



Northern California Power Agency  
651 Commerce Drive  
Roseville, California 95678-6420

## **Initial Study and Mitigated Negative Declaration NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site**



Photo Courtesy of SunPower Corporation

*Prepared by:*

**K.S. Dunbar & Associates, Inc.**  
Environmental Engineering  
45375 Vista Del Mar  
Temecula, California 92590-4314  
951-699-2082  
Email: [ksdpe67@gmail.com](mailto:ksdpe67@gmail.com)

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# Table of Contents

	Page
Executive Summary .....	ES-1
Overview of the Proposed Project .....	ES-1
Impacts and Mitigation Measures .....	ES-2
Areas of Controversy .....	ES-5
Issues to be Resolved .....	ES-5
Document Availability and Contact Personnel .....	ES-5
1 Introduction .....	1-1
1.1 Introduction .....	1-1
1.2 Project Summary .....	1-1
1.3 California Environmental Quality Act Compliance .....	1-2
1.3.1 Purposes of an Initial Study .....	1-2
1.3.2 Contents of an Initial Study .....	1-2
1.3.3 Intended Uses of the Initial Study.....	1-3
1.3.4 Lead Agency Decision-Making Process .....	1-4
1.3.5 Approvals for which this Initial Study will be Used .....	1-4
2 Project Background and Description .....	2-1
2.1 Introduction .....	2-1
2.2 Project Background .....	2-1
2.3 Project Description .....	2-2
2.3.1 Project Development .....	2-2
3 Environmental Checklist, Analysis and Mitigation Measures .....	3-1
3.1 Introduction .....	3-1
3.2 Environmental Factors Potentially Affected .....	3-2
3.3 Determination .....	3-2
3.4 Chapter Organization .....	3-3
3.4.1 Environmental Setting .....	3-3
3.4.2 Discussion and Mitigation Measures .....	3-3
3.5 Aesthetics .....	3-5
3.5.1 Environmental Setting .....	3-5
3.5.2 Discussion and Mitigation Measures .....	3-5
3.5.3 Conclusion .....	3-6
3.6 Agriculture and Forestry Resources .....	3-7
3.6.1 Environmental Setting .....	3-7
3.6.2 Discussion and Mitigation Measures .....	3-7
3.6.3 Conclusion .....	3-8
3.7 Air Quality .....	3-9
3.7.1 Environmental Setting .....	3-9
3.7.2 Discussion and Mitigation Measures .....	3-12
3.7.3 Conclusion .....	3-17
3.8 Biological Resources .....	3-18
3.8.1 Environmental Setting .....	3-18
3.8.2 Discussion and Mitigation Measures .....	3-22
3.8.3 Conclusion .....	3-24

3.9 Cultural Resources .....	3-25
3.9.1 Environmental Setting .....	3-25
3.9.2 Discussion and Mitigation Measures .....	3-25
3.9.3 Conclusion .....	3-27
3.10 Energy .....	3-28
3.10.1 Environmental Setting .....	3-28
3.10.2 Discussion and Mitigation Measures .....	3-28
3.10.3 Conclusion .....	3-28
3.11 Geology and Soils .....	3-29
3.11.1 Environmental Setting .....	3-29
3.11.2 Discussion and Mitigation Measures .....	3-30
3.11.3 Conclusion .....	3-32
3.12 Greenhouse Gas Emissions .....	3-33
3.12.1 Environmental Setting .....	3-33
3.12.2 Discussion and Mitigation Measures .....	3-34
3.12.3 Conclusion .....	3-34
3.13 Hazards and Hazardous Materials .....	3-35
3.13.1 Environmental Setting .....	3-35
3.13.2 Discussion and Mitigation Measures .....	3-37
3.13.3 Conclusion .....	3-38
3.14 Hydrology and Water Quality .....	3-39
3.14.1 Environmental Setting .....	3-39
3.14.2 Discussion and Mitigation Measures .....	3-39
3.14.3 Conclusion .....	3-42
3.15 Land Use and Planning .....	3-43
3.15.1 Environmental Setting .....	3-43
3.15.2 Discussion and Mitigation Measures .....	3-43
3.15.3 Conclusion .....	3-43
3.16 Mineral Resources .....	3-44
3.16.1 Environmental Setting .....	3-44
3.16.2 Discussion and Mitigation Measures .....	3-44
3.16.3 Conclusion .....	3-44
3.17 Noise .....	3-45
3.17.1 Environmental Setting .....	3-45
3.17.2 Discussion and Mitigation Measures .....	3-45
3.17.3 Conclusion .....	3-46
3.18 Population and Housing .....	3-47
3.18.1 Environmental Setting .....	3-47
3.18.2 Discussion and Mitigation Measures .....	3-47
3.18.3 Conclusion .....	3-47
3.19 Public Services .....	3-48
3.19.1 Environmental Setting .....	3-48
3.19.2 Discussion and Mitigation Measures .....	3-48
3.19.3 Conclusion .....	3-49
3.20 Recreation .....	3-50
3.20.1 Environmental Setting .....	3-50
3.20.2 Discussion and Mitigation Measures .....	3-50

3.20.3 Conclusion .....	3-50
3.21 Transportation .....	3-51
3.21.1 Environmental Setting .....	3-51
3.21.2 Discussion and Mitigation Measures .....	3-51
3.21.3 Conclusion .....	3-52
3.22 Tribal Cultural Resources .....	3-53
3.22.1 Environmental Setting .....	3-53
3.22.2 Discussion and Mitigation Measures .....	3-54
3.22.3 Conclusion .....	3-54
3.23 Utilities and Service Systems .....	3-55
3.23.1 Environmental Setting .....	3-55
3.23.2 Discussion and Mitigation Measures .....	3-56
3.23.3 Conclusion .....	3-56
3.24 Wildfire .....	3-57
3.24.1 Environmental Setting .....	3-57
3.24.2 Discussion and Mitigation Measures .....	3-58
3.24.3 Conclusion .....	3-58
3.25 Mandatory Findings of Significance .....	3-59
3.25.2 Discussion and Mitigation Measures .....	3-59
3.25.3 Conclusion .....	3-60
4 Persons and Organizations Consulted .....	4-1
4.1 Federal Agencies .....	4-1
4.2 State Agencies .....	4-1
4.3 County Agencies .....	4-2
4.4 City Agencies .....	4-2
4.5 Interested Entities .....	4-2
5 Report Authors/Contributors .....	5-1
5.1 Report Authors .....	5-1
5.2 Report Contributors .....	5-1
6 References .....	6-1
Appendix A, Mitigated Negative Declaration	
Appendix B, Air Quality Modeling Results	
Appendix C, Biological Resources Technical Report	
Appendix D, Cultural Resources Technical Report	
Appendix E, AB 52 Consultation	
Appendix F, Mitigation Monitoring and Reporting Program	

## List of Tables

	Page
ES-1 Impacts and Mitigation Measures .....	ES-2
2.3-1 Conceptual Design Parameters .....	2-5
3.7-1 Ozone Trends Summary: Grass Valley – Lytton Building, National Standards .....	3-9
3.7-2 Ozone Trends Summary: Grass Valley – Lytton Building, State Standards .....	3-9
3.7-3 PM <sub>2.5</sub> Trends Summary: Grass Valley – Lytton Building .....	3-11
3.7-4 Ambient Air Quality Designations for Plumas County .....	3-11

3.7-5 Threshold Concentrations Utilized to Determine Significance .....	3-13
3.7-6 Estimated Emissions from Off-Road Heavy Construction Equipment .....	3-14
3.7-7 Estimated Emissions from On-Road Vehicles .....	3-14
3.7-8 Construction Worker Commute Vehicle Emissions .....	3-14
3.7-9 Total Estimated Construction Emissions, Solar Equipment Installation .....	3-15
3.12-1 Global Warming Potential of Kyoto GHGs .....	3-33
3.17-1 Vibration Damage Potential Threshold Criteria .....	3-46
3.17-2 Vibration Annoyance Potential Threshold Criteria .....	3-46
3.17-3 Construction Vibration Impacts .....	3-46
3.21-1 Selected Traffic Counts by Caltrans (2017) .....	3-51

## List of Figures

	Page
ES-1 Proposed Project Site .....	ES-1
1.1-1 NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site .....	1-1
1.2-2 Proposed Project Location .....	1-2
2.3-1 Proposed Photovoltaic Site near Chilcoot .....	2-2
2.3-2 Plumas-Sierra Project Site .....	2-3
2.3-3 Conceptual Layout of Solar Arrays .....	2-4
2.3-4 Typical HSAT PV Array with Bifacial Modules .....	2-4
2.3-5 Point of Interconnection .....	2-5

## Acronyms and Abbreviations

AADT	annual average daily traffic
AAM	annual arithmetic mean
ADOE	Archaeological Determinations of Eligibility
AFY	acre-feet per annum
AGM	annual geometric mean
AQMP	Air Quality Management Plan
ARB	Air Resources Board
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDFW	California Department of Fish and Wildlife
CARB	California Air Resources Board
Caltrans	California Department of Transportation
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH <sub>4</sub>	methane
CMP	congestion management program
CNDDDB	California Natural Diversity Data Base
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CRWQCB, CVR	California Regional Water Quality Control Board, Central Valley Region
dB(A)	decibels on the A-scale

DEIR	Draft Environmental Impact Report
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EA	Environmental Assessment
EIR	Environmental Impact Report
EMP	Energy Management Plan
EPA	U.S. Environmental Protection Agency
EPDC	expected peak day concentration
ESA	Endangered Species Act
g	acceleration due to gravity
GHG	greenhouse gases
GIS	Geographic Information System
gpm	gallons per minute
ISA	Integrated Science Assessment
GWP	global warming potential
HPD	Historic Property Directory
kV	kilovolts
kW	kilowatts
KSD&A	K.S. Dunbar & Associates, Inc.
Ldn	day-night average sound level
Leq	noise equivalent
LUSTIS	Leaking Underground Storage Tank Information System
MBTA	Migratory Bird Treaty Act
MDB&M	Mount Diablo Base and Meridian
MMRP	Mitigation Monitoring and Reporting Program
MT	metric tons
MW	megawatts
MW <sub>dc</sub>	megawatts measured as direct current
MWh	megawatt hours
NAAQS	National Ambient Air Quality Standards

NAHC	Native American Heritage Commission
NDDB	Natural Diversity Data Base
NO	nitrogen oxide
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	oxides of nitrogen
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
NSAPCD	Northern Sierra Air Pollution Control District
O <sub>3</sub>	ozone
OES	Office of Emergency Services
OHP	Office of Historic Preservation
Pb	lead
Pga	peak ground acceleration
PM	particulate matter
PM <sub>10</sub>	particulate matter (less than 10 microns in diameter)
PM <sub>2.5</sub>	particulate matter (less than 2.5 microns in diameter)
ppb	parts per billion
ppm	parts per million
PRC	Public Resources Code
PSREC	Plumas-Sierra Rural Electric Cooperative
PV	photovoltaic
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases also called VOC (volatile organic compounds)
Sa	spectral acceleration
SAAQS	State Ambient Air Quality Standards
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	oxides of sulfur

State Water Board	State Water Resources Control Board
SCAQMD	South Coast Air Quality Management District
SWIS	Solid Waste Information System
SWPPP	Storm Water Pollution Prevention Plan
TOG	total organic gases
USDA	U.S. Department of Agriculture
USF&WS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Service
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter



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## **Executive Summary**

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**K.S. Dunbar & Associates, Inc.**  
Environmental Engineering  
45375 Vista Del Mar  
Temecula, California 92590-4314  
951-699-2082  
Email: [ksdpe67@gmail.com](mailto:ksdpe67@gmail.com)

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# Executive Summary

## Overview of the Proposed Project

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- ❖ Phase 1 – Determine member interest and requirements and identify potential sites.
- ❖ Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- ❖ Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Plumas-Sierra Rural Electric Cooperative (PSREC) selected a site near Chilcoot for further analysis as shown below:

Site	Location		Developable Area (acres)	Estimated Capacity (MW <sub>dc</sub> )
	Latitude, Longitude	Section, Township, Range		
Plumas-Sierra Chilcoot	39° 47' 56.66" N, -120° 09' 49.99" W	Sec 35, T 23 N, R 16 E, MDB&M	28.2	5.64

The Project site is located within a 36-acre vacant parcel that is located just south of Highway 70 east of its intersection with Highway 49. The site is bordered by Highway 70 to the north, an industrial facility to the east, Union Pacific Railroad to the south, and scattered residences to the east (Figure ES-1). This site would accommodate a 5.64 MW<sub>dc</sub> facility with a one-year output of 9,720 megawatt-hours.



