

Prior to initiating field surveys, an office review of relevant biological databases for special-status plant and wildlife species was carried out to develop a target list of potentially occurring special-status species and sensitive habitats in the project area. Primary sources of information regarding the occurrence of state and/or federally listed threatened, endangered, proposed, and candidate species and their habitats included:

- The results of a species record search of the CDFW California Natural Diversity Data Base (CNDDDB 2022) RareFind 5 for the 7.5 minute USGS Martis Peak quadrangle);
- The USFWS IPaC Official Species List for the Project area ESA was also obtained from the USFWS Sacramento Field Office for the Hirschdale pipeline project on January 3, 2023, 2022; and
- The review of the CNPS Inventory of Rare and Endangered Vascular Plants of California for the 7.5 minute USGS Martis Peak.

A total of 24 regionally occurring special-status plant and wildlife species were identified during the database searches and desktop review. The 24 species include 8 plant, 3 insects, 2 invertebrates, 1 amphibian, 3 fish, 3 birds and 4 mammals (see Appendix B). Figure 4 provides the locations of special-status species within a 5-mile radius of project site. Many of the species are associated with specific habitat conditions or have specific food species requirements that were not found in the project area or have a narrow range of occurrence that is outside of the project area.



Legend

- Project Site
- USGS 7.5-Minute Quadrangle
- 5-Mile Buffer of Project Site
- County Boundary

Map Code Scientific Name (Common Name) (Fed/State/CNPS)

Plants

- 1 - *Borychium lunaria* (common moonwort) (-/+/ZB.3)
- 2 - *Ivesia serotolica* (Plumas ivy) (-/+/FB.2)
- 3 - *Juncus lucidus* (Santa Lucia dwarf rush) (-/+/IB.2)
- 4 - *Lomatium grayi* (Gray's lomatium) (-/+/ZB.3)
- 5 - *Rhamnus alifolia* (alder buckthorn) (-/+/ZB.3)
- 6 - *Rorippa subumbellata* (Tahoe yellow cress) (-/+/SE/IB.1)
- 7 - *Sarcobata glaucoides* (marsh stuccup) (-/+/ZB.2)
- 8 - *Sidalcea multifida* (cut-leaf checkerbloom) (-/+/ZB.3)

Insects

- 9 - *Bombus morisoni* (Morrison bumble bee) (-/+/+)
- 10 - *Bombus occidentalis* (western bumble bee) (-/+/+)
- 11 - *Goraeoa oregana* (Segelien Creek goreracean caddisfly) (-/+/+)

Invertebrates

- 12 - *Margaritifera fucata* (western peartshell) (-/+/+)
- 13 - *Stygobromus sheldoni* (Sheldon's amphipod) (-/+/+)

Amphibians

- 14 - *Rana sierrae* (Sierra Nevada yellow-legged frog) (FE/ST, WL/-)

Fish

- 15 - *Catostomus labridian* (Lahontan mountain sucker) (-/SSC/-)
- 16 - *Oncorhynchus clarki henshawi* (Lahontan cutthroat trout) (FT/-/+)
 - 17 - *Prosopium williamsi* (mountain whitefish) (-/SSC/-)

Birds

- 18 - *Accipiter gentilis* (northern goshawk) (-/SSC/-)
- 19 - *Empidonax traillii* (willow flycatcher) (-/SE/-)
- 20 - *Haliaeetus leucocephalus* (bald eagle) (FE/ISE, FP/-)

Mammals

- 21 - *Apodonta rufa californica* (Sierra Nevada mountain beaver) (-/SSC/-)
- 22 - *Erethizon dorsatum* (North American porcupine) (-/+/+)
- 23 - *Lepus americanus lahontanensis* (Sierra Nevada snowshoe hare) (-/SSC/-)
- 24 - *Vulpes vulpes necator* pop. 2 (Sierra Nevada red fox - Sierra Nevada DPS) (FE/ST/-)

Federal Status:

- FE = Federal Endangered
- FT = Federal Threatened
- FD = Federal Deletied
- SE = State Endangered
- SI = State Threatened
- SSC = Species of Special Concern
- WL = Watch List
- FP = Fully Protected

State Status:

- IB.1 = Rare, Threatened or Endangered in California and elsewhere; Seriously Threatened in California
- IB.2 = Rare, Threatened or Endangered in California and elsewhere; Moderately Threatened in California
- ZB.2 = Rare, Threatened or Endangered in California, but more common elsewhere; Not Very Threatened in California
- ZB.3 = Rare, Threatened, or Endangered in California, but more common elsewhere; Not Very Threatened in California

CNPS Status:

- IB.1 = Rare, Threatened or Endangered in California and elsewhere; Seriously Threatened in California
- IB.2 = Rare, Threatened or Endangered in California and elsewhere; Moderately Threatened in California
- ZB.2 = Rare, Threatened or Endangered in California, but more common elsewhere; Not Very Threatened in California
- ZB.3 = Rare, Threatened, or Endangered in California, but more common elsewhere; Not Very Threatened in California

Data Sources:
 CNDOB October 2022
 ESRI Basemap World Topo Map Accessed November 2022
 USGS 2013 Data: 11-3-22
 Document Path: D:\AW\Every Entry Projects\Hirschdale_CNDDB_5m_2022\102.mxd

Scale: 0 4,000 8,000 Feet

Figure 4. CNDDDB listings of special-status species within a 5-mile radius of project site.

Response to Questions:

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?

There are no special-status species occurrences along the Hirschdale pipeline alignment based on the CNDDDB, USFWS IPaC species lists and the CNPS list of rare and endangered plants. No rare plants or suitable habitat for sensitive plant species was encountered during the field surveys. The project area does not provide suitable habitat for the majority of the special-status plant species. Many of the special-status plant species identified in the database queries are associated with meadows, seeps, bogs, fens and marsh habitats which are not found in the project area. Although no special-status plant species were observed along the pipeline alignment during the biological surveys, the surveys were conducted outside of the blooming season and special-status plant species could be present in the project area. The mitigation measures outlined below for special status plant species would reduce potential impacts to any of these species to less than significant.

The project area provides suitable nesting habitat for raptor, migratory and native avian species. Potential raptor and migratory bird occurrences are within a 5-mile radius based on CNDDDB occurrences (Figure 4) though none were seen during the onsite surveys and no raptor vocalizations were heard. The Truckee River corridor, 900-feet east of the project area, provides optimal nesting habitat for raptors with adjacent open areas to forage.

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 forest areas, such as mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), and California towhee (*Melospiza crissalis*).

The proposed project is planned for construction between mid-summer and October 15, 2023 during the raptor and migratory bird nesting seasons (February 1 through August 31). If raptors and/or migratory bird species 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 trenching for pipeline installation during the nesting season 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 mitigation measures for raptors, migratory, and non-game bird species under and special status plant species would reduce potential impacts to any of these species to ***Less than Significant Impact with Mitigation***.

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?

There are no riparian, aquatic or terrestrial sensitive natural communities in the project area nor would the project have a substantial adverse effect on any sensitive habitat identified in local or regional plans, policies or regulations, or by CDFW and USFWS. Therefore, there would be ***No Impact***.

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?

Natural stream channels, wetlands, and other sensitive natural communities are protected by state (CDFW) and federal laws, the latter under the jurisdiction of the U.S. Army Corps of Engineers (USACE). There are no surface water features within the project area and the project would not affect federally protected wetlands as defined by Section 404 of the Clean Water Act. Therefore, there would be **No Impact**.

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?

Several deer were observed in the project area during the October 10, 2022 survey although there was no sign of nursery or bedding areas along the proposed pipeline alignment. The project is not expected to interfere substantially with the movement of any native resident or migratory wildlife species or reduce the use of native wildlife nursery sites 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?

No local policies or ordinances protecting biological resources would be affected by project activities. There is no designated critical habitat or Sensitive Natural Communities within the project area. Therefore, there would be **No Impact**.

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?

The project would not conflict with the provisions of an adopted Habitat Conservation Plan or Natural Community Conservation Plan or with the implementation of such plans under the proposed project. Therefore, there would be **No Impact**.

Mitigation Measure(s): The following mitigation measures shall be incorporated into the Hirschdale pipeline project to avoid potential impacts to raptors, migratory birds and other special-status plant and wildlife species:

9.4 (a):

- A qualified biologist will conduct a thorough field survey of the project area during the avian breeding season (February 1 through August 31) and no more than two weeks prior to construction activities scheduled to begin in mid-summer 2023. The biologist will visually assess the project area for active nests within 500 ft (150 m) of the project area, which is a CDFW recommended boundary. If an active nest is located the survey biologist will consult with the District to avoid and/or minimize potential impact such as establishing buffers. Other special-status wildlife species with a potential to occur in the project area would be considered during a pre-construction survey.
- To mitigate potential impacts to special status plant species a botanical survey shall be conducted to determine the presence or absence of special-status plant species within the project area prior to commencement of construction. The surveys shall be timed to coincide with the blooming period, generally May through August. 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 and avoidance measures implemented.

9.5. CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §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) 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"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

In compliance with guidelines established by Nevada County under the California Environmental Quality Act (CEQA Section 5024, Public Resource Code), the District is required to consider potential project impacts on cultural resources within a proposed project area.

The CEQA process is outlined in CEQA Guidelines Section 15060-15065. For the purposes of CEQA, significant "historical resources" and "unique archaeological resources" are defined as (Section 15064.5[a]):

- (1) A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seq.).
- (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

Cultural resource studies are customarily performed in a series of phases, each one building upon information gained from the prior study. The objective of the cultural resource assessment is designed to satisfy cultural guidelines pertaining to *Phase 1* and *Phase 2* work where tasks include:

-
- A record search of files housed at the North Central Information Center at California State University, Sacramento.
 - A search of Sacred Lands Files with the Native American Heritage Commission and follow-up communications with tribes/individuals on the Commission's contact list.
 - An archaeological field survey comprising intensive coverage.

To accomplish these tasks, Susan Lindström, Ph.D., Consulting Archaeologist carried out the required phases according to CEQA Guidelines. Dr. Lindström exceeds qualifications for certification by the Secretary of Interior's Professional Qualifications Standards (48 FR 44738-44739) for archaeology, history and related disciplines. An intensive archaeological field survey was conducted on October 27, 2022. The Cultural Resources Assessment (CRA) is included as Appendix C to this Initial Study.

Response to Questions:

a-d): The various pre-field record searches indicate that the project area is of low sensitivity to contain cultural resources. However, several historic archaeological sites have been inventoried within and surrounding the community of Hirschdale; one historic utility line (P-29-4236) is known to bisect the project area. The intensive archaeological field survey conducted on October 27, 2022 identified the historic utility line (P-29-4236) and discovered two additional historic cultural resources within the project area: a segment of logging road dating from ca. 1969 (TDPUD-1) and a cluster of historic high-cut stumps dating from ca. 1870s-1900 logging activities. These features were inventoried and evaluated as not significant and determined ineligible for listing in the California Register of Historical Resources and National Register of Historic Places under any criteria. If a cultural resource does not meet criteria of significance and eligibility for listing in the California or National Register, or if it is not a unique archaeological or a historical resource, the effects of a project on the resource are not considered to be a significant effect on the environment.

Native American outreach was accomplished according to CEQA guidelines and mandates under California Assembly Bill 52 (AB 52 pursuant to PRC 21080.3.1). No immediate concerns regarding the project area were expressed in the Sacred Lands File Search by the Native American Heritage Commission or by tribes on the Commission's contact list who were notified, including the Washoe Tribe (whose ancestral homeland encompasses the project area).

The results of the pedestrian survey were negative for cultural content. There was no surface evidence of historic or prehistoric sites, features, artifacts or isolates. No evidence for undocumented prehistoric or historic-era cultural resources was found during the survey of the pipeline alignments. The proposed project would not affect previously recorded cultural resources, and no undocumented resources were found during the survey.

Based on the results of the pedestrian survey and Records Search, the sensitivity for finding subsurface deposits of cultural resources at the project site is considered *low*. The project will have no effect on historical, archaeological, paleontological, or other cultural resources. There are no known formal cemeteries within the project area.

In terms of guidelines established by CEQA, the project should not alter or adversely affect the physical or aesthetic properties of any significant cultural resource. Nor should the project have the potential to cause a physical change that would affect unique ethnic cultural values or restrict religious or sacred uses. While no cultural resources were identified either through background research or by a surface inspection, and no historic properties are present within the project area it is possible that buried or concealed cultural

resources could be present and detected during project ground disturbance activities. Implementation of mitigation measures below for the unexpected discovery of cultural resources would reduce potential impacts to ***Less Than Significant With Mitigation***.

Mitigation Measure(s) – The following mitigation measures shall be incorporated into the Hirschdale pipeline project to avoid impacts to Cultural Resources.

9.5 (a-d): Should unanticipated cultural resource be encountered during construction activities, work must cease, and a qualified archaeologist (e.g., Dr. Susan Lindström) contacted immediately to determine appropriate measures to mitigate any adverse impacts to the discovered resources. If human remains are discovered during construction-related activities notification of the Nevada County Coroner is required. If the County Coroner determines that the discovered remains are those of Native American ancestry, then the Native American Heritage Commission must be notified by telephone within 24 hours.

9.6. ENERGY -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" 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"/>

Response to Questions:

a-b): The proposed project would consolidate the Hirschdale and Truckee water systems to improve the supply of water utilities to the Hirschdale community. While construction activities would result in the temporary consumption of energy resources in the form of gasoline and diesel fuel, such consumption would be temporary and specific installing the pipeline to connect the two water systems. The project would not have the potential to result in wasteful, inefficient, or unnecessary consumption of energy resources nor conflict with or obstruct any state or local plan for renewable energy or energy efficiency. Therefore, there would be ***No Impacts***.

Mitigation Measure(s) - None Required

9.7. GEOLOGY AND SOILS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects including the risk of loss injury, or death involving 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 checked="" type="checkbox"/>	<input type="checkbox"/>
b) Expose people or structures to potential substantial adverse effects including the risk of loss injury, or death involving strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose people or structures to potential substantial adverse effects including the risk of loss injury, or death involving seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) 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 type="checkbox"/>	<input checked="" type="checkbox"/>
g) Be located on expansive soil, as defined in Table 18-1-B of the uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Questions:

a-b): The project area for the Hirschdale pipeline is not located within any of the Earthquake Fault Zones delineated by the Alquist-Priolo Earthquake Fault Zoning Act which identify fault areas considered to be of greatest risk in the state (CDC 2015). Although the project area could be exposed to seismic ground shaking or ground failure, the proposed pipeline installation to consolidate the Hirschdale and Truckee water systems would not in itself cause damage to structures and put the safety of people at risk. The pipeline would be constructed consistent with District design criteria. There is no aspect of the proposed project that would expose people or property to increased risk during strong seismic ground shaking and impacts related to the proposed project are *Less than Significant*.

c): Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. Soils mapped within the project area are not considered to be hydric soils, which are typically, saturated soils. According to the online Soil Survey of Nevada County, soils around the project site are Kyburz-rock outcrop-Trojan complex derived from lithic bedrock. This soil is rocky and has a low potential for liquefaction. 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 *No Impact*.

d): During field surveys there was no evidence of former landslides in 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, there would be *No Impact*.

e): Construction of the proposed Hirschdale pipeline project would require surface disturbance through undeveloped forest land and along a rugged dirt road. Best Management Practices (BMPs) would be in place during and after construction to prevent erosion of loose soil. The project would not result in substantial soil erosion or the loss of topsoil and the impact is *Less than Significant*.

f): There are no hydric soils located along the pipeline alignment which is a causative factor for liquefaction. The potential for lateral spreading, subsidence, or other related ground failure along the pipeline alignment is considered low. The project will not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project. Therefore, there would be *No Impact*.

g): Expansive soils have the tendency to expand and contract during alternative wetting and drying cycles and are generally associated with clay soils. Project site soils consist primarily Kyburz-rock outcrop-Trojan complex (derived from lithic bedrock) which has little shrink-swell risk factor associated with it. Therefore, there would be *No Impact*.

h): The proposed project would not generate wastewater requiring disposal or require septic tanks. Therefore, there would be *No Impact*.

Mitigation Measure(s) - None Required

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

Response to Questions:

a): During construction of the proposed Hirschdale pipeline project, Greenhouse Gas emissions (GHGs) would be emitted through the use of construction equipment and contractor vehicles. The only increase in site specific GHG emissions generated would occur during the construction phase scheduled from mid-summer to October 15, 2023 and largely through undeveloped forest land.

Due to the relatively small size of the project and short duration construction time period, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment or regional GHG emissions. The project activities associated with the proposed pipeline would not involve a substantial net increase in emissions above ambient conditions. The mitigation measures outlined in Section 9.3 Air Quality and provided below would be implemented to mitigate any potential project related contributions to greenhouse gases from construction emissions. Therefore, impacts are *Less than Significant with Mitigation*.

b): The short term increase in construction emissions from construction activities would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, there would be *No Impact*.

Mitigation Measure(s) - The following mitigation measures shall be incorporated into the Hirschdale pipeline project to reduce impacts to Greenhouse Gas emissions during construction activities.

9.8 (a):

- The construction contractor shall ensure that construction equipment is shut down when not in use for extended periods of time to reduce emissions associated with equipment idling.
- There would be no open burning of vegetative material. All cleared soils would be sidecast and backfilled during construction. All brush and shrubs removed during excavation would be chipped as part of the erosion control program.
- All construction equipment shall be checked by a certified mechanic and determined to be running in proper condition before the start of work to control exhaust emissions.

9.9. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handles hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site 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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working within the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Response to Questions:

a-b): The proposed Hirschdale pipeline project would require the use of a construction equipment which would contain fuels, oils, and lubricants to operate. This equipment use would be in accordance with all

applicable state and local laws and regulations. The proposed project would not include routine transport or disposal of hazardous materials into the environment. The limited hazardous material use in the form of fuels and pipe binding adhesives would be for the intended purpose.

Accidental spills of fuels and lubricants could adversely affect groundwater quality, vegetation and wildlife habitat. The contractor shall prepare spill and clean-up procedures in the event of an accidental release of fuels. Implementation of the mitigation measures outlined below would reduce impacts to ***Less Than Significant with Mitigation***.

c): There are no schools within one-quarter mile of the project site. The closest school to the project site is Glenshire Elementary School located at 10990 Dorchester Drive, Truckee and approximately 1-mile from project site. Therefore, there is ***No Impact***.

d): There are no known hazardous sites or materials present within the proposed project area nor is the site on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The project would not create a significant hazard to the public or the environment. Therefore, there would be ***No Impact***.

e-f): The proposed project site is not within or affect an airport land use plan or a private airstrip. Therefore, there would be ***No Impacts***.

g): The proposed project would involve construction activities at the intersection of Glenshire Drive and Martis Peak Road to connect the Hirschdale and Truckee water systems which may result in temporary disturbance to traffic during approximately 1-2 days at this intersection. Implementation of the proposed project would not impair or physically interfere with the designated primary community evacuation route. An encroachment permit would be required from Nevada County and the Town of Truckee for construction work in the Right-of-Way which includes traffic control measures. Therefore, impacts are ***Less than Significant***.

h): The project area is mapped as a very high fire hazard severity zone by the California Department of Forestry and Fire Protection (CAL FIRE 2007). Although the project is within a high fire risk zone, the project would comply with all applicable state and federal laws regarding construction fire protection and prevention. The project would not create a significant risk of loss, injury or death involving wildland fires or create any new urbanized areas or residences intermixed with wildland. Therefore, impacts are ***Less Than Significant***.

Mitigation Measure(s): The following mitigation measures shall be incorporated into the Hirschdale pipeline project to minimize impacts from Hazards and Hazardous Materials.

9.9. (a-b):

- The contractor shall prepare spill and leak prevention procedures prior to the commencement of construction activities. The procedures shall include information on the hazardous materials that shall be used on-site and clean-up procedures in the event of an accidental release.
- Construction vehicles and equipment will be maintained to prevent contamination of soil from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease.
- Equipment shall be re-fueled at the designated construction staging area or off-site. All construction materials will be stored and contained in a designated area and bermed with appropriate containment BMPs to prevent the discharge of pollutants to ground water and runoff water.

9.10. HYDROLOGY AND WATER QUALITY -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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 of amount of surface runoff in a manner which would result in flooding on- or offsite;	<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 planned 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 hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

Response to Questions:

a): The proposed Hirschdale pipeline project is designed to utilize the least intrusive excavation techniques to minimize the project footprint and soil disturbance. The proposed project would avoid removal of any trees within the project area to minimize disturbance to soils. During trenching for pipeline installation all completed sections would be backfilled with native material removed from the excavated trench. Any shrubbery removed would be chipped for mulch to stabilize disturbed soils and

assist with site restoration. The project would comply with all waste discharge requirements and Best Management Practices (BMPs) to ensure that adequate measures are taken during construction to minimize impacts to water quality. Implementation of the mitigation measures below would ensure that the project does not have the potential to cause any degradation to water quality or violate any water quality standards or waste discharge requirements. Therefore, impacts would be ***Less than Significant with Mitigation***.

b): The District obtains its water supply from the Martis Valley Groundwater Basin. The proposed consolidation of the Hirschdale and Truckee water systems would require additional water from the Basin in order to serve the Hirschdale community. However, any additional water would be offset by a reduction in the well source supply that currently serves the Hirschdale community. The existing well source would serve to provide important redundancy to the drinking water system as an emergency source. The proposed project would not interfere with groundwater supplies or recharge. Therefore, this impact would be ***Less than Significant***.

ci-iv): Construction of the proposed Hirschdale pipeline would not substantially alter the existing drainage pattern of the area that would result in substantial erosion or increase the rate or amount of surface runoff resulting in flooding on- or off-site. The existing topography and drainage patterns along the pipeline alignment will remain similar to pre-project site conditions. Therefore, impacts for these questions would be ***Less than Significant***.

d): The project site is not located near an ocean coast or enclosed body of water that could produce a tsunami or seiche. Therefore, there would be ***No Impact***.

e): Construction of the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, there would be ***No Impact***.

Mitigation Measure(s): The following mitigation measures shall be incorporated into the Hirschdale pipeline project to minimize impacts to Hydrology and Water Quality.

9.10 (a):

- Appropriate sediment control measures such as silt fencing and wattles will be placed to delineate staging area and reduce runoff.
- The contractor will have on-site, at all times, a Spill Containment Kit for immediate deployment in the case of a sudden and unexpected spill of pollutants.
- Contractor shall ensure that all spoil piles are covered with heavy-duty plastic sheeting when not in use or during any precipitation event.
- In order to reduce the potential to release fugitive dust associated with project activities, dust control measures will be carried out as needed including watering at staging areas.
- No water will be discharged to any perennial or ephemeral surface waters. Water that may be needed to flush and pressure test the pipeline will be properly discharged according to applicable waste discharge requirements.
- All equipment will be inspected for leaks prior to and during construction operations.

9.11. LAND USE AND PLANNING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Questions:

a-c): The proposed Hirschdale pipeline project is largely contained on land under private ownership and would not physically divide an established community or conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the area. The proposed project area is not covered by a Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, there would be *No Impacts*.

Mitigation Measure(s) - None Required

9.12. MINERAL RESOURCES -- 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"/>

Response to Questions:

a-b): No impacts to mineral resources that would be of value to the region and residents of the state would occur nor would the project result in the loss of availability of a locally-important mineral resource recovery site or interfere with the extraction of any known mineral resource. Therefore, there would be *No Impacts*.

Mitigation Measure(s) - None Required

9.13. NOISE -- Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project ex-pose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Questions:

a-d): The proposed Hirschdale pipeline project is largely contained within forest land with minimal existing ambient noise levels and no residences or other sensitive receptors near the majority of the work area. There are scattered rural residences at either end of the pipeline alignment in the community of Hirschdale on the east and along Glenshire Drive at the western end of alignment.

Noise impacts associated with the project would be a source of temporary increases in ambient noise levels that could be audible to these residents. Groundborne vibration from construction activities include the use of excavation equipment for trenching and pipeline installation. Noise associated with construction of would be short-term and not affect a given receptor for an extended period of time at either end of the alignment. The temporary increase in noise levels during project construction would not expose people to excessive groundborne vibration noise levels during trenching for pipeline installation. Residences along Glenshire Drive and adjacent to the Hirschdale well and pump station will be informed by the District prior to construction of the projects schedule. Project activities will be limited to daytime hours between 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays between 8:00 a.m. and 6:00 p.m.

There is potential that blasting may be required to clear areas of hard rock during construction. The specific locations and details of blasting are unknown at this time. Blasting would be a one-time noise impact. Should blasting be required along the pipeline alignment, the District shall have a blasting management plan prepared by a licensed blasting contractor with the appropriate permits, and all other applicable local, state, and federal permits, licenses, and bonding.

Project-related construction activities would result in temporary increases in ambient noise levels through undeveloped private land and project-related groundborne vibration impacts would not result in a permanent increase in noise as construction is a one-time activity for pipeline installation. These impacts would be *Less Than Significant*.

e-f): The proposed project is not located within two miles of a public airport or within the vicinity of a private airstrip and would not expose people living or working within the vicinity of the project site to be exposed to excessive noise levels. Therefore, there would be *No Impacts*.

Mitigation Measure(s): None Required

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

Response to Questions:

a-c): The proposed project would construct a pipeline to consolidate the Hirschdale and Truckee water systems to provide a clean and secure water supply to the Hirschdale community and important redundancy to the existing drinking water system. The project would not include the construction or replacement of homes or businesses which would directly induce population growth. There are no population and/or housing displacement impacts associated with the proposed project. Therefore, there would be *No Impacts*.

Mitigation Measure(s) - None Required

9.15. PUBLIC SERVICES -- 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 rations, response time or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>

Response to Questions:

a-b): The project site and surrounding area currently receive wildfire protection from the Truckee Fire Protection District. The proposed project would comply with appropriate ordinances regarding wildland fire protection. Police protection services within the project area is provided by Nevada County Sheriff Department. The potential for an increase in demand for services may occur for police protection if a criminal activity or accident occurs during construction of the pipeline alignment. However, these minor public service demands are not expected to overburden these agencies. Therefore, the proposed project impacts would be *Less than Significant*.

c-d): The proposed project would not generate any additional demand on schools or parks as neither facilities are within the project area. The proposed project would have *No Impacts*.

e): While not expected, minor increases in demand for emergency medical services may occur if an injury occurs during construction of the proposed pipeline. These unexpected public service needs would not be expected to overburden the public agencies and would be *Less Than Significant*.

Mitigation Measure(s) - None Required

9.16. RECREATION --	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Will the project conflict with established recreation uses of the area, including biking equestrian and/or hiking trail?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Questions:

a-c): There are no developed neighborhood or regional parks or other recreational facilities near the proposed project area such that physical deterioration of a facility would occur. The proposed project does not require the construction of recreational facilities. Therefore, there would be *No Impacts*.

Mitigation Measure(s) - None Required

9.17. TRANSPORTATION/ TRAFFIC -- Would the project:				
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase on either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Result in a change in 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 design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Questions:

a;e): The proposed Hirschdale pipeline project is designed to consolidate the Hirschdale and Truckee water systems largely through land under private ownership with no designated roadways. During the pipeline connection for the connection of the two water systems, a temporary impact to traffic at the intersection of Glenshire Drive and Martis Peak Road would occur. The District shall secure a Right-of-Way encroachment permit from the Town of Truckee and Nevada County which includes traffic control measures to ensure continued circulation along these roadways. Therefore, these impacts would be ***Less Than Significant***.

b-d;f-g): There will be an increase in vehicle trips to the project site along Glenshire Drive and Hirschdale Road associated with the contractor's activities but would not result in impacts related to transportation, circulation, parking, or transportation policies, plans or programs. Therefore, there would be ***No Impacts***.

Mitigation Measure(s): None Required.

9.18. TRIBAL CULTURAL RESOURCES -- Would the project 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:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. 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"/>
2. 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 Resource 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"/>

Environmental Setting:

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project that may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to “begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project.” Section 21074 of AB 52 also defines a new category of resources under CEQA called “tribal cultural resources.” Tribal cultural resources are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

Response to Questions:

1.-2.): In compliance with AB 52 and in conjunction with the Records Search for the proposed project, the Native American Heritage Commission (NAHC) was contacted regarding Sacred Land Listings. The NAHC indicated that there are no Sacred Land listings for the project area. The contact list from the NAHC were each sent relevant project information and map of the proposed project site and requested to supply any information they might have concerning prehistoric sites or traditional use areas within the project area (see Appendix C).