Figure ES-1 Proposed Project Site

## Impacts and Mitigation Measures

Table ES-1 identifies each potential significant effect, Standard Construction Practices/Design Features, and proposed mitigation measures that would reduce or avoid that effect. Proposed mitigation measures are NCPA Staff's and its consultant's recommendations to reduce potential impacts associated with implementation of the proposed Project. Should NCPA's Commission adopt the Mitigation Monitoring and Reporting Program (Appendix F in the IS&MND) these mitigation measures would become mandatory and part of the Project.

**Table ES-1**  
**Impacts and Mitigation Measures**

Environmental Factor:	Air Quality
Impact:	The total estimated emissions from installation of the solar equipment at the Plumas-Sierra Chilcoot site would not exceed the construction-related threshold limits for significance established by NCPA to evaluate this Project. However, the ARB has designated Plumas County as non-attainment for the State PM <sub>2.5</sub> standards. In addition, the U.S. Environmental Protection Agency has designated Plumas County as moderate non-attainment for the federal PM <sub>2.5</sub> standards. Therefore, every effort should be made to minimize emissions within the Plumas County. Consequently, to reduce the emissions as much as possible,
Standard Construction Practices/Design Features	NCPA will add the following best management practices in its contract documents for this project:
Mitigation Measures	<p>The contractor shall:</p> <ul style="list-style-type: none"> <li>❖ Utilize electricity from power poles instead of from temporary diesel or gasoline power generators, when feasible.</li> <li>❖ Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the contractor shall use trucks that meet EPA 2007 model year NO<sub>x</sub> emissions requirements.</li> <li>❖ Require that all on-site construction equipment meet EPA Tier 3 or higher emissions standards according to the following: <ul style="list-style-type: none"> <li>➤ All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with *BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.</li> <li>➤ A copy of each unit's certified tier specification, BACT documentation, and CARB or Northern Sierra AQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.</li> </ul> </li> <li>❖ Maintain construction equipment engines by keeping them properly tuned and maintained according to manufacturer's specifications.</li> <li>❖ Use alternative fuels or clean and low-sulfur fuel for equipment.</li> <li>❖ Idle trucks in accordance with the Airborne Toxic Control Measure (ACTM) to Limit Diesel Fueled Commercial Motor Vehicle Idling and other applicable laws.</li> <li>❖ Spread soil binders on site, where appropriate.</li> <li>❖ Water active construction sites at least twice daily.</li> <li>❖ Sweep all streets at the end of the day if visible soil materials are carried onto adjacent public paved roads (recommend water sweeper with reclaimed water).</li> <li>❖ All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour as directed by the Northern Sierra AQMD.</li> <li>❖ If necessary, wash off trucks leaving the site.</li> <li>❖ Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114.</li> </ul>

Impact After Mitigation:	Less than significant impact.
Mitigation Measures:	NCPA shall appoint a construction relations officer to act as a community liaison concerning on-site construction activities including resolution of issues related to PM <sub>2.5</sub> generation. Additionally, best management practices shall be included in contract documents for this project.
Impact After Mitigation:	Less than significant impact.
<b>Environmental Factor:</b>	<b>Biological Resources</b>
Impact:	Potential impacts to nesting birds.
Standard Construction Practices/Design Features	NCPA will include the following mitigation measures in its contract documents for this project.
Mitigation Measures:	If construction occurs between February 1 <sup>st</sup> and August 31 <sup>st</sup> , a pre-construction clearance survey for nesting birds shall be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. The size of the no-disturbance buffer (generally 300 feet for migratory and non-migratory song birds and 500 feet for raptors and special-status species) will be determined by the wildlife biologist, in coordination with the CDFW, and will depend on the level of noise and/or surrounding disturbances, line of sight between the nest and the construction activity, ambient noise, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.
Impact After Mitigation:	Less than significant impact
<b>Environmental Factor:</b>	<b>Cultural Resources</b>
Potential Impact:	Possible inadvertent discoveries of cultural resources or human remains during excavation activities.
Standard Construction Practices/Design Features	Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.  In addition, NCPA will include the following mitigation measures in its contract documents for this project.
Mitigation Measures:	<ul style="list-style-type: none"> <li>❖ In the unlikely event that potentially significant archaeological materials are encountered during construction activities, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery, assess the significance of the archaeological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of cultural material that might be discovered during excavation shall be in accordance with applicable laws and regulations.</li> <li>❖ All sacred items, should they be encountered within the Project sites, shall be avoided and preserved as the preferred mitigation, if feasible. All cultural materials that are collected during excavation and other earth disturbing activities on the Project sites, with the exception of sacred items, burial goods and human remains which will be addressed in any required Treatment Agreement, shall be tribally curated according to the current repository standards. The collections and associated records shall be transferred, including title, to the closest tribe to the Project site.</li> <li>❖ In the event of an accidental discovery or recognition of any human remains, the County Coroner shall be notified and construction activities at the affected work site shall be halted. If the coroner determines the remains to be Native American: (1) the coroner shall contact the Native American Heritage Commission (NAHC) within 24-hours, and (2) the NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American. The treatment and disposition of human remains that might be discovered during excavation shall be in accordance with applicable laws and regulations.</li> </ul>
Impact After Mitigation:	Less than significant impact

Environmental Factor	Geology and Soils
Potential Impact	Possible inadvertent discoveries of paleontological resources during excavation activities.
Standard Construction Practices/Design Features	NCPA will include the following mitigation measures in its contract documents for this project.
Mitigation Measures	<ul style="list-style-type: none"> <li>❖ In the unlikely event that potentially significant paleontological materials (e.g., fossils) are encountered during construction of the project, all work shall be halted in the vicinity of the paleontological discovery until a qualified paleontologist can visit the site of discovery, assess the significance of the paleontological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of paleontological material that might be discovered during excavation shall be in accordance with applicable laws and regulations.</li> </ul>
Environmental Factor	Hazards and Hazardous Materials
Potential Impact	During construction, the contractor would utilize equipment that uses petroleum-based fuels and lubricants, which are subject to both leakage from engine blocks and containers, or spillage during refueling and lubrication operations
Standard Construction Practices/Design Features	<p>NCPA's contract documents for this project will include the following:</p> <p>During project construction, the construction contractor shall implement the following measures to address the potential environmental constraints associated with the presence of hazardous materials at the project sites to the satisfaction of NCPA:</p> <ul style="list-style-type: none"> <li>❖ The contractor shall prepare a Health and Safety Plan in compliance with the requirements of Chapter 6.95, Division 20 of the Health and Safety Code (§25500 – 25532). The plan shall include measures to be taken in the event of an accidental spill.</li> <li>❖ The contractor shall enforce strict on-site handling rules to keep construction and maintenance materials out of receiving waters and storm drains. In addition, the contractor shall store all reserve fuel supplies only within the confines of designated construction staging areas; refuel equipment only with the designated construction staging areas; and regularly inspect all construction equipment for leaks.</li> <li>❖ The construction staging area shall be designed to contain contaminants such as oil, grease, and fuel products to ensure that they do not drain towards receiving waters or storm drain inlets.</li> </ul>
Mitigation Measures	No additional mitigation is required.
Impact After Mitigation	Less than significant impact.
Environmental Factor	Hydrology and Water Quality
Potential Impact	During project construction, there is the potential for sediment-laden runoff to enter downstream drainages.
Standard Construction Practices/Design Features	<p>All site grading and excavation activities associated with the construction of the Project facilities would be subject to the provisions of the National Pollutant Discharge Elimination System (NPDES) Construction Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities [NPDES No. CAS000002 (State Water Resources Control Board Order No. 2009-0009-DWQ)]. Compliance with the provisions of that Order would require NCPA to obtain coverage before the onset of construction activities. Construction activities would comply with the conditions of these permits that include preparation of storm water pollution prevention plans (SWPPP), implementation of BMP's, and monitoring to insure impacts to water quality are minimized. As part of this process, multiple BMP's should be implemented to provide effective erosion and sediment control. These BMP's should be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMP's to be implemented may include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>✓ Temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other groundcover shall be employed for disturbed areas.</li> <li>✓ Storm drain inlets on the site and in downstream offsite areas shall be protected from sediment with the use of BMP's acceptable to NCPA, local jurisdictions and the California Regional Water Quality Control Board, Central Valley Region.</li> <li>✓ Dirt and debris shall be swept from paved streets in the construction zone on a regular basis, particularly before predicted rainfall events.</li> <li>✓ No disturbed surfaces shall be left without erosion control measures in place. NCPA, or its Construction Contractor, shall file a Notice of Intent with the Regional Board and require the preparation of a pollution</li> </ul>

	<p>prevention plan prior to commencement of construction. NCPA shall routinely inspect the construction site to verify that the BMP's specified in the pollution prevention plan are properly installed and maintained. NCPA shall immediately notify the contractor if there were a noncompliance issue and require immediate compliance.</p> <p>The SWPPP will also identify the method of final stabilization of the site to ensure no post-construction erosion and impacts to water quality will occur. The Notice of Termination (NOT) and release of the Project from the provisions of the Construction General Permit coverage will be granted by the California Regional Water Quality Control Board, Central Valley Region once it is satisfied that no impacts to water quality will occur.</p>
Mitigation Measures	No additional mitigation is required.
Impact After Mitigation	Less than significant impact.

## Areas of Controversy

There are no areas of controversy associated with the NCPA Solar Project 1 – Plumas-Sierra Chilcoot site.

## Issues to be Resolved

There are no issues to be resolved associated with the NCPA Solar Project 1 – Plumas-Sierra Chilcoot site.