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. None of the tribes contacted identified any tribal cultural resources (TCRs) within the project area and the District has not been approached for formal consultation by any tribe under AB52. Based on the results of the consultation with Native American Tribes, pedestrian survey and Records Search within and around the project site, it is not expected that any tribal cultural resources are within the proposed project pipeline alignment.

Although no evidence has been provided that TCRs are present in the project area the District acknowledges that TCRs may be present within the project area, and the proposed project could possibly unearth unanticipated discoveries during project construction.

Implementation of the Mitigation Measure below in addition to mitigation measures outlined in Section 9.5 – Cultural Resources would avoid potential impacts to undiscovered tribal resources and would reduce this impact to *Less Than Significant with Mitigation*.

Mitigation Measure(s): The following mitigation measures shall be incorporated into the project to avoid impacts to Tribal Cultural Resources.

- In the event that Tribal Cultural Resources (TCRs) are inadvertently discovered during the course of constructing this project, work shall be halted in that area. The District shall immediately contact a qualified archaeologist and the Washoe Tribe of Nevada and California to assess the significance of the discovery. Should it be determined that the Native American cultural resource is an eligible TCRs, the District shall determine appropriate mitigation in consultation with the Washoe Tribe of Nevada and California. Construction activities shall not resume until mitigation measures have been completed.

9.19. UTILITIES AND SERVICE SYSTEMS-- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand and to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Questions:

a-b;e): The proposed project does not include the construction of any wastewater generating uses that would exceed wastewater treatment requirements of a Regional Water Quality Control Board as the project has no association with wastewater facilities. Therefore, there would be **No Impacts**.

c): No stormwater infrastructure is required for pipeline installation nor would the project substantially increase drainage runoff. Therefore, there would be **No Impact**.

d): The District obtains its water supply from the Martis Valley Groundwater Basin. Consolidation of the two water systems would require water from the Basin in order to serve the Hirschdale community which would be offset by a reduction in the Hirschdale well water source. Therefore, there would be **No Impact**.

f-g): Very little solid waste is anticipated to result from the proposed project and would not affect landfill capacity because the amounts would not be substantial. Contractors will dispose of all construction debris according to relevant state, federal, and local statutes. Therefore, there would be **No Impacts**.

Mitigation Measure(s) - None Required

9.20. WILDFIRE -- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors exacerbate wildfire risk, 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 type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation 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 on-going impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risk, 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Questions:

a): Construction of the proposed project could temporarily slow emergency access during daylight hours over a 1-2 day period required to connect the Hirschdale and Truckee water systems under Glenshire Drive. However, during the required time to connect the water systems this roadway would have access at all times under the required encroachment permits from Nevada County and the Town of Truckee. The proposed project would otherwise not have a significant impact on an emergency response or evacuation plan. Therefore, the proposed project impacts would be *Less than Significant*.

b): No factors have been identified that would exacerbate wildfire risk and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, there would be *No Impact*.

c): Construction procedures for the project do not require the installation of associated infrastructure that may be exacerbate fire risk or result in temporary or on-going impacts to the environment. Therefore, there would be *No Impact*.

d): The proposed project is the construction of an underground pipeline to connect the Hirschdale and Truckee water systems. The likelihood of the proposed project to expose people or structures to significant risk, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes is unlikely. No evidence of landslides was observed within the project area. Therefore, there would be *No Impact*.

Mitigation Measure(s) - None Required

9.21. 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 degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environment effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Response to Questions:

a): The proposed Hirschdale pipeline project would consolidate the Hirschdale and Truckee water systems and provide customers a secure water system and important redundancy to the existing well source system. The project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal. The proposed project would comply with all local, state, and federal laws governing general welfare and environmental protection. The project will not adversely affect any species identified as a candidate for sensitive or special status species, in local or regional plans, policies or regulations, or by California Department of Fish and Wildlife or United States Fish and Wildlife Service and would not eliminate important examples of the major periods of California history or prehistory. With implementation of the recommended mitigation measures incorporated into the project impacts would be *Less Than Significant with Mitigation*.

b): The project would not result in cumulative effects because no resources would be adversely affected. The project would involve minimal hazardous materials use, the risks of which are site-specific and extensively regulated. The project would not induce population growth or result in the development of new housing and would not create a cumulative effect related to increased demand for services or utilities.

With implementation of the mitigation measures incorporated into the project, impacts would be ***Less Than Significant with Mitigation***.

c): As described throughout the preceding checklist sections, the proposed Hirschdale pipeline project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. With mitigation measures for the respective environmental categories described in the Initial Study project impacts, both direct and indirect, to human beings would be ***Less Than Significant***.

10.0. 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 D.

11.0. PREPARERS

This Draft Initial Study/Mitigated Negative Declaration was prepared by:

Truckee Donner Public Utility District
Neil Kaufman, Water System Engineer

with technical assistance from

Inland Ecosystems, Inc.
Glenn S. Merron, Environmental Consultant
Dr. Susan Lindström, Archaeologist
Ms. Annie Overlin, Field Biologist
Ms. Mary Bailey, Field Biologist
Devin Blom, Geographic Information Systems

12.0 REFERENCES CITED

Nevada County General Plan 1996. www.nevadacounty

APPENDIX A

CALIFORNIA EMISSIONS ESTIMATOR MODEL (CalEEMod) RESULTS

Hirschdale Pipeline Project

Nevada County, CA

Hirschdale Pipeline Project v3 Summary Report

Table of Contents

1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
6. Climate Risk Detailed Report
 - 6.2. Initial Climate Risk Scores
 - 6.3. Adjusted Climate Risk Scores
7. Health and Equity Details
 - 7.3. Overall Health & Equity Scores
 - 7.5. Evaluation Scorecard

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Hirschdale Pipeline Project v3
Lead Agency	Truckee Donner Public Utility District
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.00
Precipitation (days)	2.20
Location	39.367079219547975, -120.08068497987469
County	Nevada
City	Unincorporated
Air District	Northern Sierra AQMD
Air Basin	Mountain Counties
TAZ	262
EDFZ	0-A
Electric Utility	Truckee Donner Public Utilities District
Gas Utility	Southwest Gas Corp.

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Residential	1.00	Dwelling Unit	0.00	0.00	1.00	—	2.00	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.12	0.11	0.93	1.41	< 0.005	0.05	0.04	0.07	0.04	0.01	0.05	—	216	216	0.01	0.01	0.25	217
Mit.	0.12	0.11	0.93	1.41	< 0.005	0.05	0.04	0.07	0.04	0.01	0.05	—	216	216	0.01	0.01	0.25	217
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.60	1.60	< 0.005	< 0.005	< 0.005	1.63
Mit.	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.60	1.60	< 0.005	< 0.005	< 0.005	1.63
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.27
Mit.	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.27
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	—	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mit.	—	—	—	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	—	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mit.	—	—	—	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	4	1
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	4	1
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	0	1	4	1
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	4	1
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	4	1
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	1	1	4	1
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	0.00
Healthy Places Index Score for Project Location (b)	86.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

APPENDIX B

BIOLOGICAL RESOURCES ASSESSMENT

**Hirschdale Pipeline Project
Nevada County, CA**

TABLE OF CONTENTS

INTRODUCTION	3
Purpose and Overview	3
Project Location and Environmental Setting	4
Project Description	4
METHODS	4
References Consulted	4
Special-Status Species	5
Critical Habitat	5
Sensitive Natural Communities	5
Habitat Assessments	5
RESULTS	5
Habitats	7
Critical Habitat	7
Sensitive Natural Communities	7
Special-Status Species	7
Endangered, Threatened, and Rare Plants	8
Endangered, Threatened, and Special-status Wildlife	8
Migratory Birds and Raptors	8
REGULATORY FRAMEWORK	9
Federal Endangered Species Act	9
Migratory Bird Treaty Act	9
State of California	10
California Endangered Species Act	10
California Fish and Game Code (§3503.5)	10
California Migratory Bird Protection Act	10
Rare and Endangered Plants	10
California Environmental Quality Act Guidelines §15380	11
CONCLUSIONS AND RECOMMENDATIONS	11
Endangered, Threatened, and Rare Plants	11
Endangered, Threatened, and Special-status Wildlife	11
FIGURE	
Figure 1. CNDDDB listings of special-status species within a 5-mile radius of the Hirschdale pipeline project site, Nevada County, CA	6
TABLE	
Table 1. Special-status species and their potential to occur near the Hirschdale pipeline project site, Nevada County, CA	7
ATTACHMENT	
Attachment A. CNDDDB and USFWS species listings for the Hirschdale Pipeline Project, Nevada County, CA	

BIOLOGICAL ASSESSMENT

Hirschdale Pipeline Project Nevada County, CA.

INTRODUCTION

Purpose and Overview

The Truckee Donner Public Utility District (District) provides water service to portions of the Town of Truckee along with adjacent unincorporated areas of Nevada and Placer Counties. The District operates two separate water systems in the Truckee area: the Truckee System and the Hirschdale System with a distance of approximately 1,700 feet separating the two systems. When the Hirschdale well must be taken out of service to perform periodic maintenance, it is necessary for the District to implement temporary measures such as using potable water trucks or an aboveground pipe to supply water to the Hirschdale customers. The District has identified the need to construct a pipeline to connect the Truckee and Hirschdale water systems. This pipeline will allow the District to provide Hirschdale customers with a more cost effective and reliable water supply.

Potable water service to the Hirschdale community is provided from a small water system that consists of a 35 gpm well, a 100,000 gallon storage tank and about 3,100 feet of pipeline. The water produced by the well has high levels of naturally occurring arsenic and manganese. The District operates a treatment system to remove the arsenic and manganese and water supplied to customers complies with State and Federal requirements. However, the treatment system is expensive to operate and requires constant District supervision.

The proposed pipeline would connect to an existing water main at the intersection of Glenshire Drive and Martis Peak Road and then run eastward to Hirschdale. The pipeline alignment includes approximately 1,197 feet of undisturbed forest land on private property (APN 048-240-001) where the District has been granted permission to place the pipeline. Another approximate 1,830 feet of pipe would be installed along an existing rutted dirt road (also on private property) to the Hirschdale water tank site (APN 048-110-014) for a total of 3,028 feet of pipeline. An alternate cross-country route about 665 feet/202.7 meters long and connecting the Hirschdale water tank and existing dirt road is also proposed. The alternative pipeline alignment proposed allows a considerable reduction (of about 1,000 feet) in the length of pipeline needed by going directly northeast from the dirt road directly to the District's Hirschdale tank site.

The District plans to route the pipeline through open corridors between the existing trees to avoid the removal of any large trees and minimize environmental impacts. The total width of the ground disturbance along the pipeline alignment is approximately 40 feet. The pipeline requires a 2.5-foot wide by 4-foot deep excavated trench and approximately 20-feet on either side of the excavated trench would temporarily be disturbed by construction activities. Following construction all soils would be backfilled with material removed from the excavated trench and erosion controls measures implemented to facilitate restoration of the disturbed construction area. A temporary construction staging area would operate on the privately-owned land north of Martis Peak Road.

Golden Hills Consulting (GHC) conducted biological and botanical habitat assessments in the biological survey area (BSA) to evaluate site conditions and potential for biological and botanical species to occur. Other primary references consulted include species lists and information gathered using The United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation System (IPaC), the California Department of Fish and Wildlife's (CDFW) Natural Diversity Database (CNDDDB), the California Native Plant Society's (CNPS) list of rare and endangered plants, and literature review.

Project Location and Environmental Setting

The community of Hirschdale is located approximately 6.5 miles east of Truckee in Nevada County and falls within Township 18 North, Range 17 East, Section 44, USGS Martis Peak 7.5 Quad (Figure 2). The project area is situated in the Truckee Basin approximately 900 feet south of the Truckee River which runs in a generally eastward direction north of the project site.

Hirschdale was once bisected by the transcontinental highway (Highway 40) but essentially became the hamlet at the end of a dead end road when Interstate 80 was completed and the remnant of Highway 40 turned over to Nevada County in the mid 1960's. The project area lies within Storer and Usinger's (1971) native Yellow Pine/Jeffrey Pine Belt where Jeffrey pine (*Pinus jeffreyi*) shares dominance with ponderosa pine (*P. ponderosa*) and lodgepole pine (*P. murrayana*). Understory species include sagebrush (*Artemisia tridentata*), bitterbrush (*Pursia tridentata*), rabbit brush (*Chrysothamnus nauseosus*), and assorted forbs and grasses. The proposed project area is surrounded by mostly undeveloped private forestry land (Figure 3).

Project Description

The Hirschdale System is rather small, consisting of one pressure zone; one well; one storage tank; approximately 3,100 feet of pipeline; and 26 customer accounts. In contrast, the Truckee System is a reasonably complicated system, consisting of 46 pressure zones; 12 active potable water wells; 3 active non-potable wells; 34 active storage tanks; 25 pumping stations; approximately 235 miles of pipeline ranging from 2-inches to 24-inches in diameter; 40 control valve stations; and about 13,600 customer accounts. The following elements for the proposed Hirschdale pipeline project consist of:

- Install up to 3,100 feet of 4-inch pipe within 6-inch casing to connect the Hirschdale system with the Truckee system.
- All soils would be backfilled on-site and any woody vegetation removed would be chipped and placed back on top of the disturbed ground as part of the post-construction erosion control plan.
- Connect to station site piping at the District's Hirschdale water tank and treatment facility.
- Complete pavement work after water system connection at the intersection of Glenshire Drive and Martis Peak Road.

METHODS

References Consulted

GHC obtained lists of special-status species that occur in the vicinity of the BSA. The CNDDDB Geographic Information System (GIS) database was also consulted and showed special-status species within a 5-mile radius of the BSA (Figure 1). Other primary sources of information regarding the occurrence of federally listed threatened, endangered, proposed, and candidate species and their habitats within the BSA are:

- USFWS IPaC Official Species List for the Project area, Consultation Code 2023-0029561
- The results of a species record search of the CDFW CNDDDB RareFind 5 for the 7.5 minute USGS Martis Peak quadrangle; and
- The review of the CNPS Inventory of Rare and Endangered Vascular Plants of California for the 7.5-minute USGS Martis Peak quadrangle.

Special-Status Species

Special-status species that have potential to occur in the BSA are those that fall into one of the following categories:

- Listed as threatened or endangered, or are proposed or candidates for listing under the California Endangered Species Act (CESA, 14 California Code of Regulations 670.5) or the Federal Endangered Species Act (ESA, 50 Code of Federal Regulations 17.12);
- Listed as a Species of Special Concern (SSC) by CDFW or protected under the California Fish and Game Code (CFGC) (e.g. Fully Protected species);
- Ranked by the CNPS as 1A, 1B, or 2;
- Protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act (MBTA); or
- Species that are otherwise protected under policies or ordinances at the local or regional level as required by the California Environmental Quality Act (CEQA §15380).

Critical Habitat

The ESA requires that critical habitat be designated for all species listed under the ESA. Critical habitat is designated for areas that provide essential habitat elements that enable species survival and which are occupied by the species during the species listing under the ESA. Areas outside of the species range of occupancy during the time of its listing can also be determined as critical habitat if the agency decides that the area is essential to the conservation of the species.

Sensitive Natural Communities

Sensitive Natural Communities (SNCs) are monitored by CDFW with the goal of preserving these areas of habitat that are rare or ecologically important. Many SNCs are designated as such because they represent a historical habitat assemblage.

Habitat Assessments

Habitat assessments were conducted on September 15 and October 10, 2022 to determine the suitable habitat elements for special-status species within the BSA. The habitat assessments were conducted by walking through the entire Project, visually assessing surrounding areas, and if habitat was observed for special-status species it was then evaluated for quality based on vegetation composition and structure, physical features (e.g. soils, elevation), microclimate, surrounding area, presence of predatory species and available resources (e.g. prey items, nesting substrates), and land use patterns.

The project site and immediate vicinity provides nesting and foraging habitat for a variety of native birds common to forest areas, such as mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), and California towhee (*Melospiza crissalis*). Construction activities during the avian breeding season 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. A list of species observed or potentially present within the BSA is included in Appendix B.

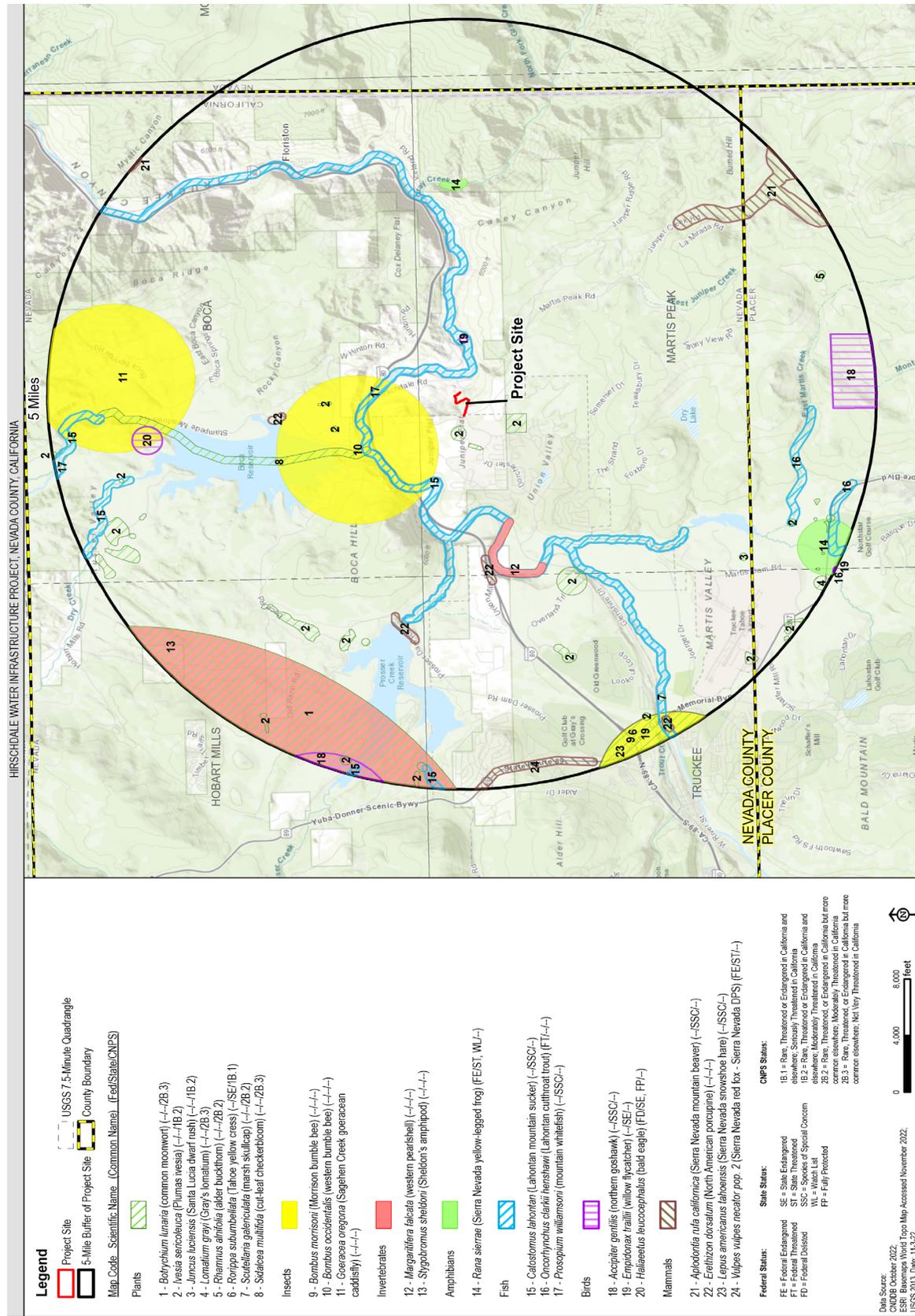


Figure 1. CNDDDB listings of special-status species within a 5-mile radius of Hirschdale pipeline project site.

RESULTS

Habitats

The project area lies within Storer and Usinger's (1971) native Yellow Pine/Jeffrey Pine Belt where Jeffrey pine (*Pinus jeffreyi*) shares dominance with ponderosa pine (*P. ponderosa*) and lodgepole pine (*P. murrayana*). Understory species include sagebrush (*Artemisia tridentata*), bitterbrush (*Purshia tridentata*), rabbit brush (*Chrysothamnus nauseosus*), and assorted forbs and grasses. The proposed project area is surrounded by mostly undeveloped private forestry land.

Critical Habitat

There is no designated critical habitat within the BSA.

Sensitive Natural Communities

No SNCs occur within the BSA.

Special-Status Species

A summary of special-status species assessed for potential occurrence within the BSA based on the USFWS IPaC and CNDDDB species lists within a 5-mile radius and the CNPS list of rare and endangered plants within the Martis Peak USGS 7.5' quadrangle is presented in **Table 1**. Potential for occurrence was determined by reviewing database queries from federal and state agencies, performing surveys, and evaluating habitat characteristics.

Table 1. Special-status species and their potential to occur at or near the Hirschdale pipeline project site, Nevada County, CA.

Common Name (Scientific Name)	Status Fed/State/CNPS	Potential for Occurrence
1. Common moonwort (<i>Botrychium lunaria</i>)	-/-/2B.3	Unlikely. No reported occurrences in project area. Not observed in field surveys.
2. Plumis ivesia (<i>Iversia sericoleuca</i>)	-/-/1B.2	Unlikely. No reported occurrences in project area. Not observed in field surveys.
3. Santa Lucia dwarf rush (<i>Juncus luciensis</i>)	-/-/1B.2	Unlikely. No reported occurrences in project area. Not observed in field surveys.
4. Gray's lomatium (<i>Lomatium grayi</i>)	-/-/2B.3	Unlikely. No reported occurrences in project area. Not observed in field surveys.
5. Alder buckthorn (<i>Rhamnus alnifolia</i>)	-/-/2B.2	Unlikely. No reported occurrences in project area. Not observed in field surveys.
6. Tahoe Yellow Cress (<i>Rorippa subumbellata</i>)	-/SE/1B.1	Unlikely. No reported occurrences in project area. Not observed in field surveys.
7. Marsh skullcap (<i>Scutellaria galericulata</i>)	-/-/2B.2	Unlikely. No reported occurrences in project area. Not observed in field surveys.
8. Cut-leaf checkerbloom (<i>Sidalcea multifidi</i>)	-/-/2B.3	Unlikely. No reported occurrences in project area. Not observed in field surveys.
INSECTS		Unlikely. No reported occurrences in project area. Not observed in field surveys.
9. Morrison bumble bee (<i>Bombus morrisoni</i>)	-/-/-/	Unlikely. No reported occurrences in project area. Not observed in field surveys.
10. Western bumble bee (<i>Bombus occidentalis</i>)	-/-/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
11. Sagehen Creek goeracean caddisfly (<i>Goeracea oregona</i>)	-/-/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.

Common Name (Scientific Name)	Status Fed/State/CNPS	Potential for Occurrence
12. western pearlshell (<i>Margaritifera falcata</i>)	-/-/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
13. Sheldon's amphipod (<i>Stygobromus sheldoni</i>)	-/-/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
14. Sierra Nevada yellow-legged frog (<i>Rana sierra</i>)	FE/ST,WL/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
15. Lahontan mountain sucker (<i>Catostomus lahontan</i>)	-/SSC/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
16. Lahontan cutthroat trout (<i>Oncorhynchus clarkii henshawi</i>)	FT/-/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
17. mountain whitefish (<i>Prosopium williamsoni</i>)	-/SSC/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
18. Northern goshawk (<i>Accipiter gentilis</i>)	-/SSC/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
19. willow flycatcher (<i>Empidonax traillii</i>)	-/SE/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
20. bald eagle (<i>Haliaeetus leucocephalus</i>)	FD/SE, FP/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
21. Sierra Nevada mountain beaver (<i>Aplodontia rufa californica</i>)	_ /SSC/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
22. North American porcupine (<i>Erethizon dorsatum</i>)	-/-/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
23. Sierra Nevada Snowshoe hare (<i>Lepus americanus tahoensis</i>)	-/SSC/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
24. Sierra Nevada red fox-Sierra Nevada DPS (<i>Vulpes vulpes necator pop. 2</i>)	FE/ST/-	Unlikely. No reported occurrences in project area. Not observed in field surveys.
CRITICAL HABITATS		
		There are no critical habitats within the BSA
CODE DESIGNATIONS		
FE or FT = Federally listed as Endangered or Threatened FC = Federal Candidate Species SE or ST = State listed as Endangered or Threatened SC = State Candidate Species SR = State Rare Species SSC = State Species of Special Concern FP = State Fully Protected Species SNC = CDFW Sensitive Natural Community	CNPS California Rare Plant Rank (CRPR): CRPR 1B = Rare or Endangered in California or elsewhere CRPR 2 = Rare or Endangered in California, more common elsewhere CRPR 3 = More information is needed CRPR 4 = Plants with limited distribution 0.1 = Seriously Threatened 0.2 = Fairly Threatened 0.3 = Not very Threatened	

Endangered, Threatened and Rare Plants

No rare plants were encountered during the biological surveys.

Endangered, Threatened and Special Status Wildlife

Migratory Birds and Raptors

Nesting birds are protected under the MBTA (16 USC 703), the CFGC (§3503), and the California Migratory Bird Protection Act (CMBPA, AB 454). The MBTA (16 USC §703) prohibits the killing of migratory birds or the destruction of their occupied nests and eggs except in accordance with regulations

prescribed by the USFWS. The bird species covered by the MBTA includes nearly all of those that breed in North America, excluding introduced (i.e. exotic) species (50 Code of Federal Regulations §10.13).

The CFGC (§3503.5) states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (owls) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Take includes the disturbance of an active nest resulting in the abandonment or loss of young. The CFGC (§3503) also states that “it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.”

The CMBPA amends the CFGC (§3513) to mirror the provisions of the MBTA and allow the State of California to enforce the prohibition of take or possession of any migratory nongame bird as designated in the federal MBTA, including incidental take. Activities that involve the removal of vegetation including trees, shrubs, grasses, and forbs or ground disturbance have the potential to affect bird species protected by the MBTA and the CFGC.

CNDDDB occurrences

The majority of migratory birds and raptors protected under the MBTA and CFGC are not recorded on the CNDDDB because they are abundant and widespread.

Status of migratory birds and raptors occurring in the BSA

There is suitable nesting habitat for a variety of avian species adjacent to the BSA along the Truckee River.

REGULATORY FRAMEWORK

The following describes federal, state, and local environmental laws and policies that may be relevant.

FEDERAL

Federal Endangered Species Act

The United States Congress passed the ESA in 1973 to protect species that are endangered or threatened with extinction. The ESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

Under the ESA, species may be listed as either “endangered” or “threatened.” Endangered means a species is in danger of extinction throughout all or a significant portion of its range. Threatened means a species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. All species of plants and animals, except non-native species and pest insects, are eligible for listing as endangered or threatened. The USFWS also maintains a list of “candidate” species. Candidate species are species for which there is enough information to warrant proposing them for listing, but that have not yet been proposed. “Proposed” species are those that have been proposed for listing, but have not yet been listed.

The ESA makes it unlawful to “take” a listed animal without a permit. Take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” Through regulations, the term “harm” is defined as “an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.”

Migratory Bird Treaty Act

The MBTA (16 USC §703) prohibits the killing of migratory birds or the destruction of their occupied nests and eggs except in accordance with regulations prescribed by the USFWS. The bird species covered by the

MBTA includes nearly all of those that breed in North America, excluding introduced (i.e. exotic) species (50 Code of Federal Regulations §10.13).

State of California

California Endangered Species Act

The California Endangered Species Act (CESA) is similar to the ESA, but pertains to state-listed endangered and threatened species. The CESA requires state agencies to consult with the CDFW when preparing documents to comply with the California Environmental Quality Act (CEQA). The purpose is to ensure that the actions of the lead agency do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species. In addition to formal listing under the federal and state endangered species acts, “species of special concern” receive consideration by CDFW. Species of special concern are those whose numbers, reproductive success, or habitat may be threatened.

California Fish and Game Code (§3503.5)

The CFGC (§3503.5) states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (all owls except barn owls) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Take includes the disturbance of an active nest resulting in the abandonment or loss of young. The CFGC (§3503) also states that “it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.”

California Migratory Bird Protection Act

The CMBPA amends the CFGC (§3513) to mirror the provisions of the MBTA and allow the State of California to enforce the prohibition of take or possession of any migratory nongame bird as designated in the federal MBTA, including incidental take.

Activities that involve the removal of vegetation including trees, shrubs, grasses, and forbs or ground disturbance have the potential to affect bird species protected by the MBTA and CFGC. Thus, vegetation removal and ground disturbance in areas with breeding birds should be conducted outside of the breeding season (approximately March 1 through August 31). If vegetation removal or ground disturbing activities are conducted during the breeding season, then a qualified biologist must determine if there are any nests of bird species protected under the MBTA and CFGC present in the Project area prior to commencement of vegetation removal or ground-disturbing activities. If active nests are located or presumed present, then appropriate avoidance measures (e.g. spatial or temporal buffers) must be implemented.

Rare and Endangered Plants

The CNPS maintains a list of plant species native to California with low population numbers, limited distribution, or otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS California Rare Plant Rank (CRPR) plants receive consideration under CEQA review. The CNPS CRPR categorizes plants as follows:

- Rank 1A: Plants presumed extinct in California;
- Rank 1B: Plants rare, threatened, or endangered in California or elsewhere;
- Rank 2A: Plants presumed extirpated or extinct in California, but not elsewhere;
- Rank 2B: Plants rare, threatened, or endangered in California, but more numerous elsewhere;
- Rank 3: Plants about which we need more information; and
- Rank 4: Plants of limited distribution.

The California Native Plant Protection Act (CFGC §1900-1913) prohibits the taking, possessing, or sale within the state of any plants with a state designation of rare, threatened, or endangered as defined by CDFW. An exception to this prohibition allows landowners, under specific circumstances, to take listed plant species, provided that the owners first notify CDFW and give the agency at least 10 days to retrieve (and presumably replant) the plants before they are destroyed. Fish and Game Code §1913 exempts from the ‘take’ prohibition “the removal of endangered or rare native plants from a canal, lateral channel, building site, or road, or other right of way.”

California Environmental Quality Act Guidelines §15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines §15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled based on the definition in the ESA and the section of the CFGC dealing with rare, threatened, and endangered plants and animals. The CEQA Guidelines (§15380) 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 (e.g. candidate species, species of concern) would occur. Thus, CEQA provides an agency with the ability to protect a species from a project’s potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

CONCLUSIONS AND RECOMMENDATIONS

Endangered, Threatened, and Rare Plants

There are no special-status botanical species present within the BSA and no suitable habitat for special status botanical species was identified within the BSA; therefore, there will be no effects to botanical species and no avoidance and minimization measures are proposed.

Endangered, Threatened, and Special-status Wildlife

The following are the recommended minimization and mitigation measures to further reduce or eliminate Project-associated impacts to special-status wildlife species.

Migratory Birds and Raptors

Although no trees large enough to provide suitable nesting are within the BSA, the nearby riparian corridor along Truckee River does support several large trees that are more attractive for nesting. To avoid impact to migratory birds and raptors within the nesting season (February 1 – August 31), a nesting bird survey by a qualified biologist should be done no later than 2-weeks prior to project initiation.

Appendix A

Species Lists:

California Natural Diversity Database

U.S. Fish and Wildlife Service

CNDDDB Occurrence List

CNAME	TAXON	CALLIST	RPLANTRANK	CDFW	Map#
common moonwort	01 - Plants	--	2B.3		1
Plumas ivesia	01 - Plants	--	1B.2		2
Santa Lucia dwarf rush	01 - Plants	--	1B.2		3
Gray's lomatium	01 - Plants	--	2B.3		4
alder buckthorn	01 - Plants	--	2B.2		5
Tahoe yellow cress	01 - Plants	SE	1B.1		6
marsh skullcap	01 - Plants	--	2B.2		7
cut-leaf checkerbloom	01 - Plants	--	2B.3		8
Morrison bumble bee	02 - Insects	--	--		9
western bumble bee	02 - Insects	--	--		10
Sagehen Creek goeracean caddisfly	02 - Insects	--	--		11
	02 -				
western pearlshell	Invertebrates	--	--		12
	02 -				
Sheldon's amphipod	Invertebrates	--	--		13
	04 -				
Sierra Nevada yellow-legged frog	Amphibians	ST, WL	--	WL	14
Lahontan mountain sucker	05 - Fish	SSC	--	SSC	15
Lahontan cutthroat trout	05 - Fish	--	--		16
mountain whitefish	05 - Fish	SSC	--	SSC	17
northern goshawk	07 - Birds	SSC	--	SSC	18
willow flycatcher	07 - Birds	SE	--		19
bald eagle	07 - Birds	SE, FP	--	FP	20
Sierra Nevada mountain beaver	08 - Mammals	SSC	--	SSC	21
North American porcupine	08 - Mammals	--	--		22
Sierra Nevada snowshoe hare	08 - Mammals	SSC	--	SSC	23
Sierra Nevada red fox - Sierra Nevada DPS	08 - Mammals	ST	--		24



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Project Code: 2023-0029561
Project Name: Hirschdale Pipeline Project

January 03, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Project Code: 2023-0029561

Project Name: Hirschdale Pipeline Project

Project Type: Distribution Line - New Construction - Below Ground

Project Description: The Truckee Donner Public Utility District, Truckee, CA. intends to connect its main Truckee water system with the Hirschdale water system. The project distance is approximately 1,700 feet of 4-inch pipe to connect the two systems.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.3666186,-120.08165453564428,14z>



Counties: Nevada County, California

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

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

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

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

-
1. [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.

Amphibians

NAME	STATUS
Sierra Nevada Yellow-legged Frog <i>Rana sierrae</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9529	Endangered

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

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

IPaC User Contact Information

Agency: Inland Ecosystems, Inc.

Name: Glenn Merron

Address: 6155 Plumas St

City: Reno

State: NV

Zip: 89519

Email gmerron@gmail.com

Phone: 7757220933

APPENDIX C

CULTURAL RESOURCES ASSESSMENT

**Hirschdale Pipeline Project
Nevada County, CA**

**TRUCKEE DONNER PUBLIC UTILITY
HIRSCHDALE PIPELINE PROJECT
CULTURAL RESOURCE STUDY**

report prepared by

Susan Lindström, Ph.D. (RPA), Consulting Archaeologist

Truckee, California

and

Devin Blom, Archaeologist, GIS Analyst

Virginia City, Nevada

report prepared for

Inland Ecosystems

Reno, Nevada

on behalf of

Truckee Donner Public Utility District

Truckee, California

November 2022

TABLE OF CONTENTS

	page
SUMMARY	1
PROJECT BACKGROUND	3
Project Description and Location	3
Project Authority and Scope	2
SETTING	12
Physical Environment	12
Native American Period	12
Prehistory	12
Washoe History	14
Euroamerican Period	15
Transportation	15
Lumbering	16
METHODS	21
North Central Information Center Records Search	21
Native American Outreach	24
Field Survey	26
RESULTS	27
Archaeological Site Inventory	x
Historic Utility Line (P-29-4236)	x
Historic Logging Road ca. 1969 (TDPUD-1)	x
Historic High-Cut Stumps ca. 1870s-1900 (TDPUD-2)	x
Features Noted Not Formally Recorded	x

Significance	x
Impacts	x
RECOMMENDATIONS	31
REFERENCES CITED	32
TABLES	
1. Summary of prior cultural resource studies and known cultural resources	23
2. Native American outreach: summary communications log	25
FIGURES	
1. Project location map (topo)	4
2. Project location map (aerial)	5
3. Archaeological coverage map (topo)	x
4. Archaeological coverage map (aerial)	x
PHOTOS	
1. Pipeline connection to existing main line at intersection of Glenshire Drive	9
2. Overview of northwestern cross-country terminus of the proposed pipeline	x
3. Intersection of cross-country pipeline and existing dirt road where pipeline will be embedded into the road grade	9
4. . Overview of water tank facility and pipeline terminus	17
5. The Clinton Mill	20
6. Clinton (Camp 18), once located at the present-day community of Hirschdale	21
7. Log train at the head of the Clinton Railroad log chute	26
8. Pacific Lumber and Wood Company’s locomotive awaits loading of log cars	27
9. Overview of project ground surface conditions	28
10. Historic utility wire	28
11. Historic dirt logging road dating from the 1960s	29
12. Historic high-cut stump	29
MAPS	
1. Map of the area of operations of the Pacific Lumber and Wood Company	x
2. USGS Truckee Quad 1889	x
3. USGS Martis Peak 7.5 Quad 1955	x
4. USGS Martis Peak 7.5 Quad 1969	x
5. USGS Martis Peak 7.5 Quad 1985	x
APPENDIX 2: North Central Information Center Correspondence	41

CONFIDENTIAL APPENDIX State of California Archaeological Site Records

Note that this appendix contains confidential archaeological site information. To prevent the deliberate and/or inadvertent destruction of cultural resources, this information should be used for planning purposes only and should not be distributed to the public. Releasing information about the nature and location of archaeological resources is restricted under Section 304 of the National Historic Preservation Act (16 U.S.C. 470w-3) and Section 9 of the Archaeological Resources Protection Act (16 U.S.C. 470hh; 36 CFR296.18).

SUMMARY

Project Background and Authority

The Truckee Donner Public Utility District (TDPUD) intends to connect its main Glenshire waterline with the Hirschdale water system. The alignment includes about 1,197 feet/365 meters of undisturbed land between Glenshire Road and Martis Peak Road and another approximate 1,830 feet/558 meters of waterline to be embedded in an existing dirt road to the Hirschdale water tank for a total of 3,028 feet/923 meters for the proposed pipeline. An alternate cross-country route, about 665 feet/202.7 meters long and connecting the Hirschdale water tank and existing dirt road is also proposed. The maximum width of the ground disturbance corridor along the pipeline alignment is approximately 50 feet.

As part of baseline environmental studies, the project applicant is required to consider potential project impacts on cultural resources under the California Environmental Quality Act (CEQA Section 5024, Public Resource Code). Within this regulatory context, cultural resource studies are customarily performed in a series of phases, each one building upon information gained from the prior study. The inventory phase (*Phase 1*) involves pre-field research and Native American contact (*Phase 1A*), archaeological field reconnaissance/resource discovery (*Phase 1B*), and documentation of any cultural resources located within the project area (*Phase 1C*). If cultural properties are present and if they may be subject to project-related impacts, their significance is evaluated (*Phase 2*) according to eligibility criteria established in the California Register of Historical Resources and the National Register of Historic Places. If project redesign to avoid impacts to significant resources is unfeasible, then mitigation measures are implemented (*Phase 3*). Mitigation (or data recovery) typically involves supplemental archival research, field excavation, photo documentation, mapping, architectural evaluation, archaeological monitoring, interpretation, etc.

Methods

To accomplish these tasks, Susan Lindstrom, Ph.D., Consulting Archaeologist was retained by Inland Ecosystems on behalf of the TDPUD. With nearly five decades of professional experience, Dr. Lindström exceeds qualifications for certification by the Secretary of Interior's Professional Qualifications Standards (48 FR 44738-44739) for archaeology, history and related disciplines. Her project work included the required records search of the regional archaeological data base, Native American outreach, and an intensive archaeological field survey conducted on October 27, 2022. Devin Blom, Archaeologist/GIS Analyst and owner of Battleborn GIS, who has a Bachelor of Arts Degree in Anthropology with over 12 years of regional archaeological experience, assisted in the field survey, conducted the GPS field mapping effort and prepared report maps. Glenn Merron of Inland Ecosystems supplied necessary project background information. Neil Kauffman, P.E., Water System Engineer, TDPUD provided helpful field orientation.

Results

The various pre-field records searches indicate that the project area is of low sensitivity to contain cultural resources. However, several historic archaeological sites have been inventoried within and surrounding the community of Hirschdale; one historic utility line (P-29-4236) is known to bisect the project area. The intensive archaeological field survey conducted on October

27, 2022 identified the historic utility line (P-29-4236) and discovered two additional historic cultural resources within the project area: a segment of logging road dating from ca. 1969 (TDPUD-1) and a cluster of historic high-cut stumps dating from ca. 1870s-1900 logging activities. These features were inventoried and evaluated as not significant and determined ineligible for listing in the California Register of Historical Resources and National Register of Historic Places under any criteria. If a cultural resource does not meet criteria of significance and eligibility for listing in the California or National Register, or if it is not a unique archaeological or a historical resource, the effects of a project on the resource are not considered to be a significant effect on the environment. It is sufficient that both the resource and the effect on it are noted in the environmental document, but they need not be considered further in the CEQA process.

Initial Native American outreach was accomplished according to CEQA guidelines and mandates under California Assembly Bill 52 (AB 52 pursuant to PRC 21080.3.1). No immediate concerns regarding the project area were expressed in the Sacred Lands File Search by the Native American Heritage Commission or by tribes on the Commission's contact list who were notified, including the Washoe Tribe (whose ancestral homeland encompasses the project area).

In terms of guidelines established by CEQA, the project should not alter or adversely affect the physical or aesthetic properties of any significant cultural resource. Nor should the project have the potential to cause a physical change that would affect unique ethnic cultural values or restrict religious or sacred uses. The potential effects of this project on cultural resources are not considered to be a significant effect on the environment.

Conclusions and Recommendations

The archival research methods and archaeological techniques employed during this investigation were comprehensive such that existing cultural materials in the project area visible to surface examination would have been identified. Although the project area has been subject to systematic surface archaeological investigations, it is possible that buried or concealed cultural resources could be present and detected during project ground disturbance activities. In the event of unanticipated discoveries, project activities should cease near the find to evaluate the resource in accordance with CEQA guidelines. If the discovered resource is determined to be significant, mitigation measures should be devised, and mitigation should be implemented before ground-disturbing work near the resource find continues.

In the unlikely event that human remains are encountered during the proposed project, all activities should be stopped immediately, and the County Coroner's Office should be contacted pursuant to Public Resources Code (PRC) Section 7050.5. If the remains are determined to be of Native American origin, the Native American Heritage Commission should be notified within 24 hours of determination, as required by PRC Section 5097.94, 5097.98 and 5097.99. The Commission should notify designated *Most Likely Descendants* (in this case the Washoe Tribe), who should provide recommendations for the proper treatment of the burial remains within 24 hours.

With the completion and submittal of this report, state and county requirements for a cultural resource study have been accomplished. Pending the implementation of mitigation measures for the fortuitous discovery of unknown resources, no further archaeological study is

recommended, and no special operational constraints need be imposed on the project sponsor concerning cultural resources.

PROJECT BACKGROUND

PROJECT DESCRIPTION AND LOCATION

The Truckee Donner Public Utility District (TDPUD) intends to connect its main Glenshire waterline with the Hirschdale water system. The alignment includes about 1,197 feet/365 meters of undisturbed land between the main connection at the intersection of Glenshire Road, Martis Peak Road and Stallion Way (photos 1 and 2) and another approximate 1,830 feet/558 meters of waterline to be embedded in an existing dirt road (Photo 3) to the Hirschdale water tank (Photo 4). The proposed pipeline line is a total of 3,028 feet/923 meters. An alternate cross-country route, about 665 feet/202.3 meters long and connecting the Hirschdale water tank and existing dirt road is also proposed. The width of the ground disturbance corridor along the pipeline alignment is approximately 50 feet.

The project area falls within Township 18 North, Range 17 East, Section 44, USGS Martis Peak 7.5 Quad (figures 1-3.) [Note that GIS data to precisely geolocate the project area were generated as the flagged pipeline alignment was field surveyed.]

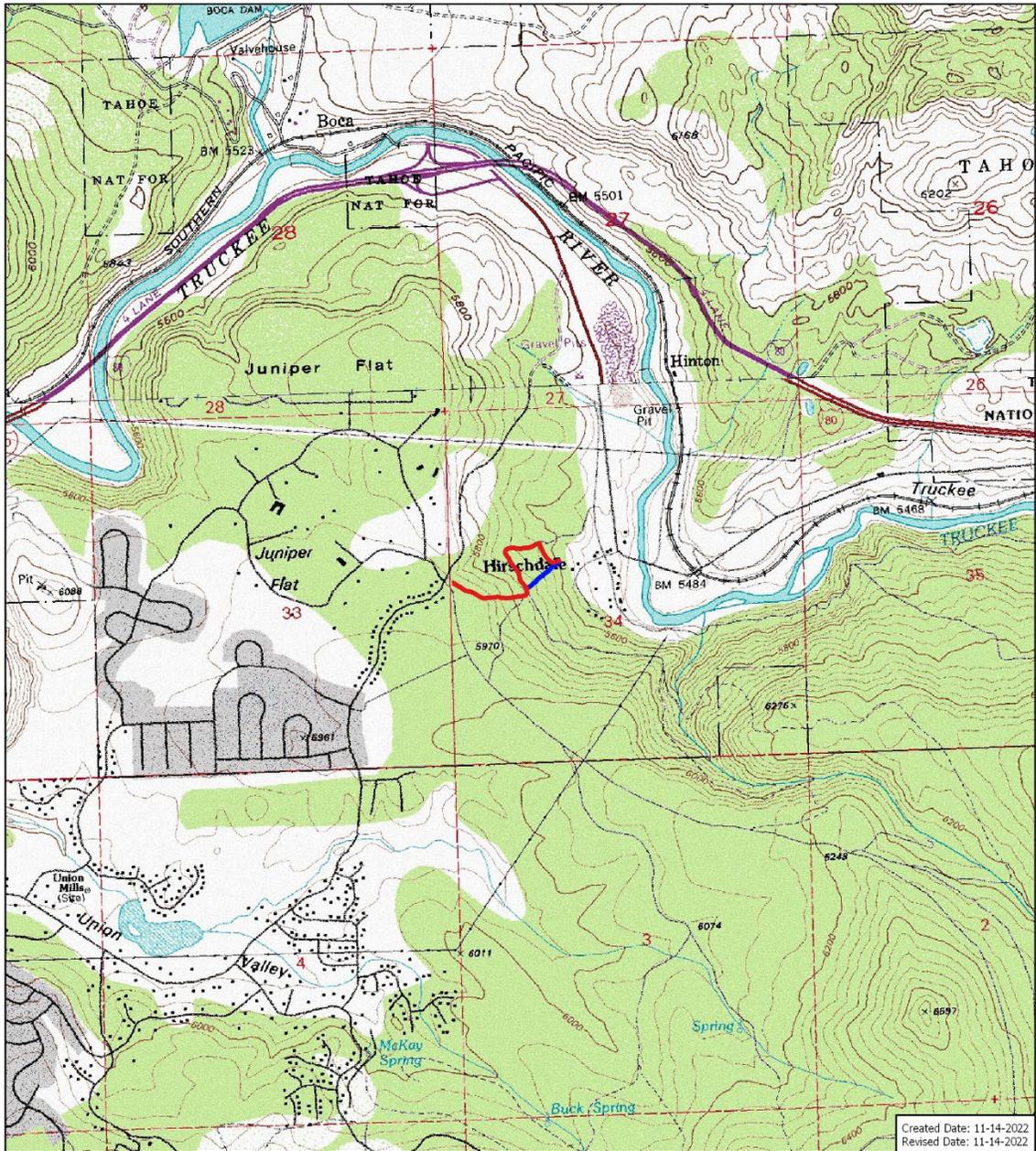
PROJECT AUTHORITY AND SCOPE

In compliance with guidelines established by Nevada County under the California Environmental Quality Act (CEQA Section 5024, Public Resource Code), the project sponsor is required to consider potential project impacts on cultural resources within a proposed project area.

State Guidelines

The CEQA process is outlined in CEQA Guidelines Section 15060-15065. For the purposes of CEQA, significant "historical resources" and "unique archaeological resources" are defined as (Section 15064.5[a]):

- (1) A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seq.).
- (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record.



Created Date: 11-14-2022
 Revised Date: 11-14-2022

Susan Lindström, Ph.D.,
 Consulting Archaeology



Battle Born GIS

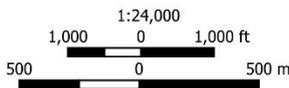
**Truckee Donner Public Utility District
 Hirschdale Pipeline Project
 Cultural Resource Study
 Figure 1. Project Location**

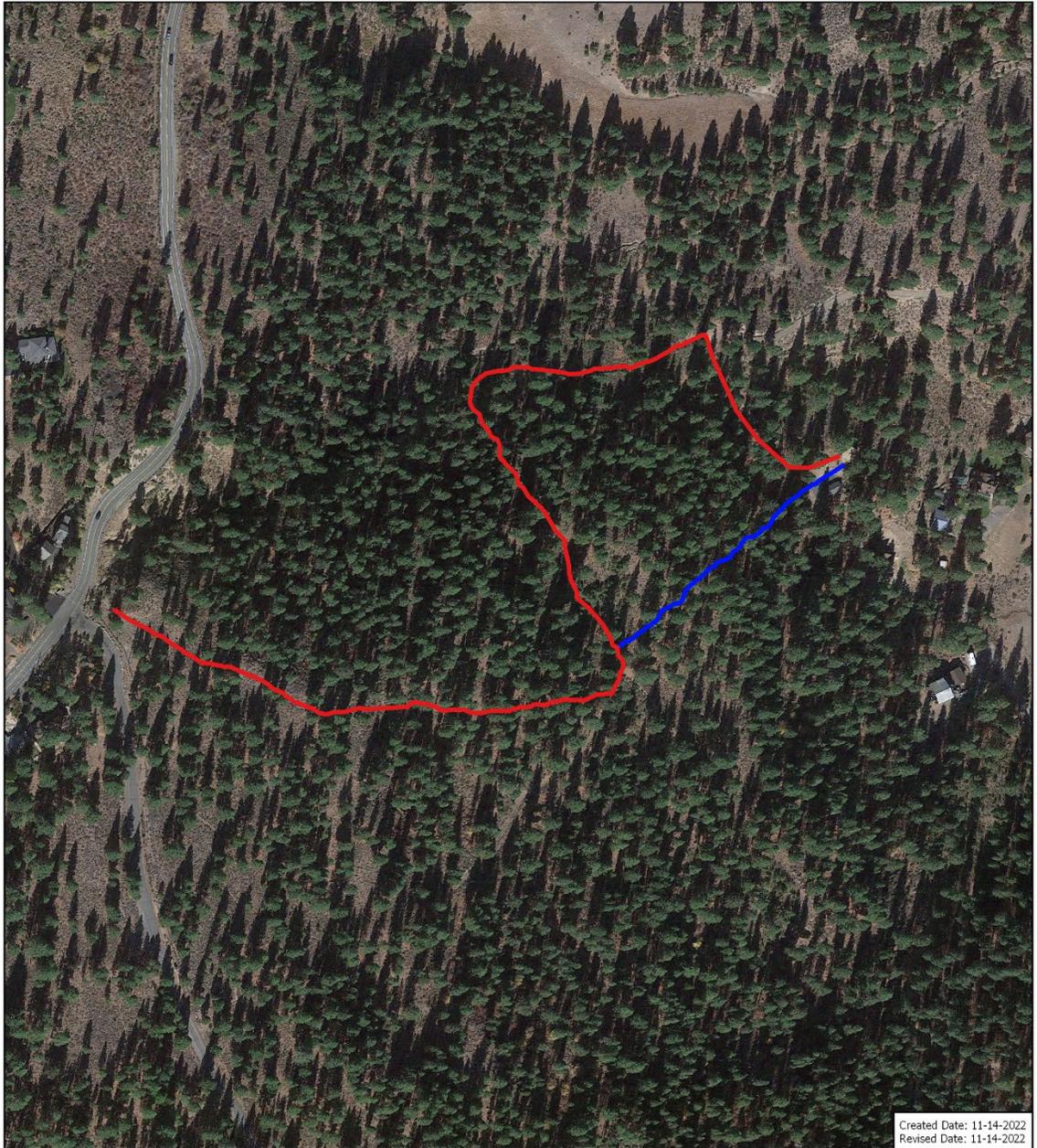
Township 18 North; Range 17 East;
 Section 34
 USGS Martis Peak 7.5' Quad



Legend

- proposed pipeline alignment
- alternative pipeline alignment





Created Date: 11-14-2022
 Revised Date: 11-14-2022

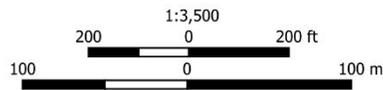
Susan Lindström, Ph.D.,
 Consulting Archaeology

**Truckee Donner Public Utility District
 Hirschdale Pipeline Project
 Cultural Resource Study
 Figure 2. Project Location**

Township 18 North; Range 17 East;
 Section 34
 USGS Martis Peak 7.5' Quad



Battle Born GIS



Legend

- proposed pipeline alignment
- alternative pipeline alignment



Susan Lindström, Ph.D.,
 Consulting Archaeology



**Truckee Donner Public Utility District
 Hirschdale Pipeline Project
 Cultural Resource Study
 Figure 2. Project Location**

Susan Lindström, Ph.D.
 Consulting Archaeologist

Township 18 North; Range 17 East;
 Section 34
 USGS Martis Peak 7.5' Quad





Photo 1. Pipeline connection to existing main line at intersection of Glenshire Drive (east-west roadway), Martis Peak Road (back) and Stallion Way (front); view southeast; proposed pipeline extends cross country and southeastward from the center of the intersection (back left)



Photo 2. Overview of northwestern cross-country terminus of the proposed pipeline (view southeast)



Photo 3. Intersection of cross-country pipeline alignment (left) and existing dirt road (center) where pipeline will be embedded into the road grade; view north



Photo 4. Overview of water tank facility and pipeline terminus (panorama view east)

Study Protocol and Objectives

A cultural resource is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. Cultural resource studies are customarily performed in a series of phases, each one building upon information gained from the prior study.

PHASE 1 INVENTORY: First, archival research and an archaeological field reconnaissance are performed to inventory and record known cultural resources and identify potential project constraints. *Phase 1A* of the inventory involves prefield research, Native American consultation and the required records search at the appropriate archaeological clearing house. A *Phase 1B* field survey to identify surface sites, features, buildings, and/or artifacts follows. If cultural resources are discovered, and based upon their number and complexity, a subsequent task and cost proposal is prepared to complete *Phase 1C* cultural resource recording.

PHASE 2 EVALUATION: Once cultural properties are recorded and if they may be subject to project-related impacts, their significance is evaluated according to criteria established in the California Register of Historical Resources and/or National Register of Historic Places. For significant resources, a determination of project impacts is assessed and detailed measures to mitigate impacts are proposed. If project redesign to avoid impacts is unfeasible, then mitigation measures are recommended to recover the significant information contained within these cultural properties prior to project ground disturbance activities.

PHASE 3 IMPACT MITIGATION AND DATA RECOVERY: A final phase may involve the implementation of mitigation measures recommended during the prior evaluation phase. Mitigation, or data recovery, typically involves additional archival research, field excavation, photo documentation, mapping, archaeological monitoring, etc.

The objectives of this study are designed to satisfy cultural guidelines pertaining to *Phase 1* and *Phase 2* work where tasks include:

- a record search of files housed at the North Central Information Center at California State University, Sacramento
- a search of Sacred Lands Files with the Native American Heritage Commission and follow-up communications with tribes/individuals on the Commission's contact list
- an archaeological field survey comprising intensive coverage.