## Document Availability and Contact Personnel

The Initial Study and Mitigated Negative Declaration is available for review at the following locations:

Northern California Power Agency  
 651 Commerce Drive  
 Roseville, California 95678

Plumas-Sierra Rural Electric Cooperative  
 73233 State Route 70  
 Portola, California 96122-7069

and can be downloaded at:

<https://www.ncpa.com>

All comments regarding the Project or environmental documents should be mailed or emailed to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE  
 K.S. Dunbar & Associates, Inc.  
 Environmental Engineering  
 45375 Vista Del Mar  
 Temecula, California 92590-4314  
 (951) 699-2082  
 Email: [ksdpe67@gmail.com](mailto:ksdpe67@gmail.com)



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Email: [ksdpe67@gmail.com](mailto:ksdpe67@gmail.com)

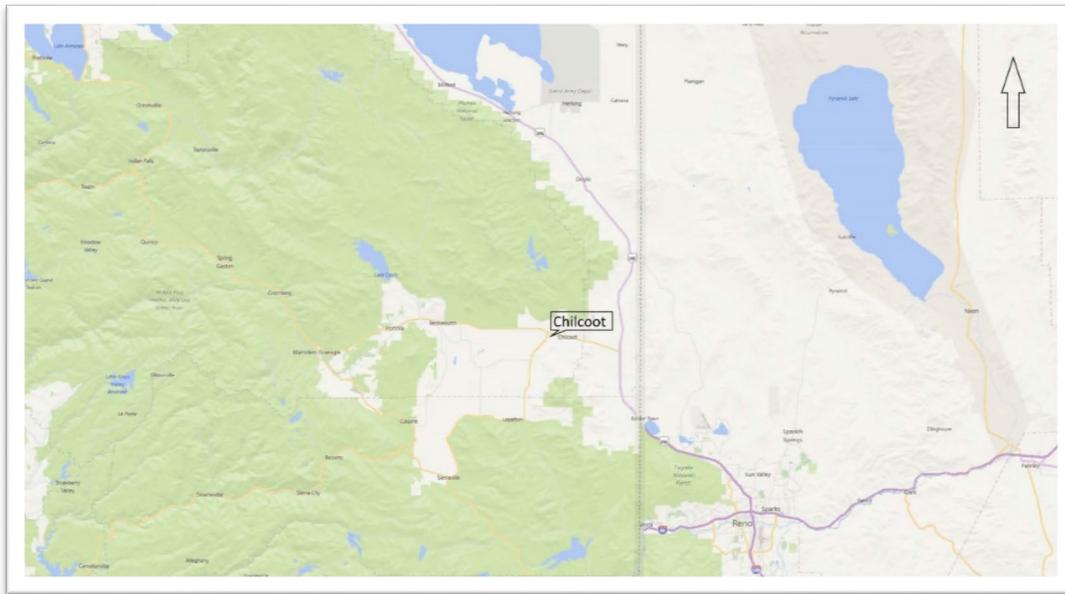
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# 1 Introduction

## 1.1 Introduction

The following Initial Study addresses the environmental impacts associated with the NCPA Solar 1 Project – Plumas-Sierra Chilcoot site (Project) being implemented by the Northern California Power Agency (NCPA) (Figure 1.1-1). This Initial Study has been prepared in accordance with the *California Environmental Quality Act of 1970*, as amended, (CEQA), the *State CEQA Guidelines*, and NCPA's *Local Guidelines for Implementing the California Environmental Quality Act*, as amended. NCPA is the Lead Agency and the Plumas-Sierra Rural Electric Cooperative is a Responsible Agency for the purposes of CEQA for this project.



**Figure 1.1-1 NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site**

## 1.2 Project Summary

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by NCPA as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- ❖ Phase 1 – Determine member interest and requirements and identify potential sites.
- ❖ Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- ❖ Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Plumas-Sierra Rural Electric Cooperative (PSREC) selected a site near Chilcoot for further analysis as shown below:

Site	Location		Developable Area (acres)	Estimated Capacity (MW <sub>dc</sub> )
	Latitude, Longitude	Section, Township, Range		
Plumas-Sierra Chilcoot	39° 47' 56.66" N, -120° 09' 49.99" W	Sec 35, T 23 N, R 16 E, MDB&M	10.3	4.9

The Project site is located within a 36-acre vacant parcel that is located just south of Highway 70 east of its intersection with Highway 49. The site is bordered by Highway 70 to the north, an industrial facility to the east, Union Pacific Railroad to the south, and scattered residences to the east (Figure 1.1-2). This site would accommodate a 4.9 MW<sub>dc</sub> facility with a one-year output of 9,720 megawatt-hours.



Figure 1.2-2 Proposed Project Location

## 1.3 California Environmental Quality Act Compliance

The California Environmental Quality Act (California Public Resources Code §21000 et seq.: “CEQA”), requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and eliminated. Therefore, to fulfill the purpose and intent of CEQA, NCPA, as the lead agency, has caused this Initial Study/Mitigated Negative Declaration (IS/MND) to be prepared to address the potentially significant adverse environmental impacts associated with implementation of the Project.

### 1.3.1 Purposes of an Initial Study

The purposes of an Initial Study, as outlined in §15063(c) of the State CEQA Guidelines, are:

- 1) Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration;

- 2) *Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration;*
- 3) *Assist the preparation of an EIR, if one is required, by:*
  - a. *Focusing the EIR on the effects determined to be significant,*
  - b. *Identifying the effects determined not to be significant,*
  - c. *Explaining the reasons for determining that potentially significant effects would not be significant, and*
  - d. *Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.*
- 4) *Facilitate environmental assessment early in the design of a project;*
- 5) *Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment;*
- 6) *Eliminate unnecessary EIR's; and*
- 7) *Determine whether a previously prepared EIR could be used with the project.*

### **1.3.2 Contents of an Initial Study**

The contents of an Initial Study are defined in §15063(d) of the CEQA Guidelines as follows:

- 1) *A description of the project including the location of the project;*
- 2) *An identification of the environmental setting;*
- 3) *An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries. The brief explanation may be either through a narrative or a reference to another information source such as an attached map, photographs, or an earlier EIR or negative declaration. A reference to another document should include, where appropriate, a citation to the page or pages where the information is found;*
- 4) *A discussion of ways to mitigate the significant effects identified, if any;*
- 5) *An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls;*
- 6) *The name of the person or persons who prepared or participated in the Initial Study.*

### **1.3.3 Intended Uses of the Initial Study**

The Initial Study will be presented to NCPA's Commission for its use in implementing the California Environmental Quality Act (CEQA). The basic purposes of CEQA as outlined in §15002(a) of the CEQA Guidelines are to:

- 1) *Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.*
- 2) *Identify the ways that environmental damage can be avoided or significantly reduced.*

- 3) *Prevent significant avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.*
- 4) *Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.*

As pointed out above, one purpose of an Initial Study is:

Provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration.

### **1.3.4 Lead Agency Decision-Making Process**

The Lead Agency (i.e., NCPA) would base its decision on the Project on the findings contained within this Initial Study plus the professional knowledge and judgment of its staff and consultants. During the review process, mitigation measures contained in this document should be evaluated with respect to their effectiveness in reducing impacts to a level of insignificance. Public input, including responsible and trustee agencies, should also be requested and evaluated during the review process.

The approval process for the proposed Project will begin with NCPA's Commission making a decision to prepare a Negative Declaration or an Environmental Impact Report for the Project. Should NCPA decide to prepare a Negative Declaration, based on this Initial Study, it would also determine whether or not it would approve of the Project in accordance with §15074 of the State CEQA Guidelines. Should NCPA decide to prepare an Environmental Impact Report for the Project, it would also have to make findings in accordance with §15091 of the State CEQA Guidelines and to certify the Final Environmental Impact Report in accordance with §15090 of the CEQA Guidelines.

### **1.3.5 Approvals for which this Initial Study will be Used**

The following agencies would also utilize this document in their decision-making process regarding the Proposed Project:

California Regional Water Quality Control Board, Central Valley Region

General Permit for Storm Water Discharges Associated with Construction Activity

Plumas-Sierra Rural Electric Cooperative

Project Approval

## 2 Project Background and Description

### 2.1 Introduction

The Northern California Power Agency (NCPA), a California Joint Action Agency, was established in 1968 by a consortium of locally owned electric utilities to make joint investments in energy resources that would ensure an affordable, reliable and clean supply of electricity for customers in its member communities. Today those members include the Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, Shasta Lake, and Ukiah as well as the Bay Area Rapid Transit District, Port of Oakland, Plumas-Sierra Rural Electric Cooperative, and Tahoe Donner Public Utility District.

Over the past four decades, NCPA has constructed and today operates and maintains a fleet of power plants that is among the cleanest in the nation and that provides reliable and affordable electricity to more than 600,000 Californians. NCPA made major investments in renewable energy in the early 1980s when it developed two geothermal power plants and financed and built a 259 MW hydroelectric facility. Thirty years later those resources continue to generate reliable, emission-free electricity for its member communities.

NCPA's 775-megawatt portfolio of power plants is approximately 50% greenhouse gas emission free. Its mix of geothermal, hydroelectric and natural gas resources is well positioned to help its members achieve California's goal of a 50% Renewable Portfolio Standard (RPS) by 2030. NCPA member utilities also have invested heavily in the most environmentally friendly form of electricity – the megawatts that are not used. The Agency members have collectively spent more than \$100 million on energy efficiency since 2006 reducing demand for electricity by more than 350 gigawatt hours during that time.

NCPA's commitment to the environment reflects its status as a not-for-profit public entity whose policies and values are set not by investors but by locally elected or appointed officials who serve as the energy regulators in the cities, towns and districts that are members of the Agency.

### 2.2 Project Background

Now NCPA intends to implement the NCPA Solar Project 1. The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- ❖ Phase 1 – Determine member interest and requirements and identify potential sites.
- ❖ Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- ❖ Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Four of the member agencies have decided to participate in this project. They are the Cities of Healdsburg, Lodi and Redding as well as the Plumas-Sierra Rural Electric Cooperative. Six potential sites have been selected for further analysis as shown below:

Site	Location	Developable Area (acres)	Estimated Capacity (MW <sub>dc</sub> )
Healdsburg – Wastewater Plant	38°35'00.03"N, 122°51'45.37"W	8.13	3.62
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	15.0	3.51
Lodi – Century East/West	38°06'26.66"N, 121°16'21.63"W	2.5	0.63
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	0.9	0.18
Plumas Sierra – Chilcoat	39°47'56.66"N, 120°09'49.99"W	10.3	4.90
Redding – Airport	40°29'41.73"N, 122°16'46.41"W	23.5	13.50

Due to the timing of implementation and the great distance between the member agencies, it was determined that the most logical approach to satisfying the requirements of CEQA for this project was to issue separate CEQA documents for each member agency's projects. Therefore, this document focuses on the project proposed by the Plumas-Sierra Rural Electric Cooperative (PSREC).

### 2.3 Project Description

As shown above, PSREC selected a potential site near the intersection of State Highways 49 and 70 at Chilcoat for further analysis. The location of this site is shown on Figure 2.3-1.

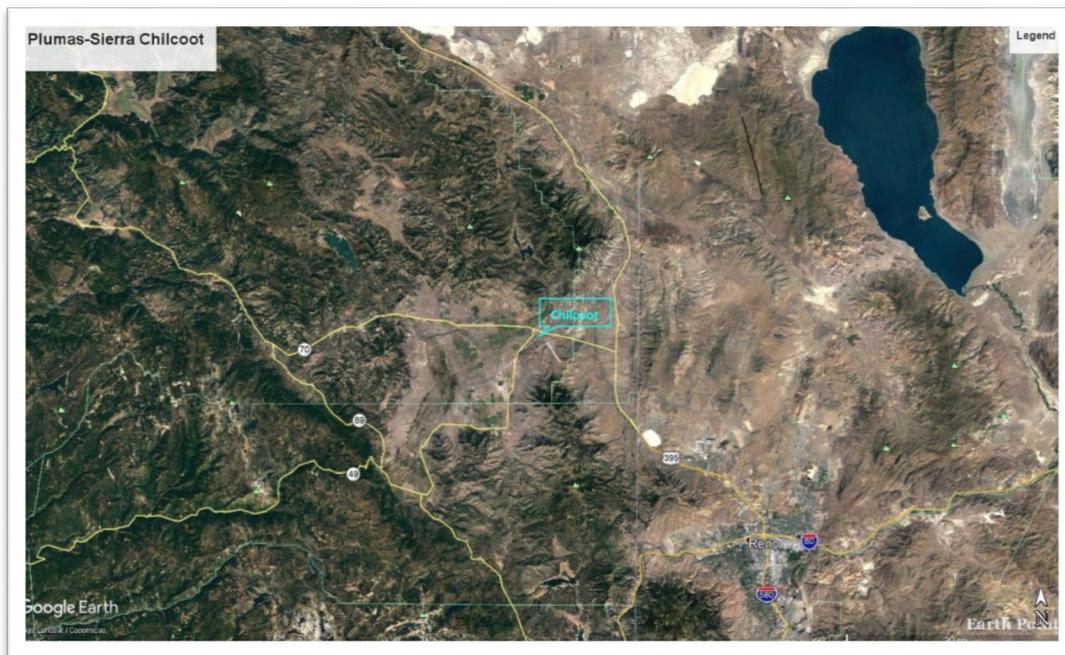


Figure 2.3-1 Proposed Photovoltaic Site near Chilcoat Location

#### 2.3.1 Project Description

According to Burns & McDonnell's May 2, 2019 *Plumas-Sierra Chilcoat Site Plan Development* report, the Plumas-Sierra Chilcoat Project site consists of a vacant privately-owned parcel containing approximately 33.2 acres. The Project site is bordered by an easement that borders State Highway 70 to the north, an industrial facility to the east, the Union Pacific Railroad to the south, and private residences to the west. A site layout is shown on Figure 2.3-2. The conceptual design shown on Figure 2.3-2 includes a Project size of 4.9 MW<sub>dc</sub>.