SETTING

PHYSICAL ENVIRONMENT

The project area is situated in the Truckee Basin, an alluviated structural basin west of the Carson Range and east of the main crest of the Sierra Nevada. Project elevations range 5,920 feet on top of Juniper Flat, down to 5,540 feet at the existing Hirschdale water tank. The project area occupies a steep and forested northeast-facing slope directly above the Truckee River. It is drained by Juniper Creek, which empties into the Truckee River. Surrounding low hills, ridges and plateaus such as Juniper Flat are Tertiary and Pleistocene volcanic rocks (Birkeland 1963) and valley floors are covered

with relatively flat laying alluvial, glacial and glacio-fluviatile deposits (Birkeland 1964). The Pleistocene geology of the Truckee Basin is influenced greatly by volcanic activity, which occurred between 2.3 and 1.2 million years ago. These flows are correlated with the Lousetown Formation, a series of early Quaternary basaltic rocks extruded from several local vents that underlie much of the Truckee Basin and its flanks. The presence of a basalt source of high knappable quality at nearby Alder Hill, which were fashioned into stone tools, greatly influenced the prehistoric occupation of the general project area. There is no suitable tool stone quality basalt on the project site. Project geology and topography are also a product of Holocene glaciation within the past 10,000 years marked by the advance of small cirque glaciers. Granite boulders embedded in glacial outwash were used by Native Americans as bedrock mills to process plants, animals and fish.

The study area lies within Storer and Usinger's (1971) native Yellow Pine/Jeffrey Pine Belt where Jeffrey pine (*Pinus jeffreyi*) shares dominance with ponderosa pine (*P. ponderosa*) and lodgepole pine (*P. murrayana*). Understory species include sagebrush (*Artemisia tridentata*), bitterbrush (*Pursia tridentata*), rabbit brush (*Chrysothamnus nauseosus*), and assorted forbs and grasses.

It is doubtful that modern plant and animal communities closely resemble their pristine composition due to past disturbance. In pristine times the area is thought to have supported a luxuriant growth of native bunch grasses that allowed an abundant large game population (deer and antelope) and provided a nutritious source of seeds for use by prehistoric peoples. The Truckee River, which was once an important fishery to both prehistoric and historic populations, has dramatically declined and the contemporary sport fishery now supports only non-native species. More recent human modifications of the project area are associated with historic and recent logging.

NATIVE AMERICAN PERIOD

Prehistory

A large view divides the prehistory of the Sierra Nevada and adjoining regions into intervals marked by changes in adaptive strategies that represent major stages of cultural evolution. Current understanding of northern Sierra Nevada and western Great Basin prehistory is framed within a chronological sequence spanning nearly 12,000 years that is drawn from paleoclimatic and archaeological studies throughout the western Great Basin, eastern Sierra front and the Tahoe-Truckee area (especially see Elston 1971, 1982, 1986; Elston et al. 1977, 1994, 1995; Heizer and Elsasser 1953; Grayson 1993, and as summarized by Waechter and Lindström 2014). In broadest terms, the archaeological signature of the Tahoe Sierra marks a trend from hunting-based societies in earlier times to more dispersed populations that were increasingly reliant upon diverse resources by historic contact. The change in lifeways may be attributed partially to factors involving paleoclimatic fluctuations, a shifting subsistence base, and variable demographics.

Pre-Archaic remains suggest occupation by at least 9,000 years ago in the Tahoe Sierra during the Late Pleistocene/Early Holocene (~12,500-8,000 years ago) as glaciers retreated, pluvial lakes shrank, and climates warmed (Elston's et al. 1977 "Tahoe Reach Phase"). Early populations were highly mobile in the pursuit of large game animals.

Pre-Archaic to Early Archaic occupation dates from about 7,000-5,500 years ago during the Middle Holocene (~8,000 to 5,500 years ago). Increased warming and drying caused diminished creek flows and lake levels in Tahoe and other regional lakes to drop, allowing trees to grow in areas

that were once inundated (Lindström et al. 2000). This period is characterized by a decrease in the number of archaeological sites that may reflect regional declining resources and populations.

The “Early” Late Holocene dating between 5,500 and 2,000 years ago (Elston’s et al. 1977 “Early Martis Phase”) witnessed the end of the Mid-Holocene droughts, with a consequent expansion of forests and woodlands and a rise in Lake Tahoe and other regional lakes and streams that drowned ancient forests along the shoreline (Lindström et al. 2000). This was the most intensive period of prehistoric occupation in the region.

A warming and drying trend with a decline in winter precipitation during the “Middle” Late Holocene between 2,000 and 1,000 years ago (Elston’s et al. “Late Martis” / “Early Kings Beach” phases) coincided with profound cultural changes.

Around 1,000 years ago during the Late Holocene (Elston’s et al 1977 “Kings Beach” Phase), much of the west was affected by frequent and dramatic fluctuations in temperature and precipitation marked by prolonged and severe droughts (Stine 1994). Late Archaic human populations continued to rise and stressed by periodic but extreme warm and dry conditions (known as the “Medieval Climatic Anomaly”), shifted away from large game hunting to the further pursuit of foods previously ignored (e.g., plants, fish and small game). This period is reflected archaeologically in more intensive use of all parts of the Tahoe Sierra landscape, with more dispersed and ephemeral settlement patterns allowing for year-round residence in the Tahoe highlands at sometimes and prohibiting even seasonal occupation at other times. These changes may reflect the arrival of incoming Numic-speaking populations (e.g., Paiute groups) into an area that had been occupied for thousands of years by Hokan-speakers (Jacobsen 1966), the protohistoric ancestors of the Washoe Indians (Elston’s et al 1977 “Late Kings Beach Phase”). It is estimated that the prehistoric Washoe had one of the highest population densities in the western Great Basin. Relatively high estimates are attributed to the bountiful environment in which they lived (Price 1962:2). Historic declines in Washoe population and traditional resource use were caused by disruptions imposed by incoming Euroamerican groups.

Washoe History

The project area falls within the center of Washoe (*Wa She Shu*) territory, with primary use by the northern Washoe or *Wel mel ti* (Downs 1966; Nevers 1976; Stewart 1966). During the mild season, small groups traveled through high mountain valleys fishing and collecting edible and medicinal roots, seeds and marsh plants. In the higher elevations, men hunted large game and trapped smaller mammals. Archaeological evidence of these ancient subsistence and trekking activities is found along the mountain flanks as temporary small hunting camps containing flakes of stone and broken tools. In the high valleys semi-permanent base camps are represented by stone flakes, tools, grinding implements, and house depressions. The Washoe regard all "prehistoric" remains and sites within the Truckee-Tahoe area as associated with their own history (Rucks 1996). Washoe consultants working with anthropologist Warren d’Azevedo identified a relatively unusual concentration of named settlement areas along the Truckee River between Donner Creek and the Little Truckee River at Boca, located about two miles northwest of the project area (d’Azevedo 1956; Rucks 2005; Rucks in Lindström et al. 2007:12), suggesting permanent habitation.

By the 1850s mining, lumbering, grazing, commercial fishing, tourism, and the growth of settlements disrupted traditional Indian relationships to the land. Washoes survived by trading goods

and services to the dominant Euroamerican population (selling baskets, catching fish and game, and working as domestic laborers, wood cutters, ice harvesters, caretakers, game guides, etc.) in exchange for camping privileges on traditional lands with access to what resources remained. Beginning in 1917 the Washoe Tribe began acquiring back a small part of their traditional lands, remaining as a recognized tribe by the U.S. government with an established land base. Today, the Washoe have developed a Comprehensive Land Use Plan (1994) that includes goals of reestablishing a presence within the Tahoe Sierra and re-vitalizing Washoe heritage and cultural knowledge, including the harvest and care of traditional plant resources and the protection of traditional properties within the cultural landscape.

EUROAMERICAN PERIOD

Truckee's beginnings are marked by the arrival of Joseph Gray, who built a stage station near the present-day downtown in 1863. Gray was soon joined by a blacksmith named S. S. Coburn, and the fledgling settlement of Gray's Toll Station was renamed Coburn's Station. This tiny way station grew from two structures into a thriving town that accommodated emigrants, stagecoach travelers and freight wagons in route westward to California's gold fields and eastward to the Comstock Lode in Nevada. In 1868 Coburn's Station burned and the name was changed to Truckee. Throughout the rest of the 19th century, Truckee thrived on the related fields of lumber, railroading and ice. However, during the 1920s, this industrial economy and society had largely disappeared, due in major part to the relocation of the train's switching yard to Roseville, the depletion of local timber supplies and the development of mechanical refrigeration. In its place, the community began to develop into a recreation-based economy, boosted by the completion of a transcontinental highway over Donner Pass (Lincoln Highway/Victory Highway/ U.S. Highway 40/Interstate 80).

Truckee had an especially large subpopulation of Chinese, the second-largest concentration of overseas Chinese in the West. The organization of Sisson, Wallace/Crocker and Company, a subsidiary of the Central Pacific Railroad, was one of the main importers and contractors of Chinese labor for the railroad (Edwards 1883:14; Lord 1981:15). With the completion of the transcontinental railroad, the Chinese immigrants were channeled into other regional occupations, especially the lumber industry, where Truckee lumbermen (such as Charles Allen Bragg, Albert Bragg, Gilman N. Folsom, and later Fred Burckhalter of the Pacific Lumber and Wood Company) employed immigrant Chinese wood cutters (Goldstein 1988:35; Meschery 1978:71). Such employment by lumber, merchandising, and other business interests engaged immigrant Chinese in direct competition with Euroamericans, especially during times of economic hardship. Truckee soon assumed a leadership role in the anti-Chinese movement in the West (Saxton 1971:206). Anti-Chinese sentiment ultimately resulted in the near demise of Truckee's Chinese community by 1886.

Transportation

Some of the first Euroamerican visitors to the Truckee area were members of the Stephens-Murphy-Townsend emigrant party who ascended the Truckee River in mid-November of 1844. This route, which passed near Hirschdale and through Truckee Town, later became known as the Truckee River Route of the Overland Emigrant Trail. Hundreds of emigrant trains soon followed, the most notable being the ill-fated Donner Party (Graydon 1986). Wagon roads, a transcontinental railroad, and interstate highways would follow, as the Truckee River canyon developed into one of the major trans-Sierra crossings.

The route of America's first transcontinental railroad (designated State Historic Landmark No. 780) passes below the northeastern boundary of the project area. Hirschdale, once referenced on the transcontinental railroad timetables as the Camp 18, was a main station stop (Myrick 1960:438). Theodore Judah, a railroad engineer, conceived of the project, surveyed a route through the Sierra Nevada, and was instrumental in obtaining congressional funding. The Central Pacific Company was selected to build the rails to the east and the Union Pacific Company was chosen to construct a railroad westward. Backers of the Central Pacific, the "Big Four" (Leland Stanford, Charles Crocker, Mark Hopkins, and Collis P. Huntington) were attracted by the U.S. government's offer of lands along the right of way, timber and quarrying rights and other generous subsidies – more than by the railroad itself. Construction commenced in Sacramento on January 8, 1863. While construction on Sierra tunnels delayed progress, advance forces at Truckee began building track east and west of Truckee until the Summit Tunnel was opened in December 1867. By May of 1868 the railroad was completed between Truckee and Reno but the line between Cisco and Truckee over Donner Pass was not finished until June 1868. The entire transcontinental route was finished in May 10, 1869, with the last rail joining the Central Pacific and the Union Pacific Railroad at Promontory, Utah (Kraus 1969:9). Its completion ended California's effective isolation from eastern markets and eastern goods and brought California into the mainstream U.S. economy. The railroad had an immense impact on the Truckee region where economic activities such as logging, commercial fishing, the ice industry, agriculture, and recreation were all stimulated or expanded by the market provided by the railroad.

Lumbering

Logging was first initiated in the Truckee area after the discovery of the Comstock Lode in 1859. When production began to fall in the mines in 1867, the lumbering business also began to suffer. A new market for lumber was found in the Central Pacific Railroad (later Southern Pacific and now Union Pacific Railroad). As the rails reached Donner Summit in 1866-1867, numerous mills established operations in the Truckee Basin to supply the railroad with cordwood for fuel, lumber for construction and ties for the roadbed. Truckee (then known as Coburn's Station) soon became one of the major lumbering centers. Over 18 sawmills were operating in the Truckee area during the late 19th century. Until around the turn of the century, demands for large saw logs and cordwood targeted pine species to produce timbers for the mines and the railroad. As lumber markets were gradually expanded with the completion of the railroad, a growing emphasis was placed on the production of other wood products. The expansion beyond saw milling targeted such facilities as planing mills, box factories, sash and door establishments, a chair factory and furniture factory, shingle mills, and charcoal earthen and brick kilns. The potentially great distance between the wood resource and its point of consumption prompted the innovation of a variety of transport techniques. A labyrinth of logging railroads, wagon roads, trails, and flumes formed a tiered network along mountain slopes. This system was marked by a series of wood camps and mills that served as strategic staging points to facilitate the progressive movement of wood.

Pacific Lumber and Wood Company

Logging operations in the vicinity of the project area during this time have been variously described (Edwards 1883; Knowles 1942; Myrick 1960:438-439; Spohr 1990). The earliest lumber operator in the Juniper Creek drainage was Thomas R. Jones. He located one of his two mills at Clinton, ten miles east of Truckee, 1.8 miles east of Boca and across the Truckee River from present-day Hirschdale. Clinton was also referenced on the transcontinental railroad timetables as the Camp 18 station stop (Myrick 1960:438). Jones was one of the largest producers in the region and in the

first year of operation, sometime during the late 1860s, Jones cut 16 million board feet of timber (Knowles 1942:16; Sphor, personal communication 1993; Wilson 1992:72).

In 1870 Jones sold the Clinton Mill to three Maine lumbermen, Charles Allen Bragg, Albert Bragg and Gilman N. Folsom of the Pacific Lumber and Wood Company (PL&WCo). The project area falls on land owned by the PL&WCo, as documented by Nevada County maps dating from 1880 and 1913, which dominated historic activities within the project area. Bragg and Folsom operated their Clinton mill from timber holdings up Juniper Creek and on Juniper Flat totaling 6,320 acres. While their focus of timber harvest was south of the mill in the Juniper Creek corridor, they did some contracting for lumber and had timber rights elsewhere. The bounty of cut logs in this area was described as "laying so close together in the forests that one could almost step from one to another." Ample material remained for 20 years of future timbering (*Truckee Republican* 10/16/1878). Edward's *Tourist Guide of Truckee* states that out of their Juniper Creek holdings, draining 15 sections, only three had been cut by 1883.

Numerous period newspaper accounts describe activities at the Clinton lumber mill (*Truckee Republican* 7/31/1873, 10/14/1873, 2/21/1874, 3/5/1874, 3/5/1874, 4/9/1874, 4/23/1874, 4/28/1874, 5/9/1874, 6/30/1874, 7/2/1874, 8/4/1874, 3/27/1875, 2/24/1875, 3/6/1875, 10/16/1878, 4/30/79, 8/2/79, 2/25/80, 3/3/80; photos 5 and 6). This mill was one of the largest and best-appointed mills on the transcontinental line (Edwards 1883:56-59). In addition to the sawmill proper, it supported a full outfit of planers, lath and molding machines, and produced all kinds of dressed and planed lumber. A total of 150 men were recruited to keep the mill operations going, along with 40 or 50 horses and cattle. A few Chinese supplemented this force, working as yard workers or cordwood cutters. In 1878, the mill operated at a capacity of 50,000 feet per day (Edwards 1883:56-59; *Truckee Republican* 10/16/1878). Large shipments of lumber were sent points east and quantities of wood were supplied to the transcontinental railroad.

The PL&WCo built a bridge across the Truckee River and constructed a wagon road up to the bluff to connect timber stands up on Juniper Flat and the Clinton Mill below (*Truckee Republican* 10/16/1878). Present-day Glenshire Drive from its intersection with Hirschdale Road and Martis Peak Road likely follows the alignment of this historic wagon log-haul road. This road segment may also have provided partial access to Union Mills, located on the opposite side of Juniper Flat to the southwest. Although a fire is reported at the Union Mill in 1873 (Wilson 1940), operations appear to have been substantial, and 75 carloads of wood were being shipped eastward from Union Mills during the winter of 1880 (*Truckee Republican* 2/14/1880). Stewart McKay and J. A. Stewart also erected a small mill on their timberland near Union Mills in the spring of 1891. In about 1897, McKay bought his partner's interest and moved the mill to Sardine Valley, shipping his lumber to Hobart Mills (Knowles 1942:41).

Control of PL&WCo operations was subsequently passed from Bragg and Folsom to Fred Burckhalter. Prior to 1878, logs were hauled by horses and oxen to the edge of the bluff on Juniper Flat overlooking the millpond at Clinton. A steep chute, 1,600 to 1,800 feet long, dropped the timber down the incline to the mill pond below. Burckhalter, intent on improving the slow and cumbersome procedure of transporting logs by horse and wagon, built a narrow-gauge railroad (the Clinton Narrow Gauge Railroad), which extended from the top of the log chute in a southerly direction along the west side of Juniper Creek (photos 7 and 8; maps 1 and 2). Placed in operation between 1878 and 1901 (*Truckee Republican* 10/16/1878), it was the first steam logging railroad in the Truckee area, with six miles of narrow-gauge track, two locomotives and ten flat cars. The PL&WCo

prospered, and the railroad was extended over the Tahoe Divide. By 1892 the railroad was ten miles long and stretched to within three miles of Hot Springs (Brockway) at Lake Tahoe.

The log camp and mill were connected to the company office at Truckee by a telephone line.

A telephone line extends from Mr. Burckhalter's store in Truckee to the Camp in the woods, a distance of fifteen miles. It is constantly employed in sending reports and conveying orders. There are telephone stations at the depot on the bluff, and at Clinton. Mr. Lester Bragg has charge of the telegraph office at Clinton, and Walter M. Burckhalter of Truckee is an operator. These young gentlemen have a private telegraph wire between Clinton and Truckee, but the telephone is employed in the transaction of all ordinary business. Mr. Burckhalter was the first to introduce the telephone into this region and has completely demonstrated its adaptation to the requirements of the lumber business. [*Truckee Republican* 10/16/1878]

As was typical of sawmills of the period, the mill at Clinton was consumed by fire on numerous occasions, first in 1873 and then in 1879 (*Truckee Republican* 9/6/79; 9/10/79; 11/1/79; 11/12/79). The mill burned again in 1888-1889 and was rebuilt. A fire in 1903 ultimately destroyed the Clinton Mill and the premises were never reactivated, as available timber reserves had become depleted by the early 1890s (Spohr 1990:4).

Burckhalter's daughter (of the PL&WCo) married the Vice President and General Manager of a competitor logging firm, the Truckee Lumber Company. Although the Truckee Lumber Company held considerable timber holdings in and surrounding nearby Martis Valley, it had no means of accessing this timber tract, so the company with a lot of timber but no railroad (Truckee Lumber Company) negotiated a contract with a company with a logging road but no timber (the PL&WCo). By June of 1893 the former Clinton Railroad was repurposed into the Donner & Tahoe Railroad, which ran between Martis Valley and the Truckee Lumber Company's mill in Truckee.

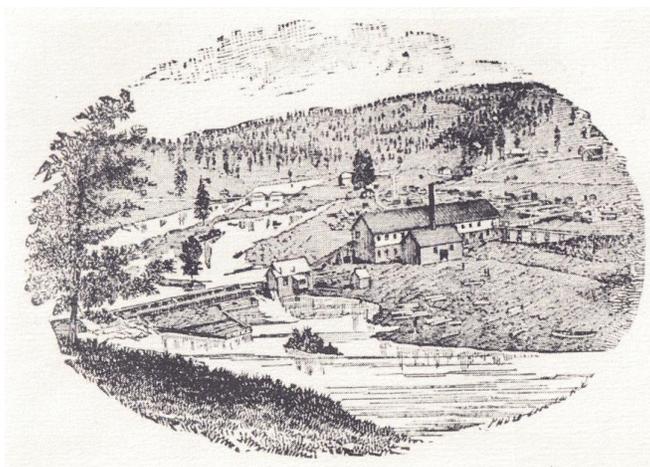


Photo 5. The Clinton Mill with the Truckee River and mill pond (left front) and the transcontinental railroad tracks (right rear); pictured in Spohr (1990:1) and adapted from *W.F. Edwards' Tourist Guide and directory of the Truckee Basin*, 1883 (courtesy California State Library)



Photo 6. Clinton (Camp 18), once located at the present-day community of Hirschdale (courtesy Richnak 1983:38)

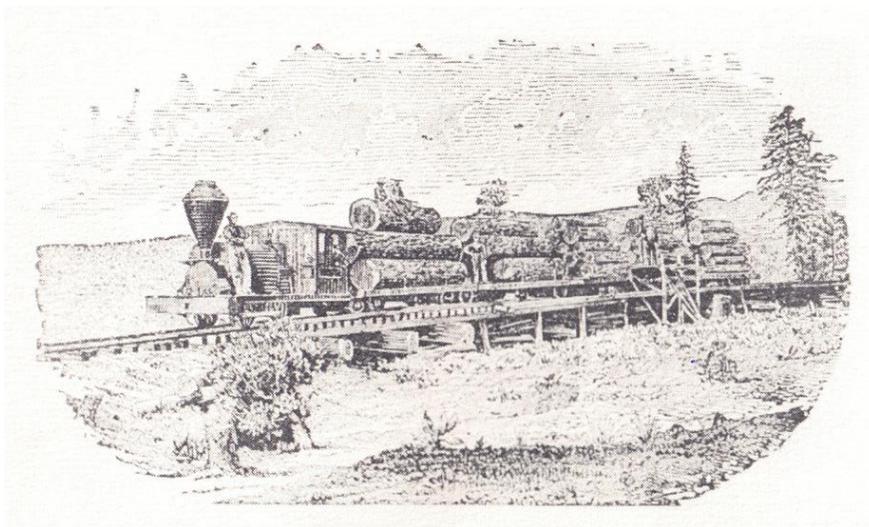


Photo 7. Log train at the head of the Clinton Railroad log chute; pictured in Spohr (1990:2) and adapted from *W.F. Edwards' Tourist Guide and directory of the Truckee Basin*, 1883 (courtesy California State Library)



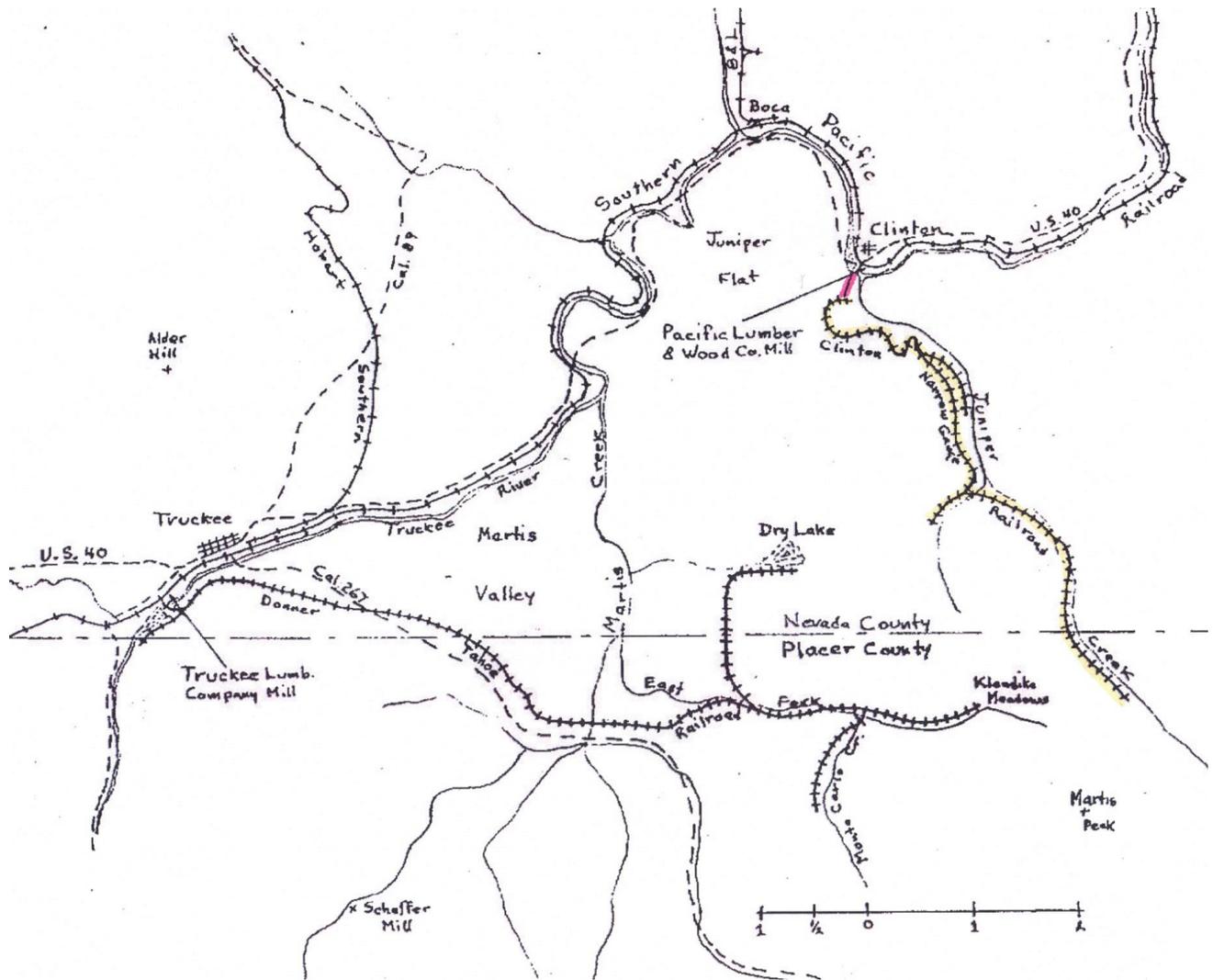
Photo 8. Pacific Lumber and Wood Company's locomotive awaits loading of log cars on the Clinton narrow-gauge railroad; pictured in Spohr (1990:4); (courtesy Nevada Historical Society photo from D.S. Richter)

Fuelwood Cutting

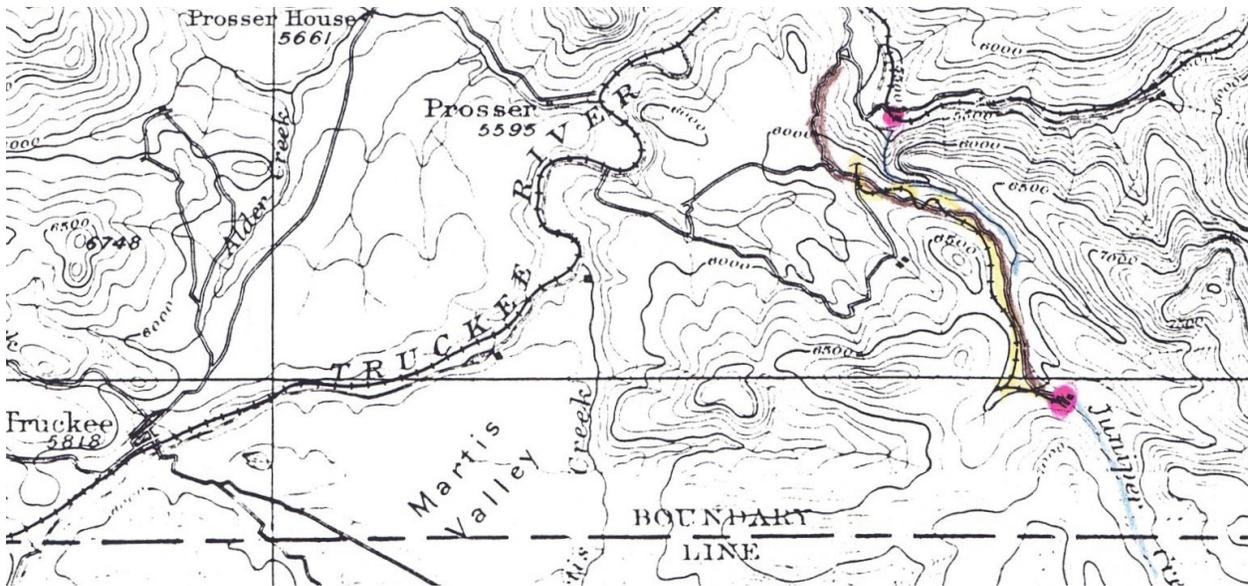
Fuelwood formed a principal adjunct to the lumber business of the Truckee Basin. The timber that remained after long saw logs were cut was salvaged as fuelwood. The fuelwood business was particularly profitable and Edwards (1883:74-75) observed that cordwood was "cheap and plentiful", and the transcontinental railroad along with numerous local logging railroads consumed vast quantities. Most commonly, logs were bucked in four-foot lengths and rounds were split with metal wedges or with "powder wedges" using black powder. Fuelwood cutting was principally done by Chinese who followed Euroamerican lumbermen and scavenged left-over trees, and stumps, Contracts for fuelwood cutting on Juniper Flat could have been awarded to any number of small operators or to one of the larger firms, such as the PL&WCo or Sisson, Wallace and Company. The latter firm hired 350 Chinese to cut wood and burn charcoal in the Truckee Basin (Thompson and West 1880:168). Independent Chinese fuelwood cutting contractors also operated here (*Truckee Republican* 10/30/1878, 1/31/1880).