**Figure 2.3-2 Plumas-Sierra Chilcoat Project Site**

Evaluation categories for the project development criteria included analysis of solar resource potential, panel performance, technology suitability and electrical interconnection. The project team did not discover any fatal flaws during the desktop analyses or site visits with respect to these evaluation criteria. Based on historical Direct Normal Irradiance/Global Horizontal Irradiance (DNI/GHI) data from 1998 to 2014, the site appears to have sufficient solar insolation for photovoltaic generation. The Project site has a low potential for dust and dirt accumulation.

Burns and McDonnell's May 2019 report included a conceptual layout of the proposed solar panel installation (Figure 2.3-3). The conceptual layout was based on the use of horizontal single axis tracking (HSAT) as the Project will be at ground level, only minimum grading will be required, and a penetrating mounting system can be used. A typical HSAT PV array with bifacial modules is shown of Figure 2.3-4.



Figure 2.3-3 Conceptual Layout of Solar Arrays



Figure 2.3-4 Typical HSAT PV Array with Bifacial Modules

Burns and McDonnell received data identifying the point of interconnection (POI). As shown on Figure 2.3-5, the POI is located at the Chilcoot 69 kV substation located adjacent to the eastern Project boundary.



Figure 2.3-5 Point of Interconnection

A summary of Burns & McDonnell’s conceptual design parameters is provided in Table 2.3-1.

Table 2.3-1  
Conceptual Design Parameters

Parameter	Content
Project Buildable Area	33.2 acres
Approximate PV Area	10.3 acres
Estimated Project Size (dc)	4.9 MW <sub>dc</sub>
Estimated Project Size (ac)	3.9 MW <sub>ac</sub>
Target dc/ac Ratio	1.2 – 1.3
Point of Interconnection Voltage	69 kV
Project Boundary to Fence Buffer	3 feet
Parcel Boundary to Array Buffer	50 feet
Security and Fencing	Existing fence upgrade to 6-foot with barbed wire
Module Size	Minimum 350 watt
Racking System	HSAT
Invertors	String (preferred) or Central

# 3 Environmental Checklist, Analysis and Mitigation Measures

## 3.1 Introduction

1. Project Title: **NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site**
2. Lead Agency Name and Address: Northern California Power Agency  
651 Commerce Drive  
Roseville, California 95678-6420
3. Contact Person, Phone Number and Email: Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE  
K.S. Dunbar & Associates, Inc.  
Environmental Engineering  
45375 Vista Del Mar  
Temecula, California 92590-4314  
(951) 699-2082  
[ksdpe67@gmail.com](mailto:ksdpe67@gmail.com)
4. Project Location: Within an unincorporated area of Plumas County  
Section 35, Township 23 North, Range 16 East, Mount Diablo B&M  
39° 47' 56.66" N, -120° 09' 49.99" W
5. Project Sponsor's Name and Address: Northern California Power Agency  
651 Commerce Drive  
Roseville, California 95678  
  
Plumas-Sierra Rural Electric Cooperative  
73233 State Route 70  
Portola, California 96122-7069
6. General Plan Designations: Suburban Residential
7. Zoning: Suburban (S-1)
8. Project Description (Describe the whole action involved, including, but not limited to, later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets, if necessary): NCPA intends to install a solar photovoltaic generation system at the Plumas-Sierra Chilcoot property. The installed capacity would be 4.90 MW<sub>dc</sub>.
9. Surrounding Land Uses and Setting: Mixture of rural residential, industrial, open space and agricultural uses.
10. Other Public Agencies whose Approval is Required (e.g., permits, financing approval, or participation agreement): California Regional Water Quality Control Board,  
Central Valley Region  
  
Plumas Sierra Rural Electric Cooperative

11. Have California Native American Tribes traditionally and culturally affiliated with the project area requested information pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun? Yes.

## 3.2 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by the Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

## 3.3 Determination

On the basis of this initial evaluation:

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

Original signed by K.S. Dunbar for

June 28, 2019

Ron Yuen  
Director of Engineering, Generation Services

Date

## 3.4 Chapter Organization

This section describes how this chapter of the Initial Study and Mitigated Negative Declaration is organized. In this analysis, potential reasonably foreseeable impacts are evaluated with respect to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire. Additionally, mandatory findings of significance regarding short-term, long-term, and cumulative impacts are evaluated. Each topic area begins with a listing of the factors identified by the State CEQA Guidelines for analysis, followed by a discussion of the environmental setting, the analysis for each factor, and an overall conclusion.

### 3.4.1 Environmental Setting

Throughout this document and according to the State CEQA Guidelines, the environmental setting is intended to mean the environmental conditions as they exist at the time the environmental analysis is commenced. The environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to gain an understanding of the significant effects of the proposed Project and its alternatives.

### 3.4.2 Discussion and Mitigation Measures

The Initial Study includes an analysis of direct and reasonably foreseeable physical changes in the environment from the proposed Project and feasible mitigation measures that would reduce such impacts to a less than significant level. Thresholds of significance for each potential impact are provided as appropriate.

A “significant effect on the environment” is defined in the State CEQA Guidelines Section 15382 as a “substantial or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. A social or economic change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.”

“Environment” is defined in the State CEQA Guidelines Section 15360 as “the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”

A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a Lead Agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

The following requirements for evaluating environmental impacts are cited directly from the State CEQA Guidelines Appendix G.

- 1) All answers must take into account of 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.
- 2) Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation incorporated, or less than

### 3 Environmental Checklist, Analysis and Mitigation Measures

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significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect is significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.

- 3) “Negative Declaration: Less Than Significant with Mitigation Incorporated” applies when the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact”. The Lead Agency must describe the mitigation measures, and briefly explain how they reduce the effect to less than significant.
- 4) Earlier analyses may be used where pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. [§15063(c)(3)(D)]. In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less Than Significant with Mitigation Incorporated”, describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 5) Lead Agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 6) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 7) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
- 8) The explanation of each issue should identify:
  - a) The significance criteria or threshold, if any, used to evaluate each question; and
  - b) The mitigation measures identified, if any, to reduce the impact to less than significance.

### 3.5 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
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 outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.5.1 Environmental Setting

As shown on Figure 3.5-1, the proposed Project site is vacant land. The Project site is bounded by rural residential properties to the west, State Highway 70 to the north, Union Pacific Railroad to the south and a small industrial area to the east.



Figure 3.5-1 Proposed Project Site, Plumas-Sierra Chilcoat

#### 3.5.2 Discussion and Mitigation Measures

**Aesthetics a.** *Would the project have a substantial adverse effect on a scenic vista?*

**Answer:** *No Impact.*

#### Discussion:

There are scenic vistas to the distant mountains from the proposed Project site. However, the solar panels would be of low profile and not interfere with those views. Therefore, there would be no adverse effects on a scenic vista caused by implementation of the Project. Consequently, no further analysis or mitigation is required.

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

**Answer:** *No Impact.*

#### Discussion:

There are no officially designated State scenic highways within Plumas County. However, portions of State Highways 36, 70 and 89 are Eligible State Scenic Highways – Not Officially Designated. None of these highways are within view of the proposed Project site. Therefore, no further analysis or mitigation is required.

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

**Answer:** *No Impact.*

#### Discussion:

According to the County of Plumas's Zoning Map, the proposed Project site is presently zoned suburban residential (SI). Installation of public utility facilities is a permitted use in this designation. Therefore, there would be no conflicts with applicable zoning and therefore no further analysis or mitigation is required.

**Aesthetics d.** *Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

**Answer:** *Less than Significant Impact.*

#### Discussion:

According to the June 2014 Meister Consultants Group Solar and Glare Fact Sheet prepared for the U.S. Department of Energy, a common misconception about solar photovoltaic (PV) panels is that they intently cause or create "too much" glare, posing a nuisance to neighbors and a safety risk for pilots. While in certain situations the glass surfaces of solar PV systems can produce a glint (a momentarily flash of bright light) and glare (a reflection of bright light for a longer duration), light adsorption, rather than reflection is central to the function of a solar PV panel – to absorb solar radiation and convert it to electricity. Solar PV panels are constructed of dark-colored (usually blue or black) materials and are covered with anti-reflective coatings. Modern PV panels reflect as little as two percent of incoming sunlight, about the same as water and less than soil or even wood shingles.

Based on the above discussion, the potential for substantial glare from the solar PV panels would be considered less than significant and therefore no further analysis or mitigation is required.

### 3.5.3 Conclusion

No significant impacts were identified; therefore, no further analysis or mitigation is required.

### 3.6 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</p> <p><i>Would the Project:</i></p>				
a. Convert Prime Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 511104(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 uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.6.1 Environmental Setting

As shown previously on Figure 3.5-1, the Project site is presently vacant land. There are no agricultural or forest lands on the Project site

#### 3.6.2 Discussion and Mitigation Measures

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

**Answer:** No Impact.

#### Discussion:

There are no Prime Farmlands or Farmlands of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency at the Project site (*resources.ca.gov, 4/12/2019*). Therefore, there would be no impacts and no further analysis or mitigation is required.

**Agriculture and Forestry Resources. b.** *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

**Answer:** No Impact.

#### Discussion:

The site is zoned as suburban residential (S-1). It is not under a Williamson Act contract. Therefore, there would be no impacts and no further analysis or mitigation is required.

**Agriculture and Forestry Resources. c.** *Would the project 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))?*

**Answer: No Impact.**

#### **Discussion:**

The site is not zoned for forest land or timber land use. Therefore, there would be no impacts and no further analysis or mitigation is required.

**Agriculture and Forestry Resources. d.** *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

**Answer: No Impact.**

#### **Discussion:**

There is no forest land within the Project site. Therefore, there would be no impacts and no further analysis or mitigation is required.

**Agriculture and Forestry Resources. e.** *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

**Answer: No Impact.**

#### **Discussion:**

There is no Farmland or forest land at the Project site. Therefore, there would be no impacts and no further analysis or mitigation is required.

### **3.6.3 Conclusion**

No significant impacts were identified; therefore, no further analysis or mitigation is required.

## 3.7 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.				
<i>Would the Project:</i>				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in cumulatively considerable net increase of any criteria pollutant under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 3.7.1 Environmental Setting

Plumas County's topography greatly influences its climate, which results in disproportionate levels of precipitation across the County. More commonly known as the rain shadow effect, this condition is created by the Sierra Nevada Crest which acts as a barrier to storm systems between the western and eastern portions of the County. Consequently, while the western side of the Sierra Nevada Mountains receives over 90 inches of rain annually, areas east of the crest receive only 11 inches, with the majority falling between October and April. Throughout the year, average temperatures, as measured at Portola, can range from over 80 degrees Fahrenheit (°F) during the summer months to 18°F during the winter months.

The Project area is located within the Mountain Counties Air Basin which includes all of Plumas, Sierra, Nevada, Amador, Calaveras and Tuolumne Counties as well as portions of Placer, El Dorado and Mariposa Counties. Within this Basin, the Northern Sierra Air Quality Management District (NSAQMD) regulates air quality conditions in Plumas County. The California Air Resources Board (ARB) provides ambient air quality data for most air basins in the State. A summary of the data available for the nearest monitoring station to the Project area (i.e., Grass Valley – Lytton Building) is provided in Tables 3.7-1 through 3.7-3.

**Table 3.7-1  
Ozone Trends Summary: Grass Valley – Lytton Building  
National Standards**

Year	Days > Standard			1-hr Observations				8-hr Observations				Year Coverage
	8-hr			EENED <sup>1</sup>				0.070 Std.		0.075 Std.		
	0.070	0.075	0.080	Max.	1-yr	3-yr	D.V. <sup>2</sup>	Max.	D.V. <sup>2</sup>	Max.	D.V. <sup>2</sup>	
2017	78	58	21	0.108	0.0	0.0	0.102	0.099	0.086	0.099	0.087	100
2016	39	16	5	0.101	0.0	0.0	0.101	0.097	0.083	0.097	0.084	100
2015	26	11	4	0.101	0.0	0.0	0.096	0.092	0.081	0.092	0.081	96
2014	28	10	1	0.089	0.0	0.0	0.089	0.085	0.078	0.085	0.079	99
2013	19	4	0	0.089	0.0	0.0	0.089	0.082	0.076	0.082	0.077	100
2012	46	5	0	0.087	0.0	0.0	0.091	0.081	0.076	0.081	0.077	98
2011	18	6	0	0.094	0.0	0.0	0.094	0.081	0.078	0.081	0.079	99
2010	15	6	1	0.093	0.0	0.0	0.103	0.087	0.083	0.087	0.084	100
2009	34	17	3	0.103	0.0	0.0	0.104	0.091	0.087	0.091	0.087	99
2008	36	24	10	0.111	0.0	0.0	0.111	0.108	0.091	0.108	0.091	85

Notes: All concentrations expressed in parts per million.

The national 1-hour ozone standard was revoked in June 2005. Statistics related to the revoked standard are shown in *italics* or **italics**.

National exceedances shown in **orange**.

An exceedance is not necessarily a violation.

Daily maximum 8-hour averages associated with the National 0.070 ppm standard exclude those 8-hour averages that have first hours between midnight and 6:00 am, Pacific Standard Time.

Daily maximum 8-hour averages associated with the National 0.070 ppm standard include only those 8-hour averages from days that have sufficient data for the day to be considered valid.

Daily maximum 8-hour averages associated with the National 0.075 ppm standard may come from days that don't have sufficient data for the day to be considered valid, provided the daily maximum 8-hour average itself includes sufficient data to be considered valid.

<sup>1</sup> EENED = Estimated Expected Number of **Exceedance** Days

<sup>2</sup> D.V. = National Design Value

\* There was insufficient (or no) data available to determine the value.

Source: arb.ca.gov, 04/13//2019

**Table 3.7-2  
Ozone Trends Summary: Grass Valley – Lytton Building  
State Standards**

Year	Days > Standard		1-Hour Observations			8-Hour Averages			Year Coverage
	1-Hour	8-Hour	Max.	EPDC <sup>1</sup>	D.V. <sup>2</sup>	Max.	EPDC <sup>1</sup>	D.V. <sup>2</sup>	
2017	13	85	0.108	0.1076	0.11	0.099	0.0999	0.099	100
2016	6	46	0.101	0.0980	0.10	0.097	0.0917	0.089	99
2015	4	30	0.101	0.932	0.09	0.093	0.0879	0.086	98
2014	0	36	0.089	0.0896	0.09	0.086	0.0854	0.083	99
2013	0	24	0.089	0.0869	0.09	0.082	0.0828	0.082	100
2012	0	22	0.087	0.0899	0.09	0.082	0.0853	0.085	96
2011	0	20	0.094	0.0958	0.10	0.082	0.0881	0.088	99
2010	0	18	0.093	0.1013	0.10	0.088	0.0948	0.092	100
2009	3	38	0.103	0.1024	0.10	0.091	0.0985	0.097	99
2008	8	42	0.111	0.1084	0.11	0.109	0.1043	0.098	88

Notes: All concentrations expressed in parts per million.

National exceedances shown in **green**.

An exceedance is not necessarily a violation.

<sup>1</sup> EPDC = Expected Peak Day Concentration

<sup>2</sup> D.V. = State Designation Value

\* There was insufficient (or no) data available to determine the value.

Source: arb.ca.gov, 04/13/2019

**Table 3.7-3  
PM<sub>2.5</sub> Trends Summary: Grass Valley – Lytton Building**

Year	Est. Days > Nat'l '06 Std.	Annual Average		Nat'l Ann. Std. D.V. <sup>1</sup>	State Ann. Std. D.V. <sup>2</sup>	Nat'l '06 Std. 98th Percentile	Nat'l '06 24-Hr Std. D.V. <sup>1</sup>	High 24-Hour Average		Year Coverage
		Nat'l	State					Nat'l	State	
2017	3.0	5.0	5.8	4.7	6	32.4	18	68.1	75.4	98
2016	0.0	4.6	4.6	*	5	11.7	28	11.7	19.5	98
2015	0.0	4.6	*	*	6	11.0	34	11.5	130.0	94
2014	*	*	*	*	6	61.3	32	61.3	239.0	83
2013	0.0	5.7	5.7	4.6	6	28.2	15	28.5	38.1	95
2012	0.0	3.8	3.8	*	6	7.6	*	7.7	37.2	95
2011	0.0	4.2	6.1	*	6	9.9	*	10.2	21.0	91
2010	*	*	4.2	*	4	*	*	10.5	19.7	81
2009	0.0	4.5	*	6.3	*	10.0	30	12.9	36.0	90
2008	26.3	9.6	*	6.9	6	65.1	35	102.2	102.2	92

**Notes:** All concentrations expressed in micrograms per cubic meter.

State exceedances shown in **green**. National exceedances shown in **orange**. An exceedance is not necessarily a violation.

State and national statistics may differ for the following reasons:

State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods.

State and national statistics may therefore be based on different samplers.

State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.

<sup>1</sup> D.V. = National Design Value

<sup>2</sup> D.V. = State Designation Value

\* There was insufficient (or no) data available to determine the value.

Source: arb.ca.gov, 04/13/2019

Both EPA and ARB issue area designations for individual pollutants for California's air basins. The latest designations for Plumas County are shown in Table 3-7.4.

**Table 3.7-4  
Ambient Air Quality Area Designations for Plumas County**

Pollutant	State Area Designation	National Area Designation
Ozone	Attainment	Unclassified/Attainment
Particulate Matter Less than 2.5 microns in diameter (PM <sub>2.5</sub> )	Non-Attainment	Moderate Non-Attainment
Particulate Matter Less than 10 microns in diameter (PM <sub>10</sub> )	Attainment	Unclassified
Carbon Monoxide (CO)	Unclassified	Unclassified/Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Unclassified/Attainment
Sulfates	Attainment	--
Lead (Pb)	Attainment	Unclassified/Attainment
Hydrogen Sulfide (H <sub>2</sub> S)	Unclassified	--
Visibility Reducing Particles	Unclassified	--

Source: arb.ca.gov and epa.gov, 4/13/2019

As shown in Table 3.7-4, currently, Plumas County is designated as moderate non-attainment for the federal PM<sub>2.5</sub> standard and non-attainment for the State PM<sub>2.5</sub> standard. The primary activities contributing to the PM<sub>2.5</sub> violations include wildfires, use of woodstoves, forestry management burns, residential open burning, vehicle travel on unpaved roads, and windblown dust.

## 3.7.2 Discussion and Mitigation Measures

**Air Quality. a.** *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

**Answer:** *Less than Significant Impact.*

### Discussion:

Plumas County has been designated as Moderate Non-Attainment for the federal PM<sub>2.5</sub> standard by the Environmental Protection Agency and Non-Attainment for the State PM<sub>2.5</sub> standard by the California Air Resources Board. Therefore, the Northern Sierra Air Quality Management District prepared the *Portola Fine Particulate Matter (PM<sub>2.5</sub>) Attainment Plan* during January 2017. That Plan was approved by the California Air Resources Board on February 16, 2017.

The Plan provides a pathway to meeting the annual PM<sub>2.5</sub> standard by December 31, 2021. Although this Plan was put in place to demonstrate the attainment of the annual standard, the control strategies will also reduce the 24-hour concentrations below the level of 35 µg/m<sup>3</sup> standard by the end of 2021.

The main problem causing the Portola area to violate the PM<sub>2.5</sub> standards is wood smoke. Wood burning is responsible for 76 percent of mass annually and 86 percent on a typical exceedance day. Wood heat is very popular in the area due to the lack of natural gas and the availability of cheap, or even free, wood. Home wood burning devices include wood stoves, fireplace inserts, fireplaces and wood burning furnaces. Each of these devices has different emission levels, with new devices burning much cleaner and more efficiently than the older devices. Due to the fact that wood burning is a key source of PM<sub>2.5</sub> pollution in the area, the Northern Sierra AQMD developed a comprehensive wood smoke reduction strategy. While there are many aspects of this strategy, the attainment demonstration relies only on the reductions from the wood stove change-out program and the ongoing reductions in directly emitted PM<sub>2.5</sub> from the mobile sector.

As shown under “b.” below, the projected emissions from construction would be less than significant and, therefore, the Project would not conflict or obstruct implementation of the air quality attainment plan and no further analysis or mitigation is required.

**Air Quality. b.** *Would the project result in cumulatively considerable net increase of any criteria pollutant under an applicable federal or state ambient air quality standard)?*

**Answer:** *Less than Significant Impact.*

### Discussion:

Although the Northern Sierra AQMD has not developed recommended thresholds of significance for projects that are subject to CEQA review, other Districts in the Mountain Counties Air Basin have. For example, both the El Dorado APCD and the Placer County AQMD have established thresholds for ozone precursors [i.e., reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>)] and respirable particulate matter (PM<sub>10</sub>). Those three thresholds are each 82 pounds per day (15 tons per year). These thresholds are utilized in this Initial Study to determine significance.

The Northern Sierra AQMD has not established numerical significance thresholds for carbon monoxide (CO) or oxides of sulfur (SO<sub>x</sub>). Other AQMDs have established such thresholds among them the South Coast AQMD. For construction projects, those thresholds are 550 pounds per day and 150 pounds per day, respectively. Those thresholds are used in this Initial Study to determine significance.

Plumas County is designated as moderate non-attainment for the federal PM<sub>2.5</sub> standard and non-attainment for the State PM<sub>2.5</sub> standard. Therefore, any analysis of this pollutant should be completed on a conservative basis. Consequently, EPA’s threshold of 10 tons per year for PM<sub>2.5</sub> for “major sources” is used to determine significance in this Initial Study. The 10 tons per year threshold equates to 55 pounds per day.

### 3 Environmental Checklist, Analysis and Mitigation Measures

The Northern Sierra AQMD has not adopted significance thresholds for the evaluation of toxic air contaminants (TACs) and associated human health risks. Cancer risks from TACs is typically expressed in numbers of excess cancer cases per million persons exposed over a defined period of exposure, for example, over an assumed 70-year lifetime. Non-cancer health hazards for chronic and acute diseases are expressed in terms of a hazard index (HI), which is ratio of TAC concentration to a reference exposure level (REL), below which no adverse health effects are expected to occur. This analysis relies on commonly applied thresholds typically recommended by other air pollution control districts in California, as identified in the California Air Pollution Officer Association's (CAPCOA) *Health Risk Assessments for Proposed Land Use Projects (2009)*. Exposure to TACs would be considered significant if the probability of contracting cancer for the maximum exposed individual would exceed 10 in one million or would result in a hazard index greater than one. (*Sacramento Metropolitan Air Quality Management District, May 2015*).