Charcoal Production

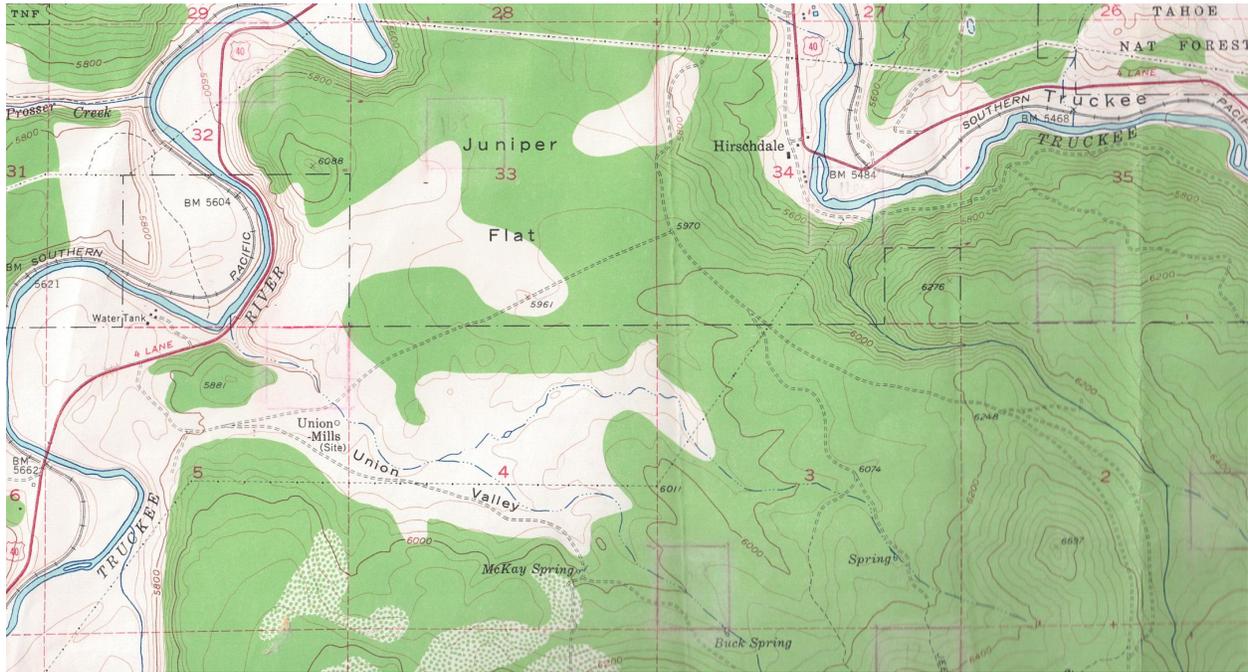
Sisson and Company employed large numbers of Chinese in the production of charcoal to supply the railroad and the smelting works of Nevada and Utah, as well as a local smelting works in Truckee (Lindström 2004; Lindström and Waechter 2006). It was an opportunistic enterprise, whereby Chinese employed as woodcutters were able to efficiently mobilize into a force of colliers to meet fluctuating market demands in charcoal. During the late 1860s through mid-1870s, local charcoal was produced in earthen kilns, generally constructed in cut over areas within a few-mile radius of Truckee. Later the company continued charcoal operations in three brick charcoal kilns near the confluence of the Truckee River and Martis Creek.



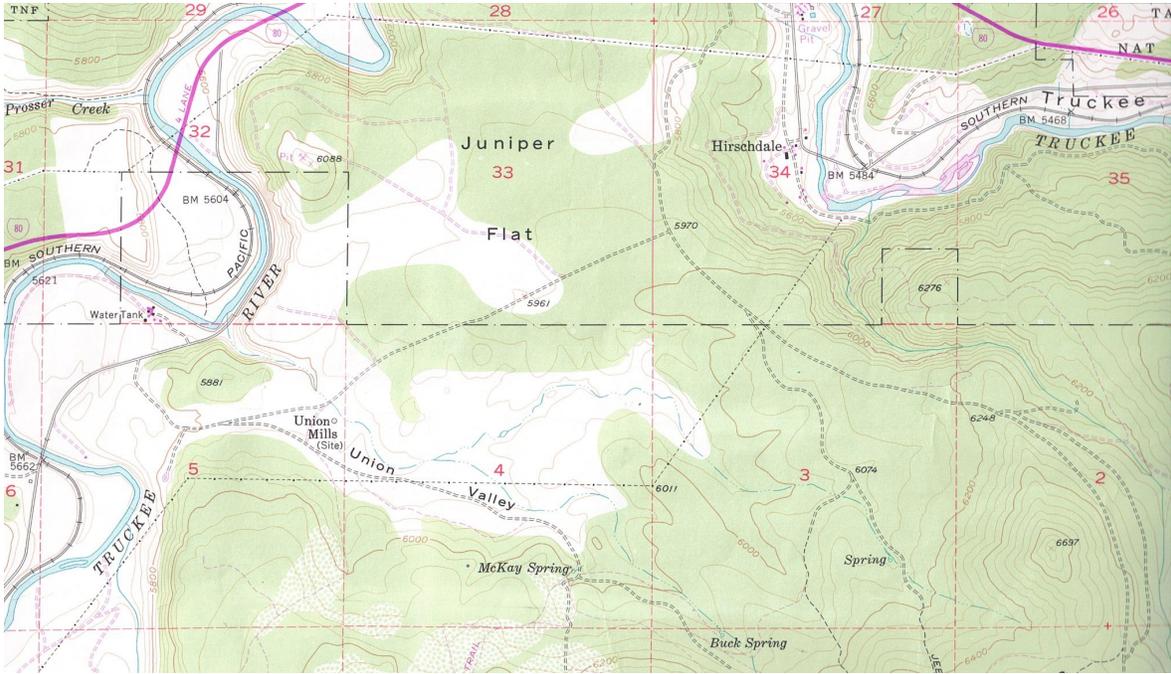
Map 1. Map of the area of operations of the Pacific Lumber and Wood Company's Clinton narrow gauge railroad showing the railroad (yellow highlight), log chute (pink highlight) and the lumber mill at Clinton (present-day Hirschdale); Juniper Flat is now occupied by the Glenshire Subdivision (adapted from Spohr 1990:8)



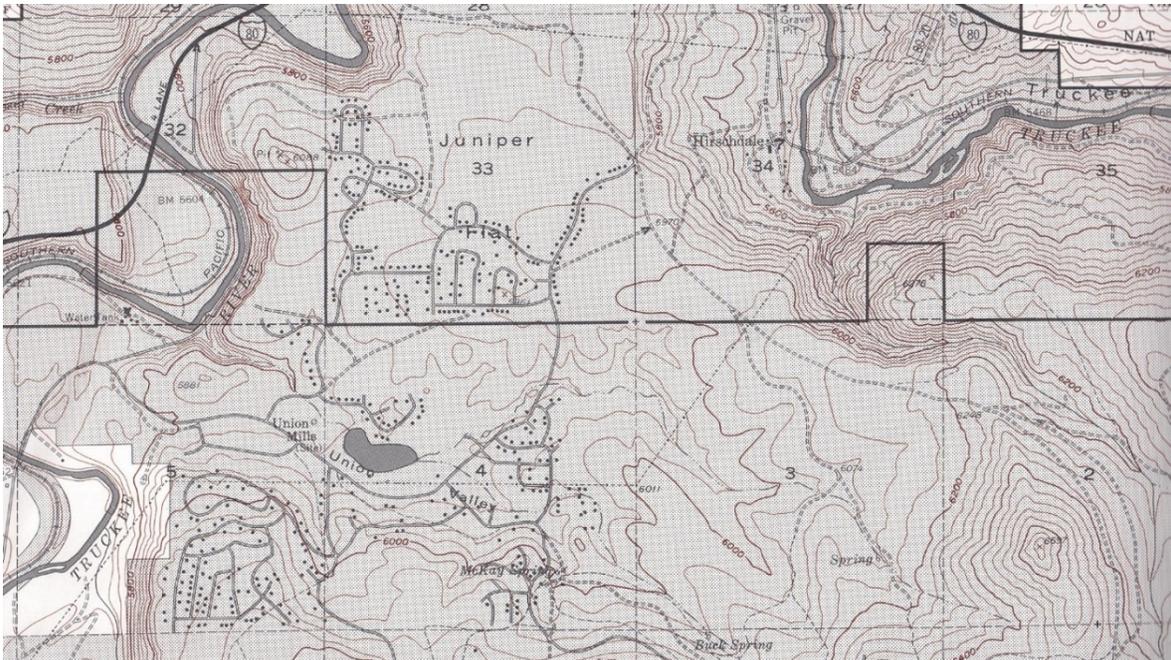
Map 2. USGS Truckee Quad 1889 (1897 edition) showing the Pacific Lumber and Wood Company's Clinton narrow gauge railroad (yellow highlight) and logging access road between Clinton Mill (upper pink dot) and mill buildings at the end of the rail line (lower pink dot)



Map 3. USGS Martis Peak 7.5 Quad 1955 showing Hirschdale and the project area (Section 34); note the historic dirt road along the western margin of Section 34, whose alignment is now overlain by Glenshire Drive (northwest quarter of Section 34) and Martis Peak Road (southwest quarter of Section 34); Juniper Flat is now occupied by the Glenshire Subdivision



Map 4. USGS Martis Peak 7.5 Quad 1969 showing Hirschdale and the project area (Section 34); note the historic logging dirt roads that have been constructed in the western half of Section 34; the segment falling within the project area is recorded as TDPUD-1 (see accompanying confidential appendix for archaeological site record)



Map 5. USGS Martis Peak 7.5 Quad 1985 showing the Glenshire Subdivision; note that the historic road to Hirschdale (now Glenshire Drive) has been extended to the southwest at the center point between sections 33 and 34; that is the point where Martis Peak Road begins and continues southeastward

METHODS

Phase 1A prefield research and *Phase 1B* field survey was accomplished by Susan Lindstrom, Ph.D., Consulting Archaeologist. Dr. Lindström has over five decades of professional experience in regional prehistory and history, holds a doctoral degree in anthropology/archaeology, has been accredited by the Register of Professional Archaeologists (formerly Society of Professional Archaeologists) since 1982, and is certified by the Secretary of Interior's Professional Qualifications Standards (48 FR 44738-44739) for archaeology, history and related disciplines (Appendix 1). Devin Blom, Archaeologist/GIS Analyst and owner of Battleborn GIS, assisted in the field survey and conducted the project's mapping effort. Mr. Blom, has a Bachelor of Arts Degree in Anthropology with over 10 years of regional archaeological experience (Appendix 1). Glenn Merron of Inland Ecosystems supplied necessary project background information. Neil Kauffman, P.E., Water System Engineer, TDPUD provided helpful field orientation.

NORTH CENTRAL INFORMATION CENTER RECORDS SEARCH

Prefield research entailed a literature review of prehistoric and historic themes for the project area and included a review of prior archaeological research and of pertinent published and unpublished literature. To identify any properties listed on the National Register, California Register and other listings, the required records search at the North Central Information Center (NCIC) at California State University Sacramento (CSUS) was completed on October 31, 2022 (NCIC: NEV-22-73). The center is a branch of the California Historical Resources Information System (CHRIS), an adjunct of the State Historic Preservation Office (SHPO) and maintains the master archaeological data base for north-central sierran counties. References checked include archaeological sites and surveys in Nevada County and other official inventories (Appendix 2):

- ✓ Office of Historic Preservation's *Historic Property Directory*
- ✓ *Determination of Eligibility*
- ✓ *California Inventory of Historical Resources*
- ✓ *California State Historical Landmarks*
- ✓ *National Register of Historical Places/California Register of Historic Resources listings*
- ✓ *California Points of Historical Interest*
- ✓ *Caltrans State and Local Bridge Surveys*

NCIC reports and cultural resources are summarized on Table 1, with more detail provided in Appendix 2. The NCIC review of the ¼-mile radius records search area disclosed that one archaeological study has been conducted within the project area and 15 other studies have been performed within the search radius. One known cultural resource is reported to occur within the project area, remnants of a historic utility line (P-29-4236) and five other cultural resources have been documented within the search radius. These resources are clustered along the river in Hirschdale and include: one Native American site, a historic trash scatter (P-29-2472) and spring box (P-29-2473), a historic power line (P-29-2474), and a historic bridge over the Truckee River (P-29-4411).

Table 1. Summary of Prior Cultural Resource Studies and Known Cultural Resources

<i>NCIC Report No.</i>	<i>Author/Date</i>	<i>Title</i>	<i>Location</i>	<i>Cultural Resources</i>
2935	Jones & Stokes/1999	Cultural Resources Inventory Report for Williams' Fiber Optic Cable System: Sacramento to California/Nevada State Border	within ¼-mile radius	n/a
2935A	Jones & Stokes/1999	Heritage Resources Report for the Pacific Fiber Link/Williams' Fiber Optic Cable System Installation Project. Tahoe National Forest 05-17-1350	within ¼-mile radius	n/a
2935B	Jones & Stokes/1999	Cultural Resources Inventory Report for Williams' Fiber Optic Cable System: Sacramento to California/Nevada State Border. Addendum 1: Historic Evaluation for the Union Pacific Railroad Bridge	within ¼-mile radius	n/a
2935C	Jones & Stokes/2000	Addendum to the Cultural Resources Inventory Report for Williams' Fiber Optic Cable System: Sacramento to California/Nevada State Border	within ¼-mile radius	n/a
2935D	Jones & Stokes/2000	Addendum 3 to the Cultural Resources Inventory Report for Williams' Fiber Optic Cable System: Sacramento to California/Nevada State Border	within ¼-mile radius	n/a
2935E	Jones & Stokes/2001	Addendum 8 to the Cultural Resources Inventory Report for Williams' Fiber Optic Cable System: Sacramento	within ¼-mile radius	n/a

		to California/Nevada State Border		
2935F	Jones & Stokes/2001	Addendum 9 to the Cultural Resources Inventory Report for Williams' Fiber Optic Cable System: Sacramento to California/Nevada State Border	within ¼-mile radius	n/a
6877	Dougherty/2006	Cultural Resources inventory on a Segment of the Sierra Pacific Power Company 12.5 KV Line near Hirschdale	within ¼-mile radius	P-29-2471, -2472, -2473, -2474
8157	Peak & Peak/1984	Cultural Resources Assessment of the Proposed Glenshire/Devonshire Wastewater Treatment and Disposal Alternatives under Clean Water Grant No. C-06-2899-100	within ¼-mile radius	n/a
10766	Johnson/1995	Teel: Archaeological and historical Resources Survey and Impact Assessment: A Supplemental Report for a Timber Harvesting Plan	within project area	P-29-4236; P-29-4411
11275	Jordan/2013	Historic Property Survey Report for the Hinton Road Realignment/Hirschdale Road Bridges Removal Project, Hirschdale. Caltrans District 3	within ¼-mile radius	P-29-4236; P-29-4411
13317	Dunay/2019	Historic Property Survey Report for Hirschdale Road Bridges Rehabilitation Project	within ¼-mile radius	n/a
13317A	Dunay/2019	Archaeological Survey Report for the Hirschdale Road Bridges Rehabilitation Project	within ¼-mile radius	n/a
13317B	Dunay/2019	Extended Phase 1 Report P-29-4366/CA-NEV-2276H	within ¼-mile radius	n/a

13317C	Dunay/2019	Findings of No Adverse Effect with non-Standard Conditions for the Hirschdale Road Bridges Rehabilitation Project	within ¼-mile radius	n/a
13317D	Dunay/2019	CSO Assumption and Approval of Eligibility Determination	within ¼-mile radius	n/a

NATIVE AMERICAN OUTREACH

Mandates under State of California Assembly Bill 52 (AB 52) specify that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. AB52 directs a lead agency (or their designated representative) to consult with the Native American Heritage Commission (NAHC) and request a search of the Sacred Lands Files. To complete the AB52 requirements, follow-up communications with all groups/individuals on the Commission’s contact list are generally recommended to incorporate tribal opinions, knowledge and sentiments regarding the project.

The NAHC was contacted by letter on October 25, 2022 to request a search of the Sacred Lands Files. A response was received from the NAHC on December 8, 2022 indicating the absence of specific site information in the Sacred Lands Files. While waiting for a response, tribes likely to be included on the Commission’s follow-up contact list were contacted on September 2nd, including letters and emails sent to all five tribes appearing on the Commission’s recommended contact list, as well as communications with four additional tribes who have expressed prior interest in the general region. As a matter of context, it should be noted that prior ethnographic studies indicate that the Washoe Tribe is the applicable tribal authority for lands encompassing the project area. Washoes have enduring ties to their ancestral homeland in the Truckee-Tahoe area, both during the pioneer and modern periods. They maintain cultural affiliation to the project area pursuant to Docket 288 of the Indian Claims Commission and believe their comments in response to AB52 consultation supersede and take precedence over any other non-Washoe group. Nonetheless, as recommended by the NAHC, consultation was initiated with the other tribes on the Commission’s contact list.

The Washoe Tribe responded by email on October 27th stating “...no immediate knowledge of any pre-contact resources within the project area...” but requesting to be kept informed if any Native American resources are encountered during project activities. When no response was received from the remaining tribes on the contact list, a second email was sent on November 15th. The Shingle Springs Rancheria responded on November 29th indicating no knowledge of any known cultural resources within the project area. Tribal communications are summarized on Table 2 and relevant correspondence is attached Appendix 3.

Table 2. Native American Outreach: Summary Communications Log

<i>Tribe</i>	<i>Contact Date/Time</i>	<i>Comments</i>
Native American Heritage Commission (NAHC)	10/25/22	Letter mailed/emailed
	12/8/22	Received NAHC response
Susanville Indian Rancheria, Deana Bovee, Chairperson	10/25/22	Letter & email sent; email message blocked
Washoe Tribe of Nevada & California, Darrel Cruz, Tribal Historic Preservation Officer	10/25/22	Letter & email sent
	10/27/22	Email response received stating no known cultural resources within the project area
Colfax-Todds Valley Consolidated Tribe, Pamela Cubbler, Treasurer & Clyde Prout, Chairperson	10/25/22	Letter & email sent
	11/15/22	Follow-up email sent
Shingle Springs Miwok, Regina Cuellar, Chairperson	10/25/22	Letter & email sent
	11/15/22	Email response stating no known cultural resources in project area; requested continued updates
Ione Band of Miwok Indians, Sara Dutschke, Chairperson	10/25/22	Letter & email sent
	11/15/22	Follow-up email sent
Nevada City Rancheria Nisenan Tribe, Richard Johnson, Chairperson	10/25/22	Letter & email sent
	11/15/22	Follow-up email sent
Tsi Akim Maidu, Don Ryberg, Chairperson	10/25/22	Letter & email sent
	11/15/22	Follow-up email sent
Wilton Rancheria, Jesus Tarango, Chairperson	10/25/22	Letter & email sent
	11/15/22	Follow-up email sent
United Auburn Indian Community of the Auburn Rancheria, Gene Whitehouse, Chairperson	10/25/22	Letter & email sent
	11/15/22	Response email acknowledging receipt of project information

FIELD RESEARCH

An archaeological field reconnaissance was conducted by Dr. Lindström and Mr. Blom on October 27, 2022. Mr. Merron of Inland Ecosystems and Mr. Kauffman of the TDPUD provided necessary field orientation, flagging the proposed pipeline and alternate routes in immediate advance of the archaeological survey. A USGS topographic map (7.5' quadrangle) and an expanded scale project site plan and aerial photograph were used to structure the field work phase. Locational information was monitored by compass, pacing, range finder, and a *Trimble GEO 7X HH* GPS unit. GIS data were generated as the proposed pipeline flag line was field surveyed.

The entire project area was subject to a systematic and intensive archaeological reconnaissance by walking the flagged proposed pipeline and alternative pipeline alignments. In addition, an adjoining 50-foot-wide buffer zone to accommodate the maximum width of potential project ground disturbance activities and staging was covered using zigzag transects across the alignment at no greater than 10 feet (~three meters) apart. Archaeological coverage is shown on figures 3 and 4. Total survey coverage extended 3,693 lineal feet and encompassed 184,650 square feet/17,154 square meters or 4.24 acres.

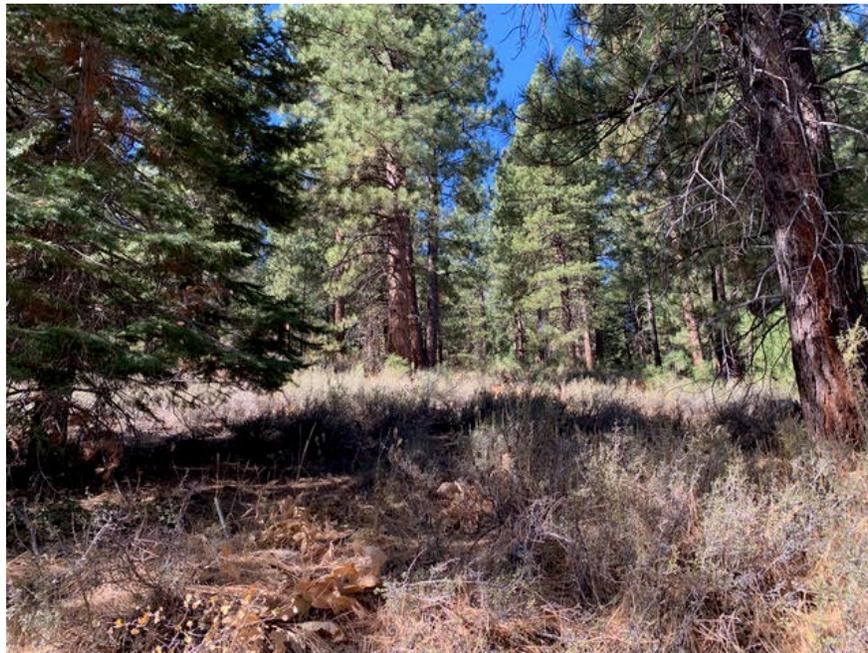
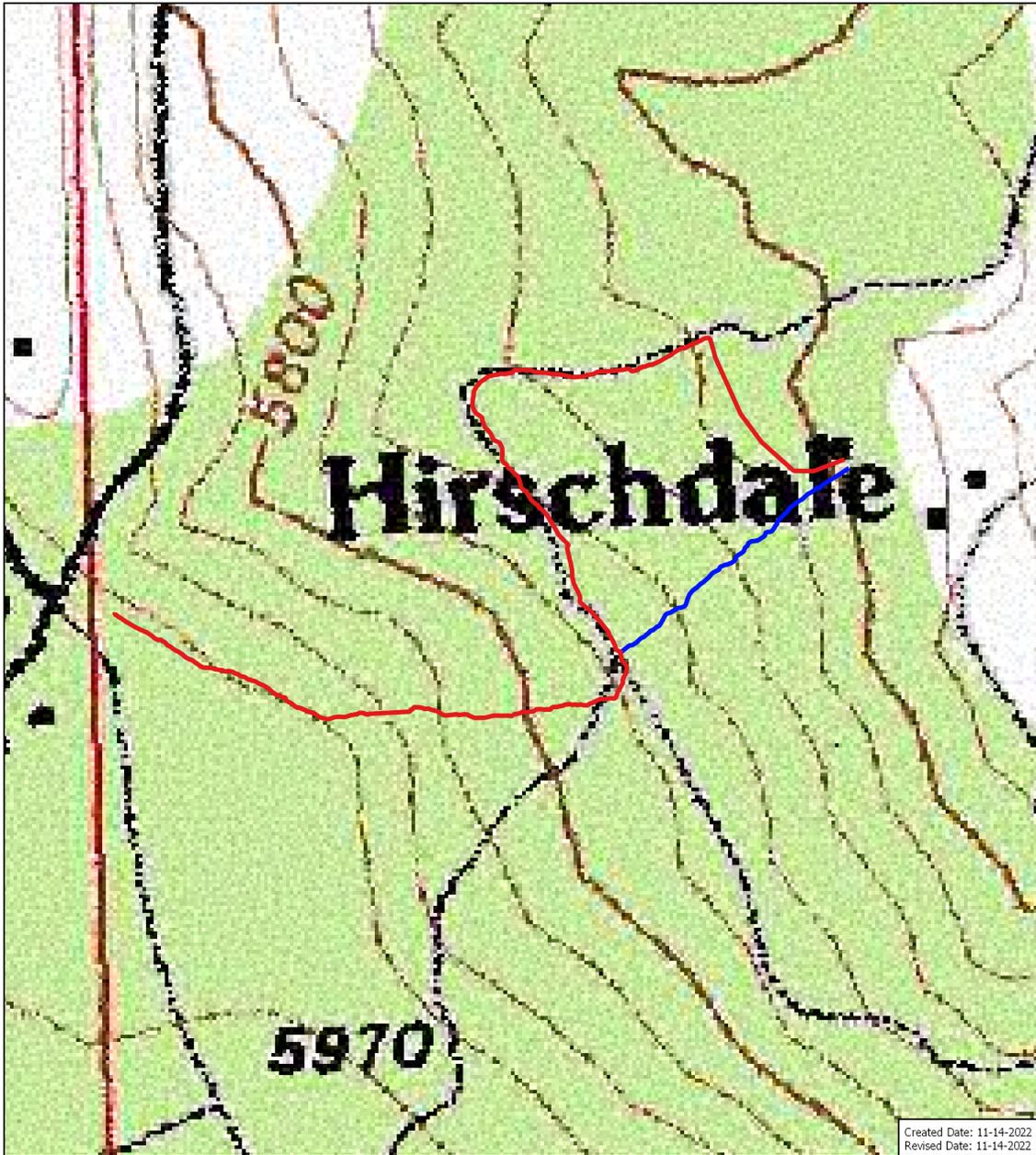


Photo 9. Overview of project ground surface conditions along the cross-country pipeline section; view (northwest) up slope towards Martis Peak Drive



Created Date: 11-14-2022
 Revised Date: 11-14-2022

Susan Lindström, Ph.D.,
 Consulting Archaeology



Battle Born GIS

**Truckee Donner Public Utility District
 Hirschdale Pipeline Project
 Cultural Resource Study**

**Figure 3. Archaeological Coverage
 Map**

1:3,500



Township 18 North; Range 17 East;
 Section 34
 USGS Martis Peak 7.5' Quad



Legend

- proposed pipeline alignment
- alternative pipeline alignment
- intensive coverage
- intensive coverage



Created Date: 11-14-2022
 Revised Date: 11-15-2022

Susan Lindström, Ph.D.,
 Consulting Archaeology

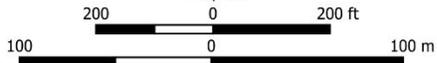


Battle Born GIS

**Truckee Donner Public Utility District
 Hirschdale Pipeline Project
 Cultural Resource Study**

**Figure 4. Archaeological Coverage
 Map**

1:3,000



Township 18 North; Range 17 East;
 Section 34
 USGS Martis Peak 7.5' Quad



Legend

- proposed pipeline alignment
- alternative pipeline alignment
- intensive coverage

The project area occupies a moderate to steep forested and brushy northeast-facing slope high above the Truckee River and on the eastern margin of Juniper Flat (Photo 9). Outcroppings of basalt are periodically exposed along the slope. Ground surface visibility is mostly obscured by pine needles and brush, excepting rutted and eroded portions of the historic dirt road (Photo 11).

RESULTS

The project area comprises a narrow linear swath that is part of a much larger 19th and 20th century logging landscape. The intensive archaeological field survey disclosed: two wire remnants of a former utility line (P-29-4236; Photo 10); a dirt logging skid/trail/road (TDPUD-1; Photo 11); and a small pocket of 19th century high-cut stumps (TDPUD-2; Photo 12) located within a sparse field of 20th century low-cut (chainsaw cut) stumps. Archaeological site records are contained in the accompanying confidential appendix.

The potential significance of the 19th and 20th century historic logging resources recorded within the project area were evaluated according to eligibility criteria of significance for listing in the California Register of Historical Resources (criteria 1-4) and National Register of Historic Places (criteria A-D). Lacking in focus, the sites' context is not clearly associated with significant historical events (Criterion A) or personalities (Criterion B) in local, state or national history. There is a high redundancy factor involving these later 19th century and mid-20th century features and, in general, elements fail to embody distinctive construction/engineering techniques and do not retain the special or particular quality such as best surviving example of their kind (Criterion C). Archaeological remains have lost and/or compromised integrity and exemplify neither adequate research nor interpretative potential warranting their preservation (Criterion D). The sites are found ineligible for inclusion in the California or National Register under any criterion. Without integrity, their historic context research potential lack "visibility" and "focus" All of the sites' potentially significant information has been obtained through data recovery associated with the preparation of this inventory report.

ARCHAEOLOGICAL SITE INVENTORY

Historic Utility Line (P-29-4236)

Remnants of this historic utility line were initially recorded in 1995 as part of timber harvest plan (Johnson 1995) as "old telephone line – cross members nailed to trees; most of the wire laying on the ground." According to Johnson's site location map, the line extended in a northeasterly direction with its southwestern terminus at the break in slope below Martis Peak Road, crossing a historic dirt logging road (recorded as TDPUD-1 in this report) and terminating about two 40-foot-contours below the logging road. Remains detected during the current survey are limited to one partly buried segment of wire about midway downslope between Martis Peak Road and the historic dirt logging road (recorded as P-29-4236a in this report) and a second segment hanging from a large Jeffrey pine (recorded as P-29-4235b) observed just above the Hirschdale water tank facility (Photo 10). The wire diameter on the up-hill remnant (P-29-4236a) is 14-gage; the wire on the downhill remnant (P-29-4236b) is 12-gage. Both remnants appear to be part of the same line originally recorded by Johnson. However, the Pacific Lumber & Wood Company's Clinton Mill (once located at present-day Hirschdale) was once connected to the company office at Truckee by a telephone line and telegraph wire, a distance of 15 miles. The telephone line

was the first in the region (*Truckee Republican* 10/16/1878). That said, historical associations between P-29-4236 and the early lumber company operations are uncertain and unconfirmed.

Historic Logging Road ca. 1969 (TDPUD-1)

Recent-historic logging activities occurred within the project area during the 1960s. A network of dirt roads were constructed to haul logs from the forest to the mill. Although this system of linear features has since been segmented and/or obliterated by modern development, a section of one of these logging roads occurs within the project area, where the project intends to embed a portion of its new pipeline. The segment is approximately 12 feet wide and extends about 1,137 feet (346.8 meters). The two-track grade is duff-covered along flatter sections (Photo 3), eroding to dirt gullies along slopes (Photo 11). The road does not appear on 1955 USGS maps, but it is shown on the 1969 photo-revised version of the map, indicating that the road was constructed sometime during the interim and most likely during the 1960s.

Historic High-Cut Stumps ca. 1870s-1900 (TDPUD-2)

Remnants of the historic logging landscape are also represented within the project area by a cluster of waist-high, flush-cut stumps (Photo 12). Landscapes containing high-cut stumps are generally considered to be markers of 19th century logging activities over a century old and these remnants of the PL&WCo timber harvesting activities date sometime between the 1870s and 1900 (TDPUD-2). A single high-cut stump (TDPUD-2a) and another grouping of four high-cut stumps were observed outside the pipeline alignment but within the survey corridor.



Photo 10. Historic utility wire line strung in large Jeffrey Pine (P-29-4236b) near the Hirschdale water tank facility; view southwest



Photo 11. Project plans intend to embed a portion of the new pipeline within a historic dirt logging road dating from the 1960s (TDPUD-1); view west



Photo 12. Historic high-cut stump (TDPUD-2a) located outside the pipeline alignment but with the archaeological survey corridor; view north

Features Noted Not Formally Recorded

Several features observed within the project pipeline alignment and the 50-foot-wide survey corridor were noted but not formally recorded, either because they fall outside project ground disturbance activities or because their age over 50 years could not be authenticated.

20th Century Logging Features. The historic logging landscape within the project area also appears to contain features typical of 20th century logging (e.g., slash, furrowed ground, bull-dozed areas, skid trails, and angled or stepped, low chainsaw-cut stumps). These logging features are non-diagnostic and an age greater than 50 years cannot be confidently authenticated based on surface archaeology and the limited archival work typically within the scope of an inventory-level cultural study. Their historic status remains problematical and indeterminate.

Glenshire Drive and Martis Peak Road. Roads initially constructed as logging roads were later converted to paved travelways within subdivisions. For example, present-day Martis Peak Road and the route of Glenshire Drive from its intersection with Hirschdale Road to its intersection with Martis Peak Road first appear on a map dating from 1889 (reprinted 1897). Both historic roads were constructed by the PL&WCo to haul logs from timberlands on Juniper Flat and in the headwaters of Juniper Creek down to their mill at Clinton (Hirschdale). The transformation of historic logging roads into modern paved secondary roads (such as Glenshire Drive and Martis Peak Road) can be traced on historic maps (maps 1-5) dating from 1889 (reprint 1897), 1955, 1969 and 1985. Martis Peak Road falls outside the area of project ground disturbance;; however, the west terminus of the new pipeline will connect into the main line embedded beneath Glenshire Road at its intersection with Martis Peak Road (Photo 1). Since both historic roads have since been altered (widened, paved, etc.) so that none of their original grade or fabric or associated features remain; their recordation as historical cultural resources is unwarranted.

SIGNIFICANCE

The potential significance of the 19th and 20th century historic logging resources recorded within the project area were evaluated according to eligibility criteria of significance for listing in the California Register of Historical Resources (criteria 1-4). These criteria are based upon the criteria of significance established by the National Register of Historic Places (criteria A-D), which typically provide legal and professional guidelines for cultural properties nationwide. Important considerations in the evaluation of significance of a cultural property focus upon a cultural property's associations with important historical events (Criterion 1/A) and personalities (Criterion 2/B), engineering and/or artistic qualities (Criterion 3/C), research potential (Criterion 4/D), and uniqueness and integrity (relative to other cultural resources similar in kind). These criteria are applied at the local, state, and/or national level, and cultural properties can be equally important at all three levels. To be eligible for consideration as a significant district, site, building, structure, or object, a property must generally be at least 50 years old (unless it is an "exceptional" younger property). Resources are evaluated within a specific time or period of significance, during which time the property was occupied or used, and archaeological remains must be associated with an era that has been designated as significant.

To be listed in the National and or California Register, a property must not only be shown to be eligible under one or more of these criteria, but it must also have integrity. The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials,

workmanship, feeling, and/or association. A property does not have to meet all seven integrity criteria, but it must retain sufficient physical character, with key aspects present, so that it conveys an association or connectedness with historic patterns, persons, designs, or technologies. The property must remain in its original location and the setting should be relatively free of modern-day intrusions. If a cultural property is not clearly “visible” or if it cannot be placed within a theme or time-period, and thereby lacks “focus,” it is considered for the National or California Register. None of the meet any of the criteria for inclusion in either register.

- Period of Significance. The period of significance for sites recorded within the project area is vague, spanning the last third of the 19th century and middle 20th century; therefore, their historic context and time period is lacking in “focus.”
- Criterion 1/A. The project area contains a 50-foot-wide linear swath of a much larger 19th and 20th century logging landscape for which the sites recorded during this study appear to have an established historical context. Although some historical documentation (maps and/or narratives) exists, the context is not clearly associated with significant historical local, state or national logging history. Although the utility line (P-29-4236) may represent part of the first telephone line in the region, associations cannot be confirmed.
- Criterion 2/B. Although the utility line (P-29-4236) and cluster of high-cut stumps (TDPUD-1) are a result of logging activities by the PL&WCo and sponsored by leading lumberman Fred Burckhalter, these resources are not directly tied to events or accomplishments responsible for Mr. Burckhalter’s renown (Criterion 2/B). The 20th century dirt logging road (TDPUD-1) lacks any connections to historical personalities in local, state or national logging history.
- Criterion C. Later 19th century and mid-20th century logging resources dominate the forest landscape in the Truckee Basin. Consequently, there is a high redundancy factor involving resource types such as logging skids/roads, remnant stump fields and associated infrastructure. None of these site elements embody distinctive construction/engineering techniques. Other like features occur elsewhere with greater quality and integrity. These resources are examples of a common resource type and do not retain the special or particular quality such as best surviving example of their kind.
- Criterion D and Integrity. For all sites, integrity has been lost and/or compromised. Defining elements of the utility line (P-29-4236) have vanished, the network of logging skids/roads (TDPUD-1) has been modified and overlain and/or segmented by paved roads and housing subdivision development and the century-old high-cut stumps are deteriorated and not suitable for dendrochronological analysis where a minimum of 50-100 years of growth rings exhibiting interannual ring-width-variability must be intact. As such, none of the sites have research or interpretative potential, nor do they involve important research questions that historical research has shown can be answered only with archaeological methods, hence requiring physical preservation.

IMPACTS

If a cultural resource does not meet criteria of significance and eligibility for listing in the California or National Register, or if it is not a unique archaeological or a historical resource, the effects of a project on a resource are not considered to be a significant effect on the environment. It is sufficient that both the resource and the effect on it are noted in the environmental document, and

they need not be considered further in the CEQA process (CEQA 15064.4. [c] [3-4]). Impact evaluations do not apply as the project will have no adverse effect on any eligible archaeological properties.

RECOMMENDATIONS

In terms of CEQA guidelines, the study concludes that the project should not alter or adversely affect the physical or aesthetic properties of any significant archaeological or historical sites, structures, objects, or buildings. Nor should the project have the potential to cause a physical change that would affect unique ethnic cultural values or restrict religious or sacred uses. The potential effects of this project on cultural resources are not considered to be a significant effect on the environment.

The archival research methods and archaeological techniques employed during this investigation were comprehensive such that existing cultural materials in the project area visible to surface examination would have been identified. Although the project area has been subject to systematic surface archaeological investigations, it is possible that buried or concealed cultural resources could be present and detected during project ground disturbance activities. In the event of unanticipated discoveries, project activities should cease near the find to evaluate the resource in accordance with CEQA guidelines. If the discovered resource is determined to be significant, mitigation measures should be devised, and mitigation should be implemented before ground-disturbing work near the resource find can continue.

In the unlikely event that human remains are encountered during the proposed project, all activities should be stopped immediately, and the County Coroner's Office should be contacted pursuant to Public Resources Code (PRC) Section 7050.5. If the remains are determined to be of Native American origin, the Native American Heritage Commission should be notified within 24 hours of determination, as required by PRC Section 5097.94, 5097.98 and 5097.99. The Commission should notify designated *Most Likely Descendants* (in this case the Washoe Tribe), who should provide recommendations for the proper treatment of the burial remains within 24 hours.

With the completion and submittal of this report, state, county and municipal requirements for a cultural resource study have been accomplished. Pending the implementation of mitigation measures for the fortuitous discovery of unknown resources, no further archaeological study is recommended no special operational constraints need be imposed on the project sponsor concerning cultural resources.

REFERENCES CITED

Birkeland, Peter W.

- 1963 Pleistocene Volcanism and Deformation of the Truckee Area, North of Lake Tahoe, California. *Geological Society of America Bulletin* 74:1452-1464.
- 1964 Pleistocene Glaciation of the Northern Sierra Nevada, North of Lake Tahoe, California. *Journal of Geology* 72:810-825.

d'Azevedo, W. L.

- 1956 Washoe Placenames. Manuscript in possession of author. Reno.
- 1986 Washoe In Handbook of North American Indians Volume 11 (W. d'Azevedo, ed.). Washington: Smithsonian Institution. pp. 466-498.

Downs, J. F.

- 1966 *The Two Worlds of the Washo*. New York: Holt, Rinehart and Winston.

Edwards, W.F.

- 1883 *Tourist Guide and Directory of the Truckee Basin*. Truckee: "Republican" Job Print.

Elston, R. G.

- 1982 Good Times, Hard Times: Prehistoric Culture Change in the Western Great Basin. In *Man and the Environment in the Great Basin*, edited by D. B. Madison and J. F. O'Connell, pp. 186-206. SAA Papers No. 2. Society for American Archaeology, Washington D.C.
- 1986 Prehistory of the Western Area. In *Great Basin*, edited by W. L. d'Azevedo, pp. 135-148. Handbook of North American Indians, Vol. 11, W. G. Sturtevant, general editor, Smithsonian Institution, Washington D.C.

Elston, R. G., K. A. Ataman, and D. P. Dugas

- 1995 *A Research Design for the Southern Truckee Meadows Prehistoric Archaeological District*. Report on file Toiyabe National Forest. Sparks.

Elston, R., J. Davis, A. Leventhal, and C. Covington

- 1977 *The Archaeology of the Tahoe Reach of the Truckee River*. Prepared for the Tahoe-Truckee Sanitation Agency by the Northern Division of the Nevada Archaeological Survey, University of Nevada, Reno.

Elston, R. G., S. Stornetta, D. P. Dugas, and P. Mires

- 1994 *Beyond the Blue Roof: Archaeological Survey of the Mt. Rose Fan and Northern Steamboat Hills*. Ms. on file, Intermountain Research, Silver City.

Freed, S. A.

- 1966 Washo Habitation Sites in the Lake Tahoe Area. *University of California Archaeological Survey Report* 66:73-83.

Goldstein, Michael Andrew

- 1988 Truckee's Chinese Community: From coexistence to Disintegration, 1870-1890. M.A. Thesis. Asian American Studies Department. University of California. Los Angeles.

Graydon, C.

- 1986 *Trail of the First Wagons over the Sierra Nevada*. Gerald, Missouri: Patrice Press.

Heizer, R. and A. Elsasser

- 1953 Some archaeological Sites and Cultures of the Central Sierra Nevada. *University of California Archaeological Survey Report*, No. 21, Berkeley and Los Angeles. (Cited in *The Martis Complex Revisited* by Elsasser and Gortner 1991).

Jacobsen, W.

- 1966 Washo Linguistic Studies. In the Current Status of Anthropological Research in the Great Basin, 1964, edited by W. d'Azevedo, pp. 113-136. *Desert Research Institute Publications in the Social Sciences*. 1:113-136.

Knowles, C. D. (with index and annotations by Trespel and Drake 1991)

- 1942 *A History of Lumbering in the Truckee Basin from 1855 to 1936*. Report on file U.S. Forest Service, Lake Tahoe Basin Management Unit, South Lake Tahoe. Annotations by R. M. Trespel and D. L. Drake, 1991.

Kraus, George

- 1969 *High Road to Promontory*. Palo Alto: American West Publishing Co.

Lindström, S.G.

- 1992 *Great Basin Fisherfolk: Optimal Diet Breadth Modeling of the Truckee River Prehistoric Subsistence Fishery*. Ph.D. Dissertation. University of California, Davis.
- 1996 *Great Basin Fisherfolk: Optimal Diet Breadth Modeling of the Truckee River Prehistoric Subsistence Fishery*. In *Prehistoric Hunter-Gathering Fishing Strategies*, edited by M. Plew. Boise State University Press. Boise, Idaho.

2004 Archaeological Investigations at Earthen Charcoal Kilns and Chinese Camp CA-Nev-890H, Old Greenwood Development, Truckee, California. Report on file, North Central Information Center, California State University, Sacramento.

Lindström, Susan and Sharon Waechter

2006 Archaeological Investigations at Alder Hill for the Gray's Crossing Development, Nevada County: Volume II, Historic-Era Sites, Part A, Report. Report prepared by Far Western Anthropological Research Group, Inc. Davis. Report on file, North Central Information Center, California State University, Sacramento.

Lindström, Susan, Sharon Waechter, Penny Rucks, Ron Reno, Charles Zeier

From Ice Age to Ice Works: Archaeological, Ethnohistorical and Historical Studies for the Truckee River Legacy Trail Project (Phase 3). Far Western Anthropological Research Group, Inc. and Susan Lindström, Consulting Archaeologist. Report on file North Central Information Center (#8960), California State University, Sacramento.

Lord, Paul A., Jr.

1981 *Fire and Ice: A Portrait of Truckee*. Truckee: Truckee Donner Historical Society.

Meschery, Joann

1978 *Truckee, An Illustrated History of the Town and its Surroundings*. Rocking Stone Press, Truckee, California.

Myrick, David

1962 *Railroads of Nevada Volume I*. San Diego: Howell North Books.

Nevers, J.

1976 *Wa She Shu: A Tribal History*. University of Utah Printing Service. Salt Lake City.

Price, J. A.

1962 Washo Economy. *Nevada State Museum Anthropological Paper 6*. Carson City. Washington.

Richnak, Barbara

1983 *A River Flows: The Life of Robert Lardin Fulton*. Incline Village, Nevada: Comstock-Nevada Publishing Company.

Rucks, M.

- 1996 *Ethnographic Report for North Shore Ecosystems Heritage Resource Report* (HRR#05-19-297). Ms. on file, USFS - Lake Tahoe Basin Management Unit, South Lake Tahoe.
- 2005 Notes on Washoe Ethnography and History in the Vicinity of Donner-Truckee. Contributions by Jo Ann Nevers. Report prepared for Summit Envirosolutions, Inc., Carson City, on behalf of Sierra Pacific Power Company, Reno.
- 2007 Washoe Ethnography, In, Lindström, Susan, Sharon Waechter, Penny Rucks, Ron Reno, Charles Zeier, From Ice Age to Ice Works: Archaeological, Ethnohistorical and Historical Studies for the Truckee River Legacy Trail Project (Phase 3). Far Western Anthropological Research Group, Inc. and Susan Lindström, Consulting Archaeologist. Report on file North Central Information Center (#8960), California State University, Sacramento.

Saxton, Alexander

- 1971 *The Indispensable Enemy, Labor and the Anti-Chinese Movement in California*. Berkeley: University of California Press.

Spohr, David

- 1990 Personal communication. Garden Valley, California. -David Spohr, Historian (Pacific Lumber and Wood Co.), Garden Valley, California, 1/14/1990, 12/5/1990, 5/16/1993.
- 1990 The Pacific Lumber and Wood Company. *Western Railroader* Spring 1990. The Pacific Coast Chapter, Railway & Locomotive Historical Society, Inc. Sacramento.

Stewart, O. C.

- 1966 Tribal distributions and boundaries in the Great Basin. In W. L. d'Azevedo (ed.), the Current Status of Anthropological Research in the Great Basin: 1964. *Desert Research Institute of Social Sciences and Humanities Publication No. 1*. Reno.

Stine, Scott

- 1994 Extreme and Persistent Drought in California and Patagonia during Medieval Time. *Nature* 339:546-549.

Storer, T. and R. Usinger

- 1971 *Sierra Nevada Natural History*. Berkeley: University of California Press.

Thompson and West

- 1880 *History of Nevada County*. San Diego: Howell-North Books.

Truckee Republican

various Truckee, California.

Washoe Tribal Council

1994 *Comprehensive Land Use Plan.* Ms. on file, Tribal Government Headquarters, Gardnerville.

Wilson, R.C.

1992 *Sawdust Trails in the Truckee Basin.* Nevada City. Nevada County Historical Society.

APPENDIX 1: RESUME

RESUME

Susan Lindström, Ph.D.
Box 3324, Truckee CA 96160
530-587-7072 (530-713-1920 cell)
susanglindstrom@gmail.com

Education

Ph.D. Archaeology 1992 - University of California Davis
M.A. Anthropology 1978 - University of California Davis
B.A. Anthropology 1972 - University of California Berkeley

Expertise

Cultural Resource Management
Archaeology (prehistoric and historic period)
History and archival records research
Ethnography, ethnohistory, oral history
Native American consultation
Interpretation and public education

Professional Organizations

Register of Professional Archaeologists
(member since 1982)
Society for Historical Archaeology
Society for California Archaeology
Various county and regional historical societies

Lindström's qualifications include archaeological field work and analytical and archival research in the prehistory and history of the western United States including California, the northern and western Great Basin in Nevada and Oregon, and the Cascade Range and the Columbia River Plateau in Oregon and Washington. Her area of expertise is centered in the north-central Sierra where she has over 43 years of experience in historic preservation matters on a local, state and federal level. She has resided in the Tahoe Sierra and accrued full-time professional experience here since 1973.

Heritage Resource Management -- As Forest Archaeologist from 1973 until 1978 for the Tahoe National Forest and "zone" Archaeologist for the El Dorado National Forest and Lake Tahoe Basin Management Unit, and as District Archaeologist for the Bureau of Land Management in 1978 (Burns, Oregon), Lindström initiated and implemented heritage resource programs for the inventory, protection, management and interpretation of prehistoric and historic heritage resources. She conducted training sessions on heritage resource identification and on antiquities legislation.

Contracting and Consulting -- Between 1980 and the present time, as a private consultant, Lindström has conducted and/or supervised fieldwork, data analysis, archival research, and report preparation for hundreds of federal, state, county, and private projects within the north-central Sierra and adjoining regions in California and Nevada. During this time, she has served as an expert witness on historic and prehistoric resources involving California State Supreme Court cases within the Tahoe Sierra.

Teaching -- Lindström instructed introductory level courses in cultural and physical anthropology and archaeology at the University of Nevada, Reno and the University of California, Davis and was appointed as an adjunct professor to the University of Nevada, Reno in 2010.

***Research, Publications and Papers** -- Academic and heritage management reports pertain to regional prehistory and history, as well as print and video publications for the popular audience (including research findings on the Donner Party, California gold mining, Washoe Indians, and California ethnobotany).

Secretary of Interior Standards: Archaeology and History (Prehistory, Ethnography, Ethnohistory, Ethnobotany, History, Paleoenvironmental Studies)

Lindström's 43 years of full-time professional experience in archaeological research, administration and management at the supervisory level involves the study of resources of the prehistoric, ethnographic, ethnohistoric, and historic period. In the Lake Tahoe Basin and Truckee Basin alone, Lindström has supervised and/or participated in the cumulative survey of nearly 50,000 acres. Her work in the adjoining sierran foothills and valleys approaches an additional 25,000 acres.

Prehistory. Experience in prehistoric archaeology largely pertains to the study of hunter-gatherer groups in the far west. Her surveys and excavations center upon the prehistoric ancestors of the Washoe and Maidu Indians of the north-central Sierra.

Lindström's Ph.D. dissertation focused on Washoe fishing in the Truckee River Drainage Basin. Her M.A. thesis explored high-elevation prehistoric land use in the Truckee-Tahoe Sierra.

During the 1990s she participated in the development of a research design for the Framework for Archaeological Resource Management (FARM), a heritage resource management document used by all north-central sierran forests.

She is presently a reviewer for the *Journal of California Archaeology*.

Ethnography, Ethnohistory, Ethnobotany. Lindström has developed an extensive knowledge of Washoe and Maidu territory and has maintained a good working relationship with these groups beginning in 1973. Since 2000 she has collaborated with prominent Washoe ethnographers such as Warren D'Azevedo and Merideth (Penny) Rucks. Lindström conducted and coordinated ethnographic research to develop a management plan for Cave Rock, a high-profile Washoe Traditional Cultural Property within the Lake Tahoe Basin. She authored a chapter on Native Californian ethnobotany that appears in a standard source book on California vegetation.

History. Experience in historic sites archaeology has focused on resources associated with the study of mining, logging, ranching, transportation, and water management resources. Since 1991 Lindström has conducted excavations at several rural work camps and industrial sites, many involving Chinese wood cutters and colliers. In 1987 and 1990 she field-directed excavations at two Donner Party camps (Murphy's Cabin and Alder Creek) and co-authored a book detailing the archival research, archaeology, architecture, dendrochronology, and zooarchaeology surrounding the tragedy.

Paleoenvironmental Studies. Lindström is a contributor to the 1997 congressionally funded, multi-disciplinary study assessing the environmental health and ecosystem management of the Sierra Nevada (*Sierra Nevada Ecosystem Project* [SNEP]) and the pilot case study focusing on the Lake Tahoe Basin.

She is also a contributor to the *Lake Tahoe Watershed Assessment* study, published in 2000 by the Pacific Southwest Research Station, USDA Forest Service, in collaboration with the Pacific Southwest Region of the USDA Forest Service, the Tahoe Regional Planning Agency, the University of California at Davis, the University of Nevada at Reno, and the Desert Research Institute, Reno, Nevada. The study was mandated as part of former President Clinton's actions to protect Lake Tahoe.

Through a series of snorkel and SCUBA surveys during the 1980s and 1990s in Lake Tahoe and its tributary lakes, Lindström investigated lake level changes and explored submerged remnant forests and prehistoric milling features as paleoenvironmental indicators over the past 6000 years. She presented her findings in scientific journals as a co-author with geologists, hydrologists and limnologists. Her work was also featured in *National Geographic* magazine (March 1992).

Secretary of Interior Standards: Closely Related Fields

Lindström's 43 years of full-time experience also entails research, writing, inventory, evaluation, data recovery, and management in closely related fields pertaining to the "built environment." Her work falls within the historical context of mining, logging, water supply engineering, and ranching landscapes, as well as transportation and communications networks, and town sites. Evaluation and data recovery have been directed to 19th and 20th century structural remains for the following resource types: Chinese/Basque/miner cabins; bake ovens/hearths; sawmills; railroad grades and camps; flumes; ditches; pipelines; dams; reservoirs; water tanks; ice works; ranch complexes; charcoal kilns; mine features; trails/roads/highways; utility lines; and fences.

For her projects involving more complex structural properties such as intact standing buildings, bridges and other architectural features, Lindström has had the opportunity to collaborate and learn from prominent architectural historians, beginning in the early 1980s with the Town of Truckee National Register District nomination process up until the present time.

Lindström also has experience with several historic preservation projects. She authored the heritage resource components for local community plans (from 1989 through 2005) and for county general plans (beginning in 1991). During the 1980s she served as a charter member of the Truckee Historical Preservation Advisory Council. She assisted in the preparation of the Truckee Historic Preservation Plan in 2009, followed by the formal National Register District nomination and subsequent Truckee Streetscape project. She served as a member of the "Placer County Department of Museums Collections Management Task Force" in 2000 and is currently an advisor to the California Department of Parks and Recreation (Sierra District) for their upcoming museum at Donner Memorial State Historic Park.