The Northern Sierra AQMD has not adopted significance criteria for the evaluation of greenhouse gas (GHG) emissions. Thresholds for GHG emissions are usually expressed in terms of carbon dioxide equivalents (CO<sub>2</sub> eq). EPA has suggested a reportable significance threshold of 25,000 tons of CO<sub>2</sub> eq per year. However, the El Dorado APCD and Placer County AQMD have adopted de minimus thresholds of 1,100 metric tons (MT) per year for construction projects. For the purposes of evaluating the proposed project's GHG impacts, emissions resulting from construction of the project will be quantified and compared to their threshold of 1,100 metric tons of CO<sub>2</sub> eq per year (1,210 tons per year).

A summary of the threshold criteria to determine significance utilized in this Initial Study is provided in Table 3.7-5.

**Table 3.7-5  
Threshold Criteria Utilized to Determine Significance**

Pollutant	Threshold Limit	
	tons per year	Pounds per day
Reactive Organic Gases (ROG)	15	82
Carbon Monoxide (CO)	100	550
Oxides of Nitrogen (NO <sub>x</sub> )	15	82
Oxides of Sulfur (SO <sub>x</sub> )	27	150
Respirable Particulate Matter (PM <sub>10</sub> )	15	82
Fine Particulate Matter (PM <sub>2.5</sub> )	10	55
<b>Toxic Air Contaminants (TACs), Odor and GHG Thresholds</b>		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic and Acute Hazard Index ≥ 1.0 (project increment)	
GHG	1,100 MT/yr CO <sub>2</sub> eq (1,210 tons per year).	

#### **Criteria Pollutants**

It is anticipated that NCPA would install solar equipment at the Plumas-Sierra Chilcoot site. A typical construction equipment list for this activity follows:

Equipment	Number	Horsepower	Load Factor <sup>1</sup>	Hours per Day
Compressor	1	106	0.48	4
Crane	1	399	0.43	4
Drill Rig	1	291	0.75	6
Sweeper	1	250	0.68	2
Tractor/Backhoe/Loader	1	108	0.55	4
Trencher	1	63	0.75	4
Utility Trucks	1	479	0.57	2
Water Truck	1	189	0.50	2

Notes:

<sup>1</sup> Percentage of the engines' maximum horsepower rating that the equipment actually operates.

These additional assumptions are also utilized in the air quality analyses for installation of the solar equipment:

- ❖ The disturbed area is estimated at 28.2 acres on the peak day of activities.

### 3 Environmental Checklist, Analysis and Mitigation Measures

- ❖ There would be two heavy-duty trucks delivering supplies to the site. Mileage for each truck is assumed at 100 miles per day.
- ❖ There would be approximately 2 pickup trucks traveling to and from the site by inspectors. Mileage for each pickup would be approximately 100 miles per day.
- ❖ Approximately 10 construction workers would be involved at the site on the peak day of activities. Mileage for worker commuters would be approximately 50 per day.
- ❖ Construction activities would occur for about 90 days.

K.S. Dunbar & Associates, Inc., developed an Excel Spreadsheet model, based on the California Air Resources Board's 2011 OFFROAD emission factors, that calculates estimated emissions from construction activities. That model was used to estimate construction related emissions from off-road heavy construction equipment. Based on construction occurring in 2019, the model generated estimated construction emissions as shown in Table 3.7-6 (detailed model results are contained in Appendix C)<sup>1</sup>.

**Table 3.7-6  
Estimated Emissions from Off-Road Heavy Construction Equipment  
Solar Equipment Installation**

	Pollutant (pounds per day) <sup>a</sup>					
	ROG	CO	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Solar Equipment Installation	3.75	25.96	34.02	0.07	0.26	0.24
Threshold Limits <sup>b</sup>	82	550	82	150	82	55

<sup>a</sup> Use of particulate traps reduces PM<sub>10</sub> and PM<sub>2.5</sub> by 85% and oxidation catalysts reduces NO<sub>x</sub> by 15%.

<sup>b</sup> Construction-related threshold limits developed to determine significance.

As can be seen by the data in Table 3.7-6, emissions from heavy construction equipment during solar equipment installation would not exceed the construction-related threshold limits contained in Table 3.7-5.

There would also be 2 heavy-duty trucks transporting equipment to the site as well as two pickup trucks utilized by inspectors at the job site. Based on the assumption that each heavy-duty truck and each pickup travel 100 miles per day, exhaust emissions would be as shown in Table 3.7-7.

**Table 3.7-7  
Estimated Emissions from On-Road Vehicles  
Solar Equipment Installation**

Equipment	Pollutant (pounds per day)					
	ROG	CO	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
On-Road Trucks	0.24	1.13	2.78	0.01	0.14	0.11
Pickups	0.11	1.01	0.10	0.00	0.02	0.01
Totals	0.35	2.14	2.88	0.01	0.16	0.12

Vehicles owned by construction workers would be an additional source of air pollutants. An estimate of emissions based on 10 worker vehicles per day of which 100 percent are pickup trucks (gross vehicle weight of 8,500 pounds or less) with an average round trip of 50 miles is presented in Table 3.7-8.

**Table 3.7-8  
Construction Worker Commute Vehicle Emissions  
Solar Equipment Installation**

Pollutant (pounds per day)						
ROG	CO	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	
0.29	2.51	0.24	0.01	0.05	0.03	

<sup>1</sup> Should the construction period be delayed, the emissions from heavy construction equipment would be less due to technology improvements and phasing out of older equipment. Therefore, the emissions shown are considered the worst-case scenario.

Earthmoving activities would create fugitive dust emissions. It is estimated that fugitive dust emissions from construction activities on disturbed soil approximate 5 pounds per acre per day (PM<sub>10</sub>) with no mitigation. However, the application of water as required would reduce the emissions by 61 percent (SCAQMD, October 2016). As stated above, it is anticipated that approximately 28.2 acres would be disturbed at the peak day of activity. Therefore, the resulting PM<sub>10</sub> emissions would be estimated at 54.99 pounds per day. SCAQMD also estimates that the PM<sub>2.5</sub> emissions in fugitive dust are equal to 21 percent of the PM<sub>10</sub> emissions in fugitive dust (SCAQMD, October 2006). Therefore, the PM<sub>2.5</sub> emissions would equal 11.55 pounds per day.

The total estimated emissions from the installation of the solar equipment at the Plumas-Sierra Chilcoot site are shown in Table 3.7-9

**Table 3.7-9  
Total Estimated Construction Emissions<sup>a</sup>  
Solar Equipment Installation**

Source	Pollutant (pounds per day)					
	ROG	CO	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction Equipment	3.75	25.96	34.02	0.07	0.26	0.24
On-Road Vehicles	0.35	2.14	2.88	0.01	0.16	0.12
Worker Commutes	0.29	2.51	0.24	0.01	0.05	0.03
Fugitive Dust	0.00	0.00	0.00	0.00	54.99	11.55
Totals	4.39	30.61	37.14	0.09	55.46	11.94
Threshold Limits <sup>b</sup>	82	550	82	150	82	55

<sup>a</sup> Use of particulate traps reduces PM<sub>10</sub> and PM<sub>2.5</sub> by 85% and oxidation catalysts reduces NO<sub>x</sub> by 15%.

<sup>b</sup> Construction-related threshold limits developed to determine significance.

As shown in Table 3.7-9, the total estimated emissions from installation of the solar equipment at the Plumas-Sierra Chilcoot site would not exceed the construction-related threshold limits for significance presented in Table 3.7-5. However, EPA has designated Plumas County as moderate non-attainment for the federal PM<sub>2.5</sub> standard and the ARB has designated Plumas County as non-attainment for the State PM<sub>2.5</sub> standard. Therefore, every effort should be made to minimize emissions within Plumas County. Consequently, to reduce the emissions as much as possible, NCPA will:

- ❖ Appoint a construction relations officer to act as a community liaison concerning on-site construction activities including resolution of issues related to PM<sub>2.5</sub> generation.
- ❖ In addition, NCPA will add the following best management practices in its contract documents for this project:

The contractor shall:

- ❖ Utilize electricity from power poles instead of from temporary diesel or gasoline power generators, when feasible.
- ❖ Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the contractor shall use trucks that meet EPA 2007 model year NO<sub>x</sub> emissions requirements.
- ❖ Require that all on-site construction equipment meet EPA Tier 3 or higher emissions standards according to the following:
  - ✓ All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

### 3 Environmental Checklist, Analysis and Mitigation Measures

- ✓ A copy of each unit's certified tier specification, BACT documentation, and CARB or Northern Sierra AQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.
- ❖ Maintain construction equipment engines by keeping them properly tuned and maintained according to manufacturer's specifications.
- ❖ Use alternative fuels or clean and low-sulfur fuel for equipment.
- ❖ Idle trucks in accordance with the Airborne Toxic Control Measure (ACTM) to Limit Diesel Fueled Commercial Motor Vehicle Idling and other applicable laws.
- ❖ Spread soil binders on site, where appropriate, unpaved roads and staging areas.
- ❖ Water active construction sites at least twice daily.
- ❖ Sweep all streets at the end of the day if visible soil materials are carried onto adjacent public paved roads (recommend water sweeper with reclaimed water).
- ❖ All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour as directed by the Northern Sierra AQMD.
- ❖ If necessary, wash off trucks leaving the site.
- ❖ Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114.

Operation and maintenance personnel might make two or three trips per week to the Project site. Consequently, there would be essentially no emissions associated with vehicle travel to and from the site during operation and maintenance of the new facilities. Operation of the actual facilities would produce essentially no emissions.

#### ***Toxic Air Contaminants (TACs)***

The combustion of diesel fuel produces diesel particulate matter as a byproduct. Diesel particulate matter has been identified by the California Air Resources Board (ARB) as a toxic air contaminant (TAC). While TACs can have long-term and/or short-term effects, diesel TAC has been shown by the ARB to have little or no short-term impact.

The ARB determined that the chronic impact of diesel particulate matter was of more concern than the acute impact in the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines (ARB 2000). In that document, ARB noted that "Our analysis shows that the potential cancer risk from inhalation is the critical path when comparing cancer and non-cancer risk. In other words, a cancer risk of 10 cases per million from the inhalation of diesel particulate matter (PM) will result from diesel PM concentrations that are much less than the diesel PM or TAC concentrations that would result in chronic or acute non-cancer hazard index values of 1 or greater." Consequently, any analysis of diesel TAC should focus on the long-term, chronic cancer risk posed by diesel emissions. Chronic cancer risk is normally measured by assessing what the risk to an exposed individual from a source of TACs would be if the exposure occurred over 70 years. Diesel emissions related to construction of the proposed Project would only occur for less than a one-year period. Therefore, the impact would be considered less than significant and no further analysis is required.

**Air Quality. c.** *Would the project expose sensitive receptors to substantial pollutant concentrations?*

**Answer: No Impact.**

**Discussion:**

As shown above, all emissions from construction of the Project would be less than significant based on the threshold limits shown in Table 3.7-5. Therefore, implementation of the Project would not expose sensitive receptors to substantial pollutant concentrations. Consequently, no further analysis or mitigation is required.

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

**Answer: Less than Significant Impact.**

**Discussion:**

As shown above in Table 3.7-9, the fugitive dust emissions would be less than significant based on threshold criteria shown in Table 3.7-5. In addition, implementation of the Project would not result in the generation of odors. Consequently, no further analysis or mitigation is required.

**3.7.3 Conclusions**

No significant impacts were identified; however, NCPA will include best management practices in the construction documents for this Project to ensure there are no significant impacts.

## 3.8 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game 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 (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 resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

### 3.8.1 Environmental Setting

K.S. Dunbar & Associates, Inc., retained ELMT Consulting (ELMT) to conduct a habitat and jurisdictional assessment for the Plumas-Sierra Chilcoot site near the community of Chilcoot in Plumas County, California. The field work associated with the habitat and jurisdictional assessment was conducted by biologist Travis J. McGill on May 1, 2019 to document baseline conditions and assess the potential for special-status<sup>2</sup> plant and wildlife species to occur within the Chilcoot Project site that could pose a constraint to implementation of the proposed Project. Special attention was given to the suitability of the Project site to support special-status plant and wildlife species identified by the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDDB) and other electronic databases as potentially occurring in the general vicinity of the Project sites. EMLT’s full report is contained in Appendix C and is the source of the following discussion.

#### Existing Site Conditions

The Project site is located on a vacant privately-owned property that is comprised of approximately 30 acres. The site is bordered by the Union Pacific Railroad to the south, scattered residences to the west and an existing industrial facility to the east. The northern edge of the parcel is a presumed easement that has been excluded as a developable area for the Project. According to

<sup>2</sup> As used in this report, “special-status” refers to plant and wildlife species that are federally and State listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

the Federal Emergency Management Agency (FEMA) data, the site is located within the 500-year flood hazard zone; however, the risk of flooding appears to be low based on observations made during the field investigation and the Union Pacific Railroad to the south.

Elevation on the Project site ranges from approximately 4,965 to 4,995 feet above mean sea level and generally slopes from east to west with no areas of significant topographic relief. Based on the NRCS USDA Web Soil Survey, the Project site is underlain by the following soil units: Bidwell sandy loam, sandy substratum (0 to 2 percent slopes), Mottsville loamy sand (2 to 9 percent slopes), and Ormsby loamy coarse sand (2 to 5 percent slopes). Refer to Exhibit 4, *Soils*, in Attachment A of ELMT's report in Appendix C. Soils on-site have been disturbed by historic cattle grazing and weed abatement activities.

## Vegetation

Due to existing land uses, no native plant communities or natural communities of special concern were observed on or adjacent to the Project site. The Project site primarily consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances, primarily cattle grazing activities. These disturbances have eliminated the natural plant communities that once occurred within the boundaries of the Project site. Refer to Attachment B, *Site Photographs* in Appendix C, for representative site photographs. No native plant communities will be impacted from implementation of the proposed Project.

The Project site consists of a land cover type that would be classified as disturbed/non-native grassland. Refer to Exhibit 5, *Vegetation* in Attachment A in Appendix C. Plant species observed on and immediately adjacent to the Project footprint include Great basin sagebrush (*Artemisia tridentata*), peony (*Paeonia brownii*), filaree (*Erodium sp.*), fiddleneck (*Amsinckia sp.*), short-podded mustard (*Hirschfeldia incana*), mule ear (*Wyethia mollis*), few flowered blue eyed mary (*Collinsia parviflora*), crested wheatgrass (*Agropyron cirstatum*), narrow leaved willow (*Salix exigua*), Mexican rush (*Juncus mexicanus*), Douglas sedge (*Carex douglasii*).

## Wildlife

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed or are expected to occur within the Project site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather conditions in which the field investigation was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. The Project site provides limited habitat for wildlife species except those adapted to a high degree of anthropogenic disturbances and development.

## Fish

No hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the Project site. No fish are expected to occur and are presumed absent from the Project site.

## Amphibians

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on the Project site. No amphibians are expected to occur and are presumed absent from the Project site.

## Reptiles

During the field investigation, no reptilian species were observed on the Project site. Common reptilian species adapted to a high degree of anthropogenic disturbances that have the potential to occur on the Project site include western side-blotched lizard (*Uta stansburiana elegans*), and alligator lizard (*Elgaria multicarinata*). Due to existing site disturbances, no special-status reptilian species are expected to occur within Project site.

#### **Birds**

The Project site provides foraging and cover habitat for bird species adapted to a high degree of human disturbance. Bird species detected during the field investigation included northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), American crow (*Corvus brachyrhynchos*), killdeer (*Charadrius vociferus*), western meadowlark (*Sturnella neglecta*), red-tailed hawk (*Buteo jamaicensis*), Brewer's blackbird (*Euphagus cyanocephalus*), and turkey vulture (*Cathartes aura*). Due to existing disturbances and lack of native habitats, the Project site does not provide suitable habitat for special-status bird species known to occur in the area.

#### **Mammals**

During the field investigation, no mammalian species were observed on the Project site. Common mammalian species adapted to a high degree of anthropogenic disturbances that have the potential to occur within the Project site include California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), opossum (*Didelphis virginiana*), mule deer (*Odocoileus hemionus*), and raccoon (*Procyon lotor*).

#### **Nesting Birds**

During the field investigation, an active killdeer nest was observed within the Project footprint and an occupied red-tailed hawk nest was observed in a power pole immediate south of the Project site. The Project site and surrounding area provides foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. In particular, the Project site has the potential to provide suitable nesting opportunities for birds that nest on the open ground. Additionally, the trees on the western boundary of the Project site associated with the residential developments also have the potential to provide suitable nesting opportunities. A pre-construction nesting bird clearance survey should be conducted within three (3) days prior to ground disturbance to ensure no nesting birds will be impacted from site development.

#### **Migratory Corridors and Linkages**

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The proposed Project will be confined to an existing disturbed area that is bordered by a railroad on its southern boundary, State Route 70 on its northern boundary, residential developments on the western boundary, and an existing industrial facility on its eastern boundary. As a result, the Project site is isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping stone habitat (natural areas) within or connecting the Project site to any identified wildlife corridors or linkages. As a result, implementation of the proposed Project will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

#### **Jurisdictional Areas**

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the California Department of Fish and Wildlife (CDFW) regulates alterations to streambed and bank under Fish and Wildlife Code

Sections 1600 et seq., and the California Regional Water Quality Control Boards regulate discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

The Project site does not support any discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the Corps, Regional Board, or CDFW. Therefore, Project activities will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.

Standing patches of water were observed at the toe of slope on the north side of the raised Union Pacific Railroad during the field investigation. It should be noted that scattered rain showers had passed through the area the day prior to the field investigation. The standing water did not display a surface hydrologic connection to downstream “waters of the United States”. Water ponds in this area immediately following storm events. During the initial design of the proposed Project, the Project footprint was designed to avoid these areas. Further, a review of recent and historic aerial photographs of the Project site and its immediate vicinity did not provide visual evidence of an astatic or vernal pool conditions within the Project site. From this review of historic aerial photographs and observations during the field investigations, it can be concluded that there is no indication of vernal pools occurring within the proposed Project site.

It should be noted that the vacant property south of the Union Pacific Railroad has been mapped as supporting freshwater emergent wetland habitats and riverine resources by the NWI. This area, outside of the Project footprint, and south of the Union Pacific Railroad has not been subject to anthropogenic disturbances and supports undisturbed habitats. As a result, no impacts to the mapped freshwater wetland habitats or riverine resources are expected to occur from the proposed Project.

## Special-Status Biological Resources

The CNDDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Chilcoot and Beckwourth USGS 7.5-minute quadrangles. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the Project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified thirteen (13) special-status plant species and nine (9) special-status wildlife species as having potential to occur within the Chilcoot and Beckwourth USGS 7.5-minute quadrangles. No special-status plant communities have been recorded on the Chilcoot and Beckwourth USGS 7.5-minute quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the Project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the Project site are presented in the table provided in Attachment C: *Potentially Occurring Special-Status Biological Resources* in Appendix C.

### Special-Status Plants

According to the CNDDDB and CNPS, thirteen (13) special-status plant species have been recorded in the Chilcoot and Beckwourth quadrangles (refer to Attachment C in Appendix C). No special-status plant species were observed onsite during the habitat assessment. The Project site consists of vacant, undeveloped land that has been subject to existing cattle grazing and weed abatement activities. These disturbances have eliminated the natural plant communities that once occurred onsite which has removed suitable habitat for special-status plant species known to occur in the general vicinity of the Project site. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the Project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent. No focused surveys are recommended.

#### **Special-Status Wildlife**

According to the CNDDDB, nine (9) special-status wildlife species have been reported in the Chilcoot and Beckwourth quadrangles (refer to Attachment C in Appendix C). No special-status wildlife species were observed onsite during the habitat assessment. The Project site consists of vacant, undeveloped land that has been subject to existing cattle grazing and weed abatement activities. These disturbances have eliminated the natural plant communities that once occurred on-site which has removed suitable habitat for special-status wildlife species known to occur in the general vicinity of the Project site.

Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the Project site does has a low potential to provide suitable habitat for Swainson's hawk (*Buteo swainsoni*) and prairie falcon (*Falco mexicanus*). The Project site primarily provides suitable foraging habitat for these species, but does not provide suitable nesting opportunities. All remaining special-status wildlife species were presumed to be absent from the Project site because it has been heavily disturbed from onsite disturbances and surrounding development.

In order to ensure impacts to the aforementioned species do not occur from implementation of the proposed Project, a pre-construction nesting bird clearance survey should be conducted prior to ground disturbance. With implementation of mitigation through the pre-construction clearance survey, impacts to the aforementioned species will be less than significant.

#### **Critical Habitat**

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The Project site is not located within federally designated Critical Habitat. Refer to Exhibit 6, *Critical Habitat* in Attachment A in Appendix C. The nearest designated Critical Habitat is located approximately 2.4 miles southwest of the Project site for Webber's ivesia (*Ivesia webberi*). Therefore, the loss or adverse modification of Critical Habitat from site development will not occur and consultation with the USFWS for impacts to Critical Habitat will not be required for implementation of the proposed Project.

### **3.8.2 Discussion and Mitigation Measures**

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

**Answer:** *Less than Significant with Mitigation Incorporated.*

#### **Discussion:**

As stated above, according to the CNDDDB and CNPS, thirteen (13) special-status plant species have been recorded in the Chilcoot and Beckwourth quadrangles (refer to Attachment C in Appendix C). No special-status plant species were observed onsite during the habitat assessment. The Project site consists of vacant, undeveloped land that has been subject to existing cattle grazing and weed abatement activities. These disturbances have eliminated the natural plant communities that once occurred onsite which has

### 3 Environmental Checklist, Analysis and Mitigation Measures

removed suitable habitat for special-status plant species known to occur in the general vicinity of the Project site. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the Project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent. No focused surveys are recommended.

Also, according to the CNDDDB, nine (9) special-status wildlife species have been reported in the Chilcoot and Beckwourth quadrangles (refer to Attachment C in Appendix C). No special-status wildlife species were observed onsite during the habitat assessment. The Project site consists of vacant, undeveloped land that has been subject to existing cattle grazing and weed abatement activities. These disturbances have eliminated the natural plant communities that once occurred on-site which has removed suitable habitat for special-status wildlife species known to occur in the general vicinity of the Project site.

Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the Project site does has a low potential to provide suitable habitat for Swainson's hawk (*Buteo swainsoni*) and prairie falcon (*Falco mexicanus*). The Project site primarily provides suitable foraging habitat for these species, but does not provide suitable nesting opportunities. All remaining special-status wildlife species were presumed to be absent from the Project site because it has been heavily disturbed from onsite disturbances and surrounding development.

In order to ensure impacts to the aforementioned species do not occur from implementation of the proposed Project, NCPA will include the following in its contract documents for this Project:

- ❖ If construction occurs between February 1<sup>st</sup> and August 31<sup>st</sup>, a pre-construction clearance survey for nesting birds shall be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. The size of the no-disturbance buffer (generally 300 feet for migratory and non-migratory song birds and 500 feet for raptors and special-status species) will be determined by the wildlife biologist, in coordination with the CDFW, and will depend on the level of noise and/or surrounding disturbances, line of sight between the nest and the construction activity, ambient noise, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Implementation of the above will insure the impacts to special-status species are less than significant.