*available upon request

Devin Gonzales Blom



Archaeologist/ GIS Analyst

Expertise

GIS/ Mapping
Aerial Drone (UAV, UAS) Pilot
Aerial Drone-based Orthomosaic Mapping
Underwater Drone (ROV) Pilot
Cultural Resources Management
Great Basin Prehistory
Comstock Mining History

Education

UNR, University of Nevada Reno, B.A., Anth, 2014
LTCC, Lake Tahoe Community College A.A., Anth, 2010
Bessemer Gynasiet, Sandviken, Sweden, Natural Sciences, 2001

Professional Registrations

FAA Part 107 Certified Remote Pilot

Professional Experience

Owner/Archaeological/ GIS Consultant, Battle Born GIS, June 2014 to present

Archaeological Technician, United States Forest Service, 2009-2014

Selected Project Experience

Pacific Coast Highway – CalTrans PAL Mapping, Malibu CA, 2020

Big Chief - Wetland Delineation, Alpine Meadows, 2020

Tahoe Donner Trails Five Year Implementation Plan – Cultural Resource Inventory, Tahoe Donner, 2015-2020

Washoe Mapping Project, Gardnerville, 2019-2020

Trout Unlimited, Truckee River Stream Enhancement Project, Glenshire, 2019

South Tahoe Public Utility District, Waterline Replacement Project, Cultural Resource Inventory, South Lake Tahoe, 2019

Squaw Creek North Meadow Enhancement Project, Aerial Mapping and Wetland Delineation, Olympic Valley, 2016-2020

Perazzo Meadow Restoration Project, Aerial Mapping and Vegetation Mapping, 2019-2020

Sardine Meadow Restoration Project, Aerial Mapping and Wetland Delineation, Boca Reservoir 2018-2020

Mt Rose Atoma Architectural Assessment, Resource Mapping, Mt Rose, 2019

Cold Stream Canyon Restoration, Cultural Resource Study- Pre-Field Research, Truckee, 2019

Cal Neva Resort Hotel and Casino Restoration, Public Spaces Project, Archaeological Resource Inventory, Crystal Bay, 2019

Angeles National Forest, High Speed Rail Project, ANF, 2019

Eureka Migratory Bird Survey, Eureka, 2018

Squaw Valley Olympic Museum, Cultural Resource Inventory and Evaluation, Olympic Valley, 2018

Kings Beach Center, Cultural Resource Inventory, Kings Beach, 2018

South Tahoe Public Utility District, Tahoe Keys and Upper Truckee Pump Station Rehabilitation Project, Cultural Resource Inventory, South Lake Tahoe, 2018

Truckee Roundabout Project, Cultural Resource Study, Truckee, 2018

Angeles National Forest, Sand Fire, ANF, 2017

Donner Lake Rim Trail, Cultural Resource Inventory, Donner Lake, 2017

Squaw Valley-Alpine Meadows, Base-To-Base Gondola Project

Cultural Resources Inventory, Olympic Valley, 2017-2020

Plumas Northern Goshawks, Mapping Survey Strategy, Detections and Active Nest Trees Mapping, Plumas, 2016-2017

Flume Trail, Ponderosa Ranch Parcel Bullwheel, Heritage Resource Inventory, Ponderosa Ranch, 2016

Incline Flume Trail, Cultural Resource Inventory and Evaluation

Phase 1c/ Phase 2, Incline, 2016

Black Rock Canyon, Mine MBTA Survey, Black Rock Canyon, 2016

Fibreboard Road-Brockway Campground Project, Cultural Resource Inventory and Evaluation Report, Brockway Summit, 2015

APPENDIX 2: NORTH CENTRAL INFORMATION CENTER



10/25/2022

NCIC File No.: NEV-22-73

Susan Lindstrom
Consulting Archaeologist
PO Box 3324
Truckee, CA 96160

Re: Truckee Donner Public Utility District Hirschdale Pipeline Project

The North Central Information Center (NCIC) received your records search request for the project area referenced above, located on the Martis Peak USGS 7.5' quad. The following reflects the results of the records search for the project area and a ¼-mi radius.

As indicated on the data request form, the locations of resources and reports are provided in the following format: custom GIS maps GIS data

Recorded resources within project area:	P-29-4236
Recorded resources outside project area, within radius:	P-29-2471 P-29-2472 P-29-2473 P-29-2474 P-29-4411
Known reports within project area:	10766
Known reports outside project area, within radius:	2935 6877 8157 11275 13317

- Resource Database Printout (list):** enclosed not requested nothing listed/NA
- Resource Database Printout (details):** enclosed not requested nothing listed/NA
- Resource Digital Database Records:** enclosed not requested nothing listed/NA
- Report Database Printout (list):** enclosed not requested nothing listed/NA
- Report Database Printout (details):** enclosed not requested nothing listed/NA
- Report Digital Database Records:** enclosed not requested nothing listed/NA
- Resource Record Copies:** enclosed not requested nothing listed/NA
- Report Copies:** enclosed not requested nothing listed/NA
- Built Environment Resources Directory:** enclosed not requested nothing listed/NA
- Archaeological Determinations of Eligibility:** enclosed not requested nothing listed/NA
- CA Inventory of Historic Resources (1976):** enclosed not requested nothing listed/NA

<u>Caltrans Bridge Survey:</u>	<input checked="" type="checkbox"/> enclosed	<input type="checkbox"/> not requested	<input type="checkbox"/> nothing listed/NA
<u>Ethnographic Information:</u>	<input type="checkbox"/> enclosed	<input checked="" type="checkbox"/> not requested	<input type="checkbox"/> nothing listed/NA
<u>Historical Literature:</u>	<input type="checkbox"/> enclosed	<input checked="" type="checkbox"/> not requested	<input type="checkbox"/> nothing listed/NA
<u>Historical Maps:</u>	<input type="checkbox"/> enclosed	<input checked="" type="checkbox"/> not requested	<input type="checkbox"/> nothing listed/NA
<u>Local Inventories:</u>	<input type="checkbox"/> enclosed	<input type="checkbox"/> not requested	<input checked="" type="checkbox"/> nothing listed/NA
<u>GLO and/or Rancho Plat Maps:</u>	<input type="checkbox"/> enclosed	<input checked="" type="checkbox"/> not requested	<input type="checkbox"/> nothing listed/NA
<u>Shipwreck Inventory:</u>	<input type="checkbox"/> enclosed	<input checked="" type="checkbox"/> not requested	<input type="checkbox"/> nothing listed/NA
<u>Soil Survey Maps:</u>	<input type="checkbox"/> enclosed	<input checked="" type="checkbox"/> not requested	<input type="checkbox"/> nothing listed/NA

Please forward a copy of any resulting reports and resource records from this project to NCIC as soon as possible. The lead agency/authority and cultural resources consultant should coordinate sending documentation to NCIC. Digital materials are preferred and can be sent to our office via our file transfer system. Please contact NCIC for instructions. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

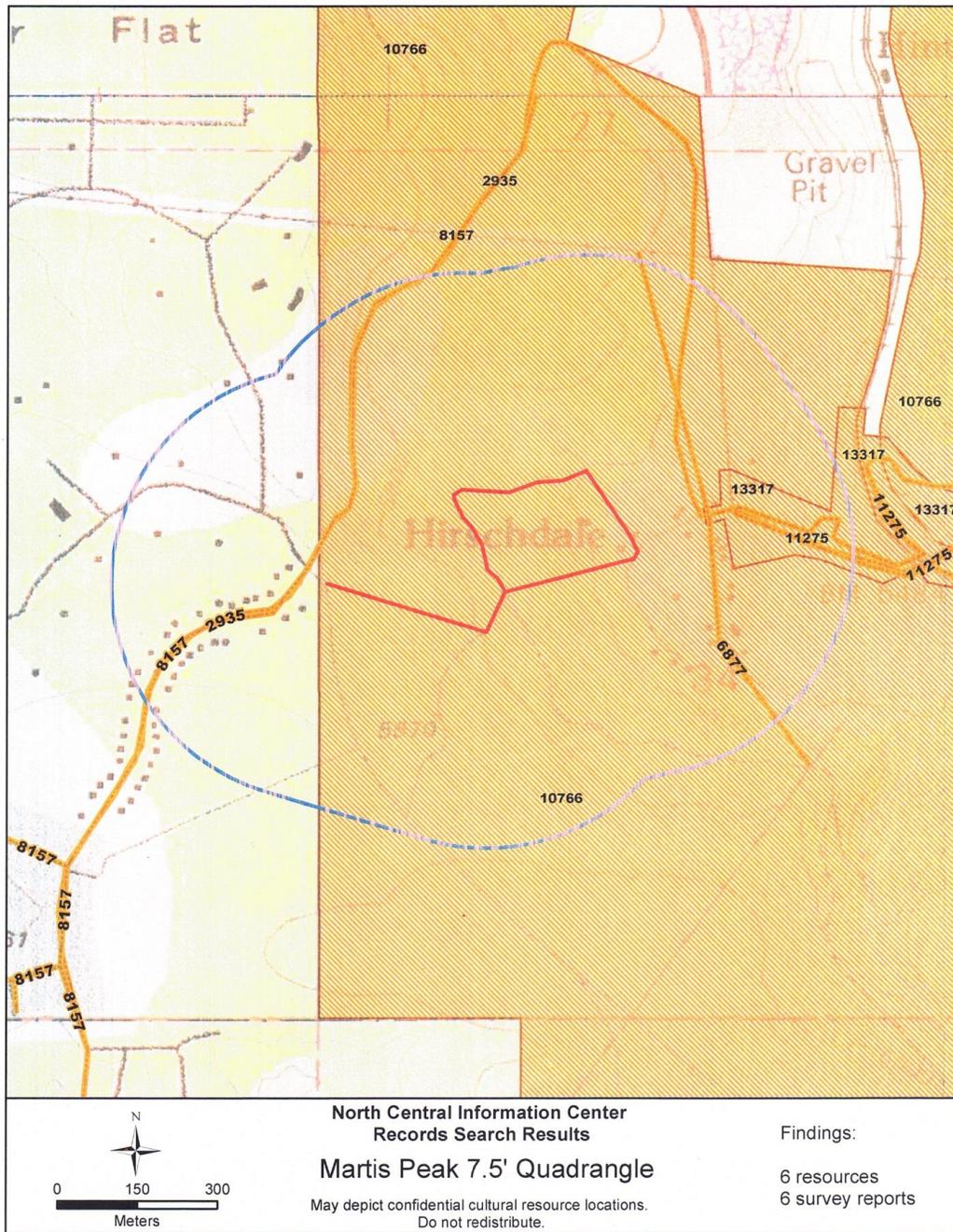
Due to processing delays and other factors, it is possible that not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the records search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Sincerely,

Paul Rendes, Coordinator
North Central Information Center

Truckee Donner Public Utility District Hirschdale Pipeline Project



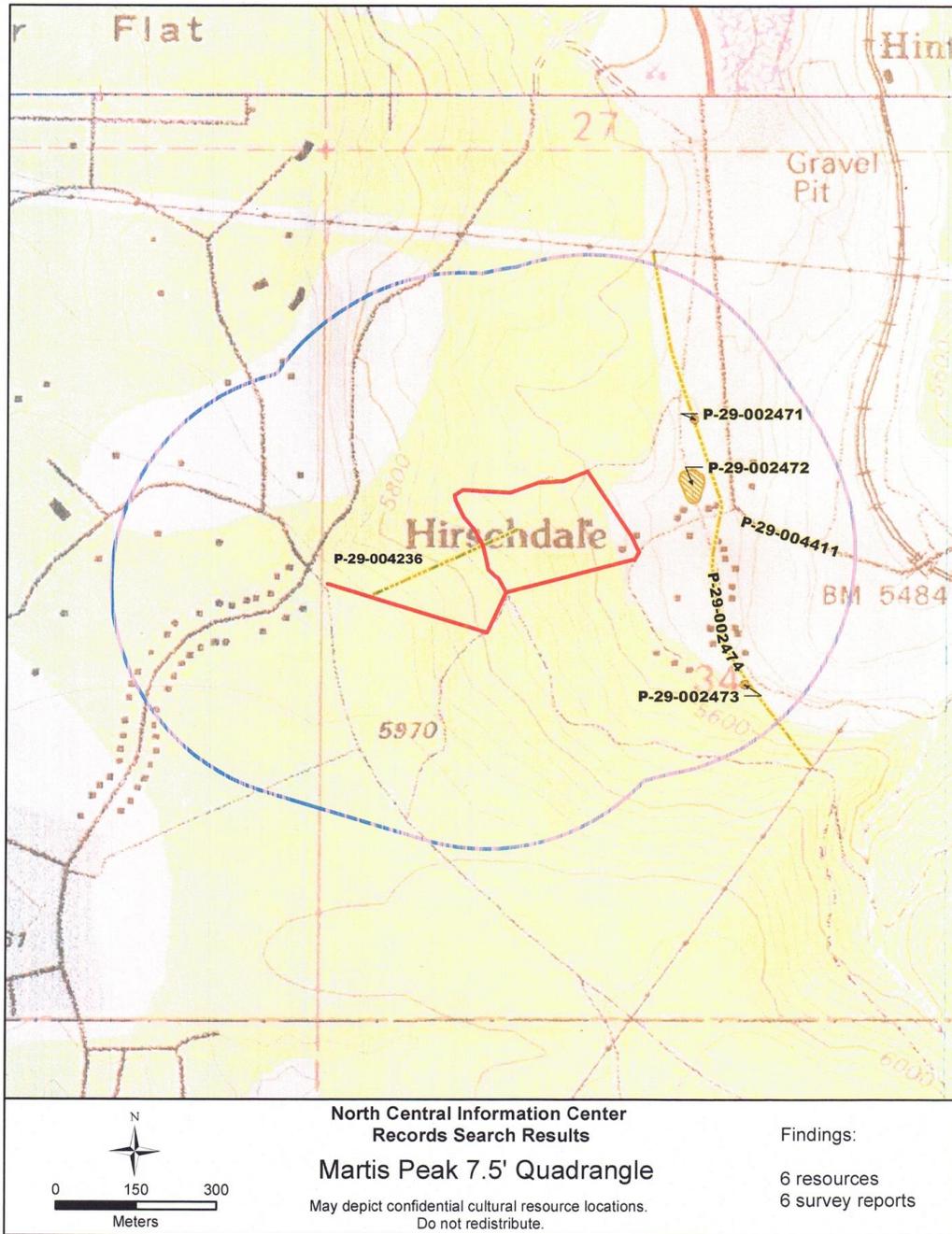
Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
002935A		1999	Jones and Stokes Associates, Inc.	Cultural Resources Inventory Report for Williams' Fiber Optic Cable System: Sacramento to California/Nevada State Border, Sacramento, Placer, and Nevada Counties, Calif.	Jones and Stokes Associates, Inc.	29-000169, 29-000613, 29-000940, 29-000942, 29-000944, 29-000947, 29-000948, 29-000949, 29-000950, 31-000671, 31-000796, 31-000964, 31-001211, 31-001249, 31-001267, 31-001268, 31-001269, 31-001270, 31-001271, 31-001272, 31-001273, 31-001274, 31-001275, 31-001277, 31-001278, 31-001279, 31-001280, 31-001281, 31-001283, 31-001284, 31-001285, 31-001286, 31-001287, 31-001288, 31-001290, 31-001291, 31-001294, 31-002629, 31-005391, 34-000505, 34-005121
002935B		1999	Jones & Stokes Associates, Inc.	Heritage Resources Report for the Pacific Fiber Link/Williams Fiber Optic Cable System Installation Project, Tahoe National Forest, US Forest Service Report 05-17-1350	Jones & Stokes Associates, Inc.	
002935C		2000	Jones & Stokes Associates, Inc.	Cultural Resources Inventory Report for Williams' Fiber Optic Cable System: Sacramento to California/Nevada State Border, Sacramento, Placer, and Nevada Counties, Calif. Addendum 1: Historic Evaluation for the Union Pacific Railroad American River Bridge	Jones & Stokes Associates, Inc.	
002935D		2000	Jones & Stokes Associates, Inc.	Addendum to the Cultural Resources Inventory Report, Williams Communications, Inc. Fiber Optic Cable System Installation Project, Sacramento, California to the California/Nevada Border, Sacramento, Placer, and Nevada Counties, Calif.	Jones & Stokes Associates, Inc.	
002935E		2001	Jones & Stokes Associates, Inc.	Addendum 3 to the Cultural Resources Inventory Report for Williams Communications, Inc. Fiber Optic Cable System Installation Project, Sacramento, California to the California/Nevada Border, Sacramento, Placer, and Nevada Counties, Calif.	Jones & Stokes Associates, Inc.	
002935F		2001	Jones & Stokes Associates, Inc.	Addendum 8: Cultural Resources Inventory Report for Williams Communications, Inc. Fiber Optic Cable System, Sacramento to California/Nevada State Border, Nevada County, California	Jones & Stokes Associates, Inc.	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
002935F		2001	Jones & Stokes	Addendum 9: Report of Project Monitoring, Additional Survey, and Site Reclamation. Cultural Resources Inventory Report for Williams' Fiber Optic Cable System: Sacramento to California/Nevada State Border, Sacramento, Placer, and Nevada Counties, California	Jones & Stokes	
006877		2006	Dougherty, John W.	Cultural Resources Inventory on a Segment of the Sierra Pacific Power Company 12.5 KV Line Near Hirschdale, Nevada County, CA		29-002471, 29-002472, 29-002473, 29-002474
008157		1984	Ann Peak and Melinda Peak	Cultural Resources Assessment of the Proposed Gleanshire/Devonshire Waternwater Treatment and Disposal Alternatives Under Clean Water Grant No. C-06-2899-110	Peak and Associates	29-000240, 29-002858, 29-002859
010786		1995	James P. Johnson	Teel: Archaeological and Historical Resources Survey and Impact Assessment a Supplemental Report for a Timber Harvesting Plan	Archaeological Surveyor, The CHY Company	29-000699, 29-000700, 29-004233, 29-004234, 29-004235, 29-004236, 31-001045
011275		2013	Nichole Jordan	Historic Property Survey Report for the Hinton Road Realignment/Hirschdale Road Bridges Removal Project Hirschdale, Nevada County, California Caltrans District 3 Brioza 5917(031)	LSA Associates, Inc	29-004364, 29-004365, 29-004366, 29-004411, 29-004412
013317		2019	Amy Dunay	Historic Property Survey Report for Hirschdale Road Bridges Rehabilitation Project, Nevada County, California	Dokken Engineering	29-000613, 29-004366
013317A		2019	Amy Dunay	Archaeological Survey Report for the Hirschdale Road Bridges Rehabilitation Project, Nevada County, California	Dokken Engineering	
013317B		2019	Amy Dunay	Extended Phase 1 Report P-29-004366/CA-NEY-002276H	Dokken Engineering	
013317C		2019	Amy Dunay	Findings of No Adverse Effect with Non-Standard Conditions for the Hirschdale Road Bridges Rehabilitation Project, Nevada County, CA	Dokken Engineering	
013317D		2019	Amy Dunay	CSO Assumption and Approval of Eligibility Determination	Dokken Engineering	

Truckee Donner Public Utility District Hirschdale Pipeline Project



Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-29-002471		Other - Hirschdale R1	Other	Prehistoric	AP16	2005 (M. Nolte, J.W. Dougherty, PAR Environmental Services, Inc.)	006877
P-29-002472	CA-NEV-001550H	Other - Hirschdale R2	Site	Historic	AH04, AP16	2005 (M. Nolte, J. W. Dougherty, PAR Environmental)	006877
P-29-002473		Other - Hirschdale R3	Structure	Historic	HP39	2005 (M. Nolte, J.W. Dougherty, PAR Environmental Services, Inc.)	006877
P-29-002474	CA-NEV-001551H	Other - Hirschdale R4	Structure	Historic	HP39	2005 (M. Nolte, J. W. Dougherty, PAR Environmental)	006877
P-29-004236		Resource Name - Teel Site #28 Telephone line	Site	Historic	AH16	1995 (James P. Johnson, The CHY Company)	010766
P-29-004411		Resource Name - Truckee River Bridge; Other - Bridge 17C0045	Structure	Historic	HP19	2013 (Katie Vallaire, LSA Associates, Inc)	011275

APPENDIX 3: NATIVE AMERICAN OUTREACH

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd, Suite 100
West Sacramento, CA 95501
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Truckee Donner Public District Hirschdale Pipeline Project
County: Nevada

USGS Quadrangle

Name: Martis Peak 7.5'
Township: 18N Range: 17E Section(s): 34

Company/Firm/Agency:

Susan Lindstrom, Consulting Archaeology

Contact Person: Susan Lindstrom

Street Address: Box 3324

City: Truckee Zip: 96160

Phone: (530) 713-1920 Extension: _____

Fax: _____

Email: susanglindstrom@gmail.com

Project Description:

The TDPUD intends to connect its main Glenshire waterline with the Hirschdale system. The alignment would extend down a steep slope for approximately 2,400 feet. Half of this distance will be embedded in an existing dirt road.

Project Location Map is attached

SLF&Contactsform: rev: 05/07/14

Susan Lindström, Ph.D.

Consulting Archaeologist

P.O. Box 3324
Truckee CA 96160
530-713-1920
susanglindstrom@gmail.com

DATE: October 25, 2022

TO: Native American Heritage Commission
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
916-373-3710; 916-373-5471 (fax)
nahc@nahc.ca.gov

RE: Truckee Donner Public Utility District (TDPUD) Hirschdale Pipeline Project
Cultural Resource Study

I am writing to request a record search of the Sacred Land Files. The TDPUD is planning to connect its main Glenshire waterline with the Hirschdale system. The alignment would extend down a steep slope for approximately 2,400 feet. Half of this distance will be embedded in an existing dirt road. The project area falls within Township 18 North, Range 17 East, Section 34, USGS Martis Peak 7.5 (see attached map).

I wish to bring this project to your attention, and I invite your opinions, knowledge and sentiments regarding any potential concerns for traditional Native American lands within the project vicinity.

Thank you very much.

Susan Lindström, Ph.D.
Consulting Archaeologist



Susan Lindstrom <susanglindstrom@gmail.com>

Truckee Donner Public Utility District Hirschdale Pipeline Project

2 messages

Susan Lindstrom <susanglindstrom@gmail.com>
To: NAHC NAHC <nahc@nahc.ca.gov>

Tue, Oct 25, 2022 at 12:41 PM

Hello;
Attached please project information regarding my request for a search of your sacred lands files. Please confirm receipt of this request and provide an estimate of your turn-around-time to process results. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

4 attachments



NAHCa.jpg
346K



NAHCb.jpg
271K



NAHCc.jpg
258K

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-a%3Ar864650989176801240&simpl=msg-a%3Ar4484253361...> 1/3

10/26/22, 9:15 AM

Gmail - Truckee Donner Public Utility District Hirschdale Pipeline Project



NTPUD Hirschdale Project Project Location 24k topo.png
11998K

NAHC@NAHC <NAHC@nahc.ca.gov>
To: Susan Lindstrom <susanglindstrom@gmail.com>
Cc: "Torres-Fuentes, Pricilla@NAHC" <Pricilla.Torres-Fuentes@nahc.ca.gov>

Tue, Oct 25, 2022 at 3:40 PM

Hello,

Thank you for your message. We're in receipt of your request. We have recently hired new staff, and this change in our office is creating some delays. We estimate a turn-around time of 6-8 weeks and don't anticipate responding sooner than the end of that time frame. Please let us know if you have any questions.

Kind regards,

Native American Heritage Commission

1550 Harbor Blvd. Suite 100

West Sacramento, CA 95691

(916) 373-3710

[Quoted text hidden]

4 attachments

NAHCa.jpg
346K

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-a%3Ar864650989176801240&simpl=msg-a%3Ar4484253361...> 2/3

10/26/22, 9:15 AM

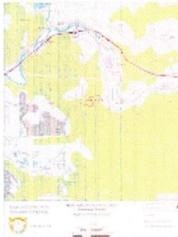
Gmail - Truckee Donner Public Utility District Hirschdale Pipeline Project



NAHCb.jpg
271K



NAHCc.jpg
258K



NTPUD Hirschdale Project Project Location 24k topo.png
11998K

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-a%3Ar864650989176801240&simpl=msg-a%3Ar4484253361...> 3/3



NATIVE AMERICAN HERITAGE COMMISSION

December 8, 2022

Susan Lindstrom
Consulting Archaeologist

Via Email to: susanglindstrom@gmail.com

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Sara Dulschke
Miwok

COMMISSIONER
Isaac Bojarquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki,
Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
[VAVANT]

COMMISSIONER
[VACANT]

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Truckee Donner Public Utility District Hirschdale Pipeline Project, Nevada County

Dear Ms. Lindstrom:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
 - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.
2. The results of any archaeological inventory survey that was conducted, including:
- Any report that may contain site forms, site significance, and suggested mitigation measures.
- All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.
3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.
4. Any ethnographic studies conducted for any area including all or part of the APE; and
5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

Attachment

**Native American Heritage Commission
Tribal Consultation List
Nevada County
12/8/2022**

Tsi Akim Maidu

Grayson Coney, Cultural Director
P.O. Box 510 Maidu
Browns Valley, CA, 95918
Phone: (530) 383 - 7234
tsi-akim-maidu@att.net

Tsi Akim Maidu

Don Ryberg, Chairperson
P.O. Box 510 Maidu
Browns Valley, CA, 95918
Phone: (530) 383 - 7234
tsi-akim-maidu@att.net

**United Auburn Indian
Community of the Auburn
Rancheria**

Gene Whitehouse, Chairperson
10720 Indian Hill Road Maidu
Auburn, CA, 95603 Miwok
Phone: (530) 883 - 2390
Fax: (530) 883-2380
bguth@auburnrancheria.com

**Washoe Tribe of Nevada and
California**

Darrel Cruz, Cultural Resources
Department
919 Highway 395 North Washoe
Gardnerville, NV, 89410
Phone: (775) 265 - 8600
darrel.cruz@washoetribe.us

**Washoe Tribe of Nevada and
California**

Serrell Smokey, Chairperson
919 Highway 395 North Washoe
Gardnerville, NV, 89410
Phone: (775) 265 - 8600
serrell.smokey@washoetribe.us

**Colfax-Todds Valley
Consolidated Tribe**

Clyde Prout, Chairperson
P.O. Box 4884 none Maidu
Auburn, CA, 95604 Miwok
Phone: (916) 577 - 3558
miwokmaidu@yahoo.com

**Colfax-Todds Valley
Consolidated Tribe**

Pamela Cubbler, Treasurer
P.O. Box 4884 Maidu
Auburn, CA, 95604 Miwok
Phone: (530) 320 - 3943
pcubbler@colfaxrancheria.com

**Nevada City Rancheria Nisenan
Tribe**

Richard Johnson, Chairman
P.O. Box 2624 Nisenan
Nevada City, CA, 95959
Phone: (530) 570 - 0846
shelly@nevadacityrancheria.org

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Truckee Donner Public Utility District Hirschdale Pipeline Project, Nevada County.

PROJ-2022-
007327

12/08/2022 10:48 AM

1 of 1

Susan Lindström, Ph.D.

Consulting Archaeologist

P.O. Box 3324
Truckee CA 96160
530-713-1920 (cell)
susanglindstrom@gmail.com

DATE: October 25, 2022

TO: Deana Bovee, Chairperson
Susanville Indian Rancheria
745 Joaquin Street, Susanville, CA 96130
bovee@sir-nsn.gov
530-257-6264

RE: Truckee Donner Public Utility District Hirschdale Pipeline Project
Cultural Resource Study

The Truckee Donner Public Utility District intends to connect its main Glenshire waterline with the Hirschdale system. The alignment would extend down a steep slope for approximately 2,400 feet. For half of this distance, the pipeline will be embedded in an existing dirt road. The project area falls within Township 18 North, Range 17 East, Section 34, USGS Martis Peak 7.5 (see attached map).

I wish to bring this project to your attention, and I invite your opinions, knowledge and sentiments regarding any potential concerns for traditional Native American lands within the project vicinity.

Thank you very much.

Susan Lindström, Ph.D.
Consulting Archaeologist



Susan Lindstrom <susanglindstrom@gmail.com>

Truckee Donner PUD Hirschdale Pipeline Project

2 messages

Susan Lindstrom <susanglindstrom@gmail.com>
To: bovee@sir-nsn.gov

Tue, Oct 25, 2022 at 1:14 PM

Chairperson Bovee;
Attached please find information regarding the above project. I welcome your comments and will include them in my upcoming report. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

 **TDPUD Hirschdale NAHC Bovee.docx**
4504K

Mail Delivery Subsystem <mailer-daemon@googlemail.com>
To: susanglindstrom@gmail.com

Tue, Oct 25, 2022 at 1:14 PM



Message blocked

Your message to **bovee@sir-nsn.gov** has been blocked. See technical details below for more information.

The response from the remote server was:

550 5.4.1 Recipient address rejected: Access denied. AS(201806281) [DM6NAM11FT069.eop-nam11.prod.protection.outlook.com]

Final-Recipient: rfc822; bovee@sir-nsn.gov
Action: failed
Status: 5.4.1
Remote-MTA: dns; sirnsn-gov01.mail.protection.outlook.com. (104.47.57.138, the server for the domain sir-nsn.gov.)

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-a%3Ar-7545444810262131209&simpl=msg-a%3Ar-3624063...> 1/2

Susan Lindström, Ph.D.

Consulting Archaeologist

P.O. Box 3324
Truckee CA 96160
530-713-1920 (cell)
susanglindstrom@gmail.com

DATE: October 25, 2022

TO: Darrel Cruz, THPO
Washoe Tribe of Nevada and California
Cultural Resources Department
919 Highway 395 South
Gardnerville, NV 89410
darrel.cruz@washoetribe.us
775-782-0014; 775-546-3421 (cell)

RE: Truckee Donner Public Utility District Hirschdale Pipeline Project
Cultural Resource Study

The Truckee Donner Public Utility District intends to connect its main Glenshire waterline with the Hirschdale system. The alignment would extend down a steep slope for approximately 2,400 feet. For half of this distance, the pipeline will be embedded in an existing dirt road. The project area falls within Township 18 North, Range 17 East, Section 34, USGS Martis Peak 7.5 (see attached map).

I wish to bring this project to your attention, and I invite your opinions, knowledge and sentiments regarding any potential concerns for traditional Native American lands within the project vicinity.

Thank you very much.

Susan Lindström, Ph.D.
Consulting Archaeologist

10/25/22, 1:30 PM

Gmail - Truckee Donner PUD Hirschdale Pipeline Project



Susan Lindstrom <susanglindstrom@gmail.com>

Truckee Donner PUD Hirschdale Pipeline Project

1 message

Susan Lindstrom <susanglindstrom@gmail.com>
To: Darrel Cruz <darrel.cruz@washoetribe.us>

Tue, Oct 25, 2022 at 1:15 PM

Hello Darrel;
Attached please find information regarding the above project. I welcome your comments and will include them in my upcoming report. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

 **TDPUD Hirschdale NAHC Cruz.docx**
4504K

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-a%3Ar-7085483980137343433&simpl=msg-a%3Ar15771099...> 1/1



Susan Lindstrom <susanglindstrom@gmail.com>

RE: Truckee Donner PUD Hirschdale Pipeline Project 102722

2 messages

Darrel Cruz <Darrel.Cruz@washoetribe.us>
To: Susan Lindstrom <susanglindstrom@gmail.com>

Thu, Oct 27, 2022 at 2:44 PM

Hi Susan,

Thank you for consulting with the Washoe Tribe of Nevada and California regarding the Truckee Donner Public Utility District Hirschdale Pipeline Project, Cultural Resource Study.

I do not have immediate knowledge of any pre-contact resources within the project area of potential effect.

When the cultural study is completed please keep us informed if the project may affect any pre-contact sites.

Thank you,

Darrel

Darrel Cruz, Director
THPO/CRO
Washoe Tribe of NV & CA
919 Highway 395
Gardnerville, NV. 89410
P. (775) 265-8600
C. (775) 546-3421
darrel.cruz@washoetribe.us

From: Susan Lindstrom [mailto:susanglindstrom@gmail.com]
Sent: Tuesday, October 25, 2022 1:15 PM
To: Darrel Cruz <Darrel.Cruz@washoetribe.us>
Subject: Truckee Donner PUD Hirschdale Pipeline Project

Hello Darrel;

Attached please find information regarding the above project. I welcome your comments and will include them in my upcoming report. Thank you.

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-f%3A1747878761116831464&siml=msg-f%3A1747878761116831464> 1/2

10/28/22, 5:07 PM

Gmail - RE: Truckee Donner PUD Hirschdale Pipeline Project 102722

Susan G. Lindstrom, Ph.D.

Consulting Archaeologist

susanglindstrom@gmail.com

P.O. Box 3324

Truckee, CA 96160

530-713-1920

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.

Susan Lindstrom <susanglindstrom@gmail.com>
To: Darrel Cruz <Darrel.Cruz@washoetribe.us>

Fri, Oct 28, 2022 at 5:07 PM

Thank you for your response, Darrel. I'll include your comments in my upcoming report and keep you informed should any Native American sites/features/artifacts be encountered during project construction activities..

Susan G. Lindstrom, Ph.D.

Consulting Archaeologist

susanglindstrom@gmail.com

P.O. Box 3324

Truckee, CA 96160

530-713-1920

[Quoted text hidden]

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-f%3A1747878761116831464&simpl=msg-f%3A1747878761116831464> 2/2

Susan Lindström, Ph.D.

Consulting Archaeologist

P.O. Box 3324
Truckee CA 96160
530-713-1920 (cell)
susanglindstrom@gmail.com

DATE: October 25, 2022

TO: Pamela Cubbler, Treasurer
(Clyde Prout, Chairman)
Colfax-Todds Valley Consolidated Tribe
P.O. Box 4884
Auburn, CA 95604
pcubbler@colfaxrancheria.com (miwokmaidu@yahoo.com)
530-320-3943; 530-367-2093 (home); (916-577-3558)

RE: Truckee Donner Public Utility District Hirschdale Pipeline Project
Cultural Resource Study

The Truckee Donner Public Utility District intends to connect its main Glenshire waterline with the Hirschdale system. The alignment would extend down a steep slope for approximately 2,400 feet. For half of this distance, the pipeline will be embedded in an existing dirt road. The project area falls within Township 18 North, Range 17 East, Section 34, USGS Martis Peak 7.5 (see attached map).

I wish to bring this project to your attention, and I invite your opinions, knowledge and sentiments regarding any potential concerns for traditional Native American lands within the project vicinity.

Thank you very much.

Susan Lindström, Ph.D.
Consulting Archaeologist



Susan Lindstrom <susanglindstrom@gmail.com>

Truckee Donner PUD Hirschdale Pipeline Project

2 messages

Susan Lindstrom <susanglindstrom@gmail.com>
To: Pamela Cubbler <pcubbler@colfaxrancheria.com>

Tue, Oct 25, 2022 at 1:16 PM

Hello Pam;
Attached please find information regarding the above project. I welcome your comments and will include them in my upcoming report. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

 **TDPUD Hirschdale NAHC Cubbler.docx**
4504K

Susan Lindstrom <susanglindstrom@gmail.com>
To: Pamela Cubbler <pcubbler@colfaxrancheria.com>

Tue, Nov 15, 2022 at 10:46 AM

Hi Pam;
I'm following up on my October 25th email and mailed correspondence to confirm you have all the necessary project information should you choose to comment. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

[Quoted text hidden]

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-a%3Ar2312101890516508607&simpl=msg-a%3Ar743164035...> 1/1

Susan Lindström, Ph.D.

Consulting Archaeologist

P.O. Box 3324
Truckee CA 96160
530-713-1920 (cell)
susanglindstrom@gmail.com

DATE: October 25, 2022

TO: Regina Cuellar, Chairperson
Shingle Springs Band of Miwok Indians
P.O. Box 1340
Shingle Springs, CA 95682
530-387-4970
rcuellar@ssband.org

RE: Truckee Donner Public Utility District Hirschdale Pipeline Project
Cultural Resource Study

The Truckee Donner Public Utility District intends to connect its main Glenshire waterline with the Hirschdale system. The alignment would extend down a steep slope for approximately 2,400 feet. For half of this distance, the pipeline will be embedded in an existing dirt road. The project area falls within Township 18 North, Range 17 East, Section 34, USGS Martis Peak 7.5 (see attached map).

I wish to bring this project to your attention, and I invite your opinions, knowledge and sentiments regarding any potential concerns for traditional Native American lands within the project vicinity.

Thank you very much.

Susan Lindström, Ph.D.
Consulting Archaeologist



Susan Lindstrom <susanglindstrom@gmail.com>

Truckee Donner PUD Hirschdale Pipeline Project

2 messages

Susan Lindstrom <susanglindstrom@gmail.com>
To: Regina Cuellar <rcuellar@ssband.org>

Tue, Oct 25, 2022 at 1:17 PM

Chairperson Cuellar;
Attached please find information regarding the above project. I welcome your comments and will include them in my upcoming report. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

 **TDPUD Hirschdale NAHC Cuellar.docx**
4504K

Susan Lindstrom <susanglindstrom@gmail.com>
To: Regina Cuellar <rcuellar@ssband.org>

Tue, Nov 15, 2022 at 10:47 AM

Chairperson Cuellar;
I'm following up on my October 25th email and mailed correspondence to confirm you have all the necessary project information should you choose to comment. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

[Quoted text hidden]

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-a%3Ar35858455916290281&siml=msg-a%3Ar-2302714776...> 1/1



Susan Lindstrom <susanglindstrom@gmail.com>

Truckee Donner Public Utility District Hirschdale Pipeline Project

1 message

Mariah Mayberry <mmaryberry@ssband.org>
To: Susan Lindstrom <susanglindstrom@gmail.com>
Cc: Kara Perry <KPerry@ssband.org>

Tue, Nov 29, 2022 at 9:14 AM

Good morning,

Please see attached no consultation request from the Shingle Springs Band of Miwok Indians.

Thank you

Mariah Mayberry
Administrative Assistant
Cultural Resources Department

Fax: (530) 558-2034
Email: mmaryberry@ssband.org

Shingle Springs Band of Miwok Indians | P.O. Box 1340, Shingle Springs, CA 95682

SSBBI Disclaimer: This email (Truckee Donner Public Utility District Hirschdale Pipeline Project) is from Shingle Springs Band of Miwok Indians: Cultural Resources Department and is intended for susanglindstrom@gmail.com. Any attachments thereto may contain private, confidential, and privileged material. Any review, copying, or distribution of this email (or any attachments thereto) by parties other than the Shingle Springs Band of Miwok Indians (and its affiliated departments or programs) or the intended recipient(s) is strictly prohibited. If you properly received this e-mail as an employee of the Shingle Springs Band of Miwok Indians, outside legal counsel or retained expert, you should maintain its contents in confidence in order to preserve the attorney-client or work product privilege that may be available to protect confidentiality.

If you are not the intended recipient, please notify the sender immediately and permanently delete the email and any attachments thereto. Do not forward, copy, disclose, or otherwise reproduce its contents to anyone.

2022-11-019.pdf
258K



**SHINGLE SPRINGS BAND
OF MIWOK INDIANS**

Shingle Springs Rancheria
(Verona Tract), California
5168 Honple Road
Placerville, CA 95667
Phone: 530-676-8010
shinglespringsrancheria.com

CULTURAL RESOURCES

November 22, 2022

Susan Lindstrom

RE: Truckee Donner Public Utility District Hirschdale Pipeline Project

Dear Susan Lindstrom,

Thank you for your letter regarding the above-mentioned project. Based on the information provided, the Shingle Springs Band of Miwok Indians is not aware of any known cultural resources on this site. However, SSR would like to have continued consultation through updates, as the project progresses. This will foster greater communication between the Tribe and your agency.

SSR would also like to request all completed record searches and or surveys that were done in or around the project area up to and including environmental, archaeological, and cultural reports. If during the progress of the project new information or human remains are found, we would like to be able to go over our process with you to protect such important and sacred artifacts (especially near rivers and streams).

If such finds are made, please contact Kara Perry, Site Protection Manager, at (530) 488-4049 or kperry@ssband.org.

Thank you for providing us with this notice and opportunity to comment.

Sincerely,

Daniel Fonseca
Cultural Resource Director
Tribal Historic Preservation Officer (THPO)
Most Likely Descendant (MLD)

Susan Lindström, Ph.D.

Consulting Archaeologist

P.O. Box 3324
Truckee CA 96160
530-713-1920 (cell)
susanglindstrom@gmail.com

DATE: October 25, 2022

TO: Sara Dutschke, Chairperson
Ione Band of Miwok Indians
9252 Bush Street
Plymouth, CA 95669
209-245-5800; consultation@ionemiwok.net

RE: Truckee Donner Public Utility District Hirschdale Pipeline Project
Cultural Resource Study

The Truckee Donner Public Utility District intends to connect its main Glenshire waterline with the Hirschdale system. The alignment would extend down a steep slope for approximately 2,400 feet. For half of this distance, the pipeline will be embedded in an existing dirt road. The project area falls within Township 18 North, Range 17 East, Section 34, USGS Martis Peak 7.5 (see attached map).

I wish to bring this project to your attention, and I invite your opinions, knowledge and sentiments regarding any potential concerns for traditional Native American lands within the project vicinity.

Thank you very much.

Susan Lindström, Ph.D.
Consulting Archaeologist



Susan Lindstrom <susanglindstrom@gmail.com>

Truckee Donner PUD Hirschdale Pipeline Project

2 messages

Susan Lindstrom <susanglindstrom@gmail.com>
To: consultation@ionemiwok.net

Tue, Oct 25, 2022 at 1:18 PM

Chairperson Dutschke;
Attached please find information regarding the above project. I welcome your comments and will include them in my upcoming report. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

 **TDPUD Hirschdale NAHC Dutschke.docx**
4504K

Susan Lindstrom <susanglindstrom@gmail.com>
To: consultation@ionemiwok.net

Tue, Nov 15, 2022 at 10:47 AM

Chairperson Dutschke;
I'm following up on my October 25th email and mailed correspondence to confirm you have all the necessary project information should you choose to comment. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

[Quoted text hidden]

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-a%3Ar-5063775075563759118&simpl=msg-a%3Ar-16992185...> 1/1

Susan Lindström, Ph.D.

Consulting Archaeologist

**P.O. Box 3324
Truckee CA 96160
530-713-1920 (cell)
susanglindstrom@gmail.com**

DATE: October 25, 2022

TO: Richard Johnson, Chairperson
Saxon Thomas, Tribal Council
Shelly Covert, Tribal Secretary
Nevada City Rancheria Nisenan Tribe
P.O. Box 2266
Nevada City, CA 95959
530-570-0846; shelly@nevadacityrancheria.org

RE: Truckee Donner Public Utility District Hirschdale Pipeline Project
Cultural Resource Study

The Truckee Donner Public Utility District intends to connect its main Glenshire waterline with the Hirschdale system. The alignment would extend down a steep slope for approximately 2,400 feet. For half of this distance, the pipeline will be embedded in an existing dirt road. The project area falls within Township 18 North, Range 17 East, Section 34, USGS Martis Peak 7.5 (see attached map).

I wish to bring this project to your attention, and I invite your opinions, knowledge and sentiments regarding any potential concerns for traditional Native American lands within the project vicinity.

Thank you very much.

Susan Lindström, Ph.D.
Consulting Archaeologist



Susan Lindstrom <susanglindstrom@gmail.com>

Truckee Donner PUD Hirschdale Pipeline Project

2 messages

Susan Lindstrom <susanglindstrom@gmail.com>
To: shelly@nevadacityrancheria.org

Tue, Oct 25, 2022 at 1:19 PM

Chairperson Johnson;
Attached please find information regarding the above project. I welcome your comments and will include them in my upcoming report. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

 **TDPUD Hirschdale NAHC Johnson.docx**
4504K

Susan Lindstrom <susanglindstrom@gmail.com>
To: shelly@nevadacityrancheria.org

Tue, Nov 15, 2022 at 10:48 AM

Chairperson Johnson;
I'm following up on my October 25th email and mailed correspondence to confirm you have all the necessary project information should you choose to comment. Thank you. Chairperson Johnson;

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

[Quoted text hidden]

Susan Lindström, Ph.D.

Consulting Archaeologist

P.O. Box 3324
Truckee CA 96160
530-713-1920 (cell)
susanglindstrom@gmail.com

DATE: October 25, 2022

TO: Don Ryberg, Chairperson
Tsi Akim Maidu
P.O. Box 510
Browns Valley, CA 95918
530-383-7234
Tsi-akim-maidu@att.net

RE: Truckee Donner Public Utility District Hirschdale Pipeline Project
Cultural Resource Study

The Truckee Donner Public Utility District intends to connect its main Glenshire waterline with the Hirschdale system. The alignment would extend down a steep slope for approximately 2,400 feet. For half of this distance, the pipeline will be embedded in an existing dirt road. The project area falls within Township 18 North, Range 17 East, Section 34, USGS Martis Peak 7.5 (see attached map).

I wish to bring this project to your attention, and I invite your opinions, knowledge and sentiments regarding any potential concerns for traditional Native American lands within the project vicinity.

Thank you very much.

Susan Lindström, Ph.D.
Consulting Archaeologist



Susan Lindstrom <susanglindstrom@gmail.com>

Truckee Donner PUD Hirschdale Pipeline Project

2 messages

Susan Lindstrom <susanglindstrom@gmail.com>
To: tsi-akim-maidu@att.net

Tue, Oct 25, 2022 at 1:20 PM

Chairperson Ryberg;
Attached please find information regarding the above project. I welcome your comments and will include them in my upcoming report. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

 **TDPUD Hirschdale NAHC Ryberg.docx**
4504K

Susan Lindstrom <susanglindstrom@gmail.com>
To: tsi-akim-maidu@att.net

Tue, Nov 15, 2022 at 10:48 AM

Chairperson Ryberg;
I'm following up on my October 25th email and mailed correspondence to confirm you have all the necessary project information should you choose to comment. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

[Quoted text hidden]

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-a%3Ar5262583953746693409&simpl=msg-a%3Ar361947020...> 1/1

Susan Lindström, Ph.D.

Consulting Archaeologist

P.O. Box 3324
Truckee CA 96160
530-713-1920 (cell)
susanglindstrom@gmail.com

DATE: October 25, 2022

TO: Jesus Tarango, Chairperson
Wilton Rancheria
9728 Kent Street
Elk Grove, CA 95624
916-683-6000; jtarango@wiltonrancheria-nsn.gov

Steven Hutchason, Tribal Historic Preservation Officer
Wilton Rancheria
9728 Kent Street
Elk Grove, CA 95624
916-683-6000; shutchasson@wiltonrancheria-nsn.gov
c/o Mariah Mayberry; 916-683-6000x2023
mmayberry@wiltonrancheria-nsn.gov

RE: Truckee Donner Public Utility District Hirschdale Pipeline Project
Cultural Resource Study

The Truckee Donner Public Utility District intends to connect its main Glenshire waterline with the Hirschdale system. The alignment would extend down a steep slope for approximately 2,400 feet. For half of this distance, the pipeline will be embedded in an existing dirt road. The project area falls within Township 18 North, Range 17 East, Section 34, USGS Martis Peak 7.5 (see attached map).

I wish to bring this project to your attention, and I invite your opinions, knowledge and sentiments regarding any potential concerns for traditional Native American lands within the project vicinity.

Thank you very much.

Susan Lindström, Ph.D.
Consulting Archaeologist



Susan Lindstrom <susanglindstrom@gmail.com>

Truckee Donner PUD Hirschdale Pipeline Project

2 messages

Susan Lindstrom <susanglindstrom@gmail.com>
To: jtarango@wiltonrancheria-nsn.gov
Cc: Mariah Mayberry <mmayberry@wiltonrancheria-nsn.gov>

Tue, Oct 25, 2022 at 1:21 PM

Chairperson Tarango;
Attached please find information regarding the above project. I welcome your comments and will include them in my upcoming report. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

 **TDPUD Hirschdale NAHC Tarango.docx**
4504K

Susan Lindstrom <susanglindstrom@gmail.com>
To: jtarango@wiltonrancheria-nsn.gov

Tue, Nov 15, 2022 at 10:49 AM

Chairperson Tarango;
I'm following up on my October 25th email and mailed correspondence to confirm you have all the necessary project information should you choose to comment. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

[Quoted text hidden]

<https://mail.google.com/mail/u/0/?ik=8201b3428f&view=pt&search=all&permthid=thread-a%3Ar1251505167628903153&siml=msg-a%3Ar898289613...> 1/1

Susan Lindström, Ph.D.

Consulting Archaeologist

P.O. Box 3324
Truckee CA 96160
530-713-1920 (cell)
susanglindstrom@gmail.com

DATE: October 25, 2022

TO: Gene Whitehouse, Chairperson
United Auburn Indian Community of the Auburn Rancheria
10720 Indian Hill Road
Auburn, CA 95603
530-883-2390
bguth@auburnrancheria.com

RE: Truckee Donner Public Utility District Hirschdale Pipeline Project
Cultural Resource Study

The Truckee Donner Public Utility District intends to connect its main Glenshire waterline with the Hirschdale system. The alignment would extend down a steep slope for approximately 2,400 feet. For half of this distance, the pipeline will be embedded in an existing dirt road. The project area falls within Township 18 North, Range 17 East, Section 34, USGS Martis Peak 7.5 (see attached map).

I wish to bring this project to your attention, and I invite your opinions, knowledge and sentiments regarding any potential concerns for traditional Native American lands within the project vicinity.

Thank you very much.

Susan Lindström, Ph.D.
Consulting Archaeologist



Susan Lindstrom <susanglindstrom@gmail.com>

Truckee Donner PUD Hirschdale Pipeline Project

2 messages

Susan Lindstrom <susanglindstrom@gmail.com>
To: Brian Guth <bguth@auburnrancheria.com>

Tue, Oct 25, 2022 at 1:24 PM

Chairperson Whitehouse;
Attached please find information regarding the above project. I welcome your comments and will include them in my upcoming report. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

 **TDPUD Hirschdale NAHC Whitehouse.docx**
4504K

Susan Lindstrom <susanglindstrom@gmail.com>
To: Brian Guth <bguth@auburnrancheria.com>

Tue, Nov 15, 2022 at 10:49 AM

Chairperson Whitehouse;
I'm following up on my October 25th email and mailed correspondence to confirm you have all the necessary project information should you choose to comment. Thank you.

Susan G. Lindstrom, Ph.D.
Consulting Archaeologist

susanglindstrom@gmail.com
P.O. Box 3324
Truckee, CA 96160
530-713-1920

[Quoted text hidden]

APPENDIX D

**MITIGATION MONITORING AND
REPORTING PROGRAM**

**Hirschdale Pipeline Project
Nevada County, CA**

March 2023

MITIGATION MONITORING AND REPORTING PROGRAM

The California Environmental Quality Act (CEQA) Initial Study/Mitigated Negative Declaration (IS/MND) prepared for this project documents the impacts and mitigation measures that would reduce, avoid, or otherwise minimize these impacts. This Mitigation Monitoring and Reporting Program (MMRP) will ensure that each mitigation measure, adopted as a condition of project approval, is implemented. This MMRP complies with CEQA Guidelines Section 15074(d) that specifies the lead agency shall adopt a program for reporting on the changes that it has either required in the project or made a condition of approval to mitigate or avoid significant environmental effects.

ROLES AND RESPONSIBILITIES

The Truckee Donner Public Utility District will adopt this MMRP in order to mitigate environmental effects and ensure completion of the monitoring program. This MMRP reflects all mitigation measures identified in the Initial Study.

LIST OF MITIGATION MEASURES AND DATE OF COMPLETION

9.3 (a-c): AIR QUALITY - The following mitigation measures shall be incorporated into the Hirschdale pipeline project to reduce impacts to Air Quality during construction activities:

- The construction contractor shall ensure that construction equipment is shut down when not in use for extended periods of time to reduce emissions associated with equipment idling.
- There would be no open burning of vegetative material. All cleared soils would be sidecast and backfilled during construction. All brush and shrubs removed during excavation would be chipped as part of site restoration measures.
- All construction equipment shall be checked by a certified mechanic and determined to be running in proper condition before the start of work.
- All stockpiled material shall be sufficiently covered when not in use to prevent potential air-borne dirt and sand from leaving the project site.
- All trucks hauling construction material such as gravel and sand to the project site shall be securely covered to avoid spilling.
- All trucks hauling construction material shall avoid track-out from the project area.
- Water trucks shall be used as needed to prevent airborne dust from leaving the staging area adjacent to Glenshire Drive and Martis Peak Road.
- The site shall be cleaned at the end of each working day.

Mitigation Monitoring: Truckee Donner Public Utility District

Timing Process: Prior to and during construction

Verification of Compliance (Initials, Date, Remarks):

9.4 (a;d): BIOLOGICAL RESOURCES: The following mitigation measures shall be incorporated into the project to avoid impacts to raptors, migratory birds and other special-status plant and wildlife species.

- A qualified biologist will conduct a thorough field survey of the project area during the avian breeding season (February 1 through August 31) and no more than two weeks prior to construction activities scheduled to begin in mid-summer 2023. The biologist will visually assess the project area for active nests within 500 ft (150 m) of the project area, which is a CDFW recommended boundary. If an active nest is located the survey biologist will consult with the District to avoid and/or minimize potential impact such as establishing buffers. Other special-status wildlife species with a potential to occur in the project area would be considered during a pre-construction survey.
- To mitigate potential impacts to special status plant species a botanical survey shall be conducted to determine the presence or absence of special-status plant species within the project area prior to commencement of construction. The surveys shall be timed to coincide with the blooming period, generally May through August. 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 and avoidance measures implemented.

Mitigation Monitoring: Truckee Donner Public Utility District

Timing Process: Prior to and during construction

Verification of Compliance (Initials, Date, Remarks):

9.5 (a-d): CULTURAL RESOURCES: The following mitigation measures shall be incorporated into the project to avoid impacts to Cultural Resources.

- Should unanticipated cultural resource be encountered during construction activities, work must cease, and a qualified archaeologist (e.g., Dr. Susan Lindström) contacted immediately to determine appropriate measures to mitigate any adverse impacts to the discovered resources. If human remains are discovered during construction-related activities notification of the Nevada County Coroner is required. If the County Coroner determines that the discovered remains are those of Native American ancestry, then the Native American Heritage Commission must be notified by telephone within 24 hours.

Mitigation Monitoring – Truckee Donner Public Utility District

Timing Process: During construction

Verification of Compliance (Initials, Date, Remarks):

9.8. GREENHOUSE GAS EMISSIONS- The following mitigation measures, in addition to measures outlined in section 9.3 Air Quality, shall be incorporated into the project to minimize Greenhouse Gas Emissions during construction activities and include:

(a):

- The construction contractor shall ensure that construction equipment is shut down when not in use for extended periods of time to reduce emissions associated with equipment idling.
- There would be no open burning of vegetative material. All cleared soils would be sidecast and backfilled during construction. All brush and shrubs removed during excavation would be chipped as part of the erosion control program.
- All construction equipment shall be checked by a certified mechanic and determined to be running in proper condition before the start of work to control exhaust emissions.

Mitigation Monitoring – Truckee Donner Public Utility District

Timing Process: During construction

Verification of Compliance (Initials, Date, Remarks):

9.9. HAZARDS AND HAZARDOUS MATERIALS: The following mitigation measures shall be incorporated into the project to avoid impacts from Hazards and Hazardous Materials.

(a-b; h):

- The contractor shall prepare spill and leak prevention procedures prior to the commencement of construction activities. The procedures shall include information on the hazardous materials that shall be used on-site and clean-up procedures in the event of an accidental release.
- Construction vehicles and equipment will be maintained to prevent contamination of soil from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease.
- Equipment shall be re-fueled at the designated construction staging area or off-site. All construction materials will be stored and contained in a designated area and bermed with appropriate containment BMPs to prevent the discharge of pollutants to ground water and runoff water.

Mitigation Monitoring – Truckee Donner Public Utility District

Timing Process: During construction

Verification of Compliance (Initials, Date, Remarks):

9.10. HYDROLOGY AND WATER QUALITY: The mitigation measures outlined below shall be incorporated into the project to minimize impacts to Hydrology and Water Quality.

(a):

- Appropriate sediment control measures such as silt fencing and wattles will be placed to delineate staging area and reduce runoff.
- All soils will be stabilized following construction.
- The contractor will have on-site, at all times, a Spill Containment Kit for immediate deployment in the case of a sudden and unexpected spill of pollutants.
- Contractor shall ensure that all spoil piles are covered with heavy-duty plastic sheeting when not in use or during any precipitation event.
- In order to reduce the potential to release fugitive dust associated with project activities, dust control measures will be carried out as needed including watering at staging areas.
- No water will be discharged to any perennial or ephemeral surface waters. Water that may be needed to flush and pressure test the pipeline will be properly discharged according to applicable waste discharge requirements.
- All equipment will be inspected for leaks prior to and during construction operations.

9.18. TRIBAL CULTURAL RESOURCES: The following mitigation measure, in addition to the mitigation measures outlined in section 9.5 Cultural Resources shall be incorporated into the project to avoid impacts to Tribal Cultural Resources during construction activities:

- In the event that Tribal Cultural Resources (TCRs) are inadvertently discovered during the course of constructing this project, work shall be halted in that area. The District shall immediately contact a qualified archaeologist and the Washoe Tribe of Nevada and California to assess the significance of the discovery. Should it be determined that the Native American cultural resource is an eligible TCRs, the District shall determine appropriate mitigation in consultation with the Washoe Tribe of Nevada and California. Construction activities shall not resume until mitigation measures have been completed.