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

**Answer: No Impact.**

### Discussion:

As discussed above, there is no riparian habitat or other sensitive natural community on the Project site. Therefore, would be no impacts and no further analysis or mitigation required.

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

**Answer: No Impact**

#### Discussion:

As discussed above, the Project site does not support any discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the Corps, Regional Board, or CDFW. Therefore, Project activities will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required. Therefore, there would be no impacts and no further analysis or mitigation is required.

**Biological Resources. d.** *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

**Answer: No Impact.**

#### Discussion:

As discussed above, the proposed Project will be confined to an existing disturbed area that is bordered by a railroad on its southern boundary, State Route 70 on its northern boundary, residential developments on the western boundary, and an existing industrial facility on its eastern boundary. As a result, the Project site is isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping stone habitat (natural areas) within or connecting the Project site to any identified wildlife corridors or linkages. As a result, implementation of the proposed Project will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area. Therefore, no further analysis or mitigation is required.

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

**Answer: No Impact.**

#### Discussion:

There are no local policies or ordinances protecting biological resources that would be applicable to the Project. Therefore, no further analysis or mitigation is required.

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

**Answer: No Impact.**

#### Discussion:

There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan applicable to the Project area. Therefore, no further analysis or mitigation is required.

### 3.8.3 Conclusion

Implementation of the above mitigation measures will insure that the impacts to biological resources are reduced to a level of less than significant.

### 3.9 Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### 3.9.1 Environmental Setting

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the NCPA Solar Project 1 – Plumas-Sierra Chilcoot site located near the intersection of State Highways 70 and 49 in the community of Vinton-Chilcoot, Plumas County, California.

The Phase 1 study includes a cultural resources records search, Sacred Lands File search and Native American scoping, a pedestrian survey of the Project site, and preparation of a technical report in compliance with the cultural resources requirements of CEQA. A complete copy of Anza’s report is included in Appendix D of this report.

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within or adjacent to the Project site. Anza recommends a finding of **no impact to historical resources** under CEQA. No further cultural resources study is recommended; however, standard mitigation measures are recommended to avoid potential impacts from the unanticipated discovery of cultural resources during project-related ground disturbing activities.

#### 3.9.2 Discussion and Mitigation Measures

**Cultural Resources. a.** *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

**Answer: No Impact.**

#### Discussion:

Anza requested a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), Northeast Information Center (NEIC) located at California State University, Chico. The search was conducted by NEIC on May 6, 2019, to identify all previous cultural resources work and previously recorded cultural resources within a one-mile radius of the Project site (Appendix A in Anza’s report). The CHRIS search included a review of the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic United States Geological Survey (USGS) 7.5-, 15-, and 30-minute quadrangle maps.

Five historic built or archaeological resources, and one multicomponent site were identified within one mile of the Project site (Table 2 in Anza’s report). These were: historic refuse deposit associated with the railroad (P-32-000389); Beckwourth Trail, a historic wagon road constructed in 1851 (P-32-001635H); historic refuse deposit (P-32-002462); the Last Chance Creek Water District ditch system (P-32-003542); and a segment of the Sierra Valley and Mohawk Railroad grade (P-32-005892H).

Portions of Resource P-32-00392, the Beckwourth Trail, within California have been recorded or updated 26 times between 1980 and 2016. Despite a 220-page resource record, multiple websites, articles and books on the subject, and the listing of Beckwourth Pass (a separate resource) on the NRHP and as a California Historical Landmark, no evidence of CRHR or NRHP eligibility evaluation for the Beckwourth Trail was identified during this study. Nevertheless, it is likely that, at minimum, segments of the trail with sufficient integrity are eligible for the CRHR and NRHP because of the trail's association with the legendary African American mountain man James Beckwourth, the Gold Rush's massive emigration of European Americans into California.

NEIC provided conflicting data regarding the location of the Beckwourth Trail in the immediate vicinity of the Project site. One figure, labeled "Informal Resource Location," depicts the trail within the Project site. However, page 204 of the resource record depicts the trail south of the UPRR in the vicinity of the Project site on the USGS *Chilcoot, California* 7.5-minute quadrangle map. Similarly, the figure titled "Resource Locations" depicts an unlabeled linear resource that better matches the alignment on the resource record. Combined with review of online references and Google Earth, the preponderance of evidence supports Anza's conclusion that the Beckwourth Trail does not cross within the Project site. Rather, the trail runs south of the UPRR alignment until just west of the southwest corner of the Project site, where the trail turns northwest and crosses the (later constructed) railroad alignment.

None of the other historic sites are within the Project site. Therefore, there would be no impacts to historic resources due to implementation of the Project and no further analysis or mitigation is required.

**Cultural Resources. b.** *Would the project cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?*

**Answer:** *Less than Significant with Mitigation Incorporated.*

## Discussion:

Two prehistoric sparse lithic artifact scatters (P-32-000390 and -000392) were identified adjacent to the Project site to the south.

### ***P-32-000390***

This prehistoric sparse lithic artifact scatter was recorded by Henrici in 1979. The site comprises six red chert waste flakes (i.e., the byproducts of tool manufacture) within a 3x3-meter area between two east-west dirt roads approximately five meters north of the UPRR. Based on this description, the resource is outside the Project site (development footprint) but within the same parcel. Henrici notes that this artifact scatter is unlikely to possess depth. No CRHR eligibility evaluation was provided; however, sparse lithic scatters of this nature (i.e., very few artifacts, less than three artifacts per square meter, a single material type, no tools or diagnostic artifacts, common for the area, surface scatter only) are typically considered not eligible for CRHR listing as they lack significant data potential.

### ***P-32-000392***

This prehistoric sparse lithic artifact scatter was recorded by Henrici in 1979. The site comprises seven red chert waste flakes (i.e., the byproducts of tool manufacture) within a 4x4-meter area between two east-west dirt roads approximately seven meters north of the UPRR. Based on this description, the resource is outside the project site (development footprint) but within the same parcel. Henrici notes that this artifact scatter is unlikely to possess depth. No CRHR eligibility evaluation was provided; however, sparse lithic scatters of this nature (i.e., very few artifacts, less than three artifacts per square meter, a single material type, no tools or diagnostic artifacts, common for the area, surface scatter only) are typically considered not eligible for CRHR listing as they lack significant data potential.

Although there were no archaeological sites discovered on the Project site, there is always the possibility of an inadvertent discovery of an unknown site during excavation. Therefore, NCPA will:

- ❖ Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.
- ❖ In addition, NCPA will include the following mitigation measures in its contract documents for this project.
  - ✓ In the unlikely event that potentially significant archaeological materials are encountered during construction activities, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery, assess the significance of the archaeological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of cultural material that might be discovered during excavation shall be in accordance with applicable laws and regulations.
  - ❖ All sacred items, should they be encountered within the Project sites, shall be avoided and preserved as the preferred mitigation, if feasible. All cultural materials that are collected during excavation and other earth disturbing activities on the Project sites, with the exception of sacred items, burial goods and human remains which will be addressed in any required Treatment Agreement, shall be tribally curated according to the current repository standards. The collections and associated records shall be transferred, including title, to the closest tribe to the Project site.

**Cultural Resources. d.** *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

**Answer:** *Less than Significant with Mitigation Incorporated.*

## Discussion:

No human remains were discovered on-site. However, there is always the potential to inadvertently discover human remains during excavation. Therefore, NCPA will include the following in its standard contract documents for this Project.

- ❖ In the event of an accidental discovery or recognition of any human remains, the County Coroner shall be notified and construction activities at the affected work site shall be halted. If the coroner determines the remains to be Native American: (1) the coroner shall contact the Native American Heritage Commission (NAHC) within 24-hours, and (2) the NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American. The treatment and disposition of human remains that might be discovered during excavation shall be in accordance with applicable laws and regulations.

### 3.9.3 Conclusion

Implementation of the above mitigation measures would insure that any impact to cultural resources would be reduced to a level of less than significant.

### 3.10 Energy

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
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 or obstruct a state of local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.10.1 Environmental Setting

The Plumas-Sierra Rural Electric Cooperative (PSREC) was founded in 1937. PSREC serves 6,500 members in Plumas, Sierra and Lassen Counties in California as well as Washoe County in Nevada. During 2017, its power mix included 4% geothermal, 1% small hydro, 50% large hydro, 14% natural gas and 31% unspecified sources. It has been a member of the Northern California Power Agency for over 30 years.

#### 3.10.2 Discussion and Mitigation Measures

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

**Answer: No Impact.**

##### Discussion:

During construction, it would be necessary to use diesel-powered equipment. This would not be considered a wasteful, inefficient or unnecessary consumption of energy resources.

It is proposed to install solar photovoltaic electric generation systems at the Plumas-Sierra Chilcoot site. The installed capacity would be 5.64 MW<sub>dc</sub>. It is anticipated that these facilities would generate a total of approximately 9,720 MWhr during its first year of operation. This generation of electrical energy would far outweigh the minor amount of resources used to construct the facilities.

Therefore, there would be no impacts to energy caused by implementation of the Project. Consequently, there would be no further analysis or mitigation required.

**Energy. b.** *Would the project conflict or obstruct a state of local plan for renewable energy or energy efficiency?*

**Answer: No Impact.**

##### Discussion:

The addition of approximately 5.64 MW<sub>dc</sub> of renewable energy generation would assist NCPA and PSREC in meeting its goals of a 50 percent Renewable Portfolio Standard (RPS) by 2030. Therefore, implementation of the Project would not conflict or obstruct implementation of that plan. Consequently, no further analysis or mitigation is required.

#### 3.10.3 Conclusion

No adverse impacts were identified; therefore, no further analysis or mitigation is required.

### 3.11 Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Be located on 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"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### 3.11.1 Environmental Setting

##### Geologic Setting

The Project area overlies the Sierra Valley Groundwater Basin which is believed to have been formed during the Pliocene-Pleistocene Eras (3 to 11 million years ago). Evidently, this was an undrained basin trapped among the volcanoes and granite knobs of the region. It filled with water during a time when rainfall was heavier than it is now and became a lake until its outlet stream managed to erode a valley deep enough to restore drainage into the Feather River.

It is interesting to note that the Feather River drains this region westward toward and through the high Sierra Mountains. The river would be expected to flow “downhill” away from the high Sierra toward the east. This unexpected direction of flow indicates that the river is older than the outlines of the present landscape and managed to maintain its westward course through all the regional faulting and volcanism of the last several million years. The river was able to erode its channel downward more rapidly than the uplift of the Sierra Nevada block.

The geology of the area is characterized as Q1 (Quaternary lake beds) on the Geologic Map of the Chico Quadrangle, California.

##### Seismicity

There are no active faults in the Project area that have been zoned by the State Geologist under the Alquist-Priolo Earthquake Fault Zoning Act. The nearest seismically active faults are the Mohawk Valley Fault located approximately 10 miles west of the Project site and the Honey Lake Fault located approximately 19 miles to the east. The nearest potentially active fault zone is the Sulphur Creek Fault Zone located approximately 8 miles to the southwest. This fault has an estimated maximum credible earthquake magnitude of 6.5 (*City of Portola, Safety Element, January 11, 2012*).

## Soils

According to the U.S. Department of Agriculture's National Conservation Service's Web Soils Survey for Plumas County, soils at the site are composed of BsA, Bidwell sandy loam, sandy substrate, 0 to 2% slopes: MrC, Mottsville loamy sand, 0 to 2% slopes; and OrB, Ormsby loamy coarse sand, 2 to 5% slopes..

### 3.11.2 Discussion and Mitigation Measures

**Geology and Soils. a. i.** *Would the project directly or indirectly cause 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.*

**Answer: No impact.**

#### Discussion:

The Alquist-Priolo Earthquake Fault Zoning Act identifies special study zones for areas where existing known faults are located. The main purpose of the Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act also required the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. As discussed above, there are no Alquist-Priolo Fault Zones in the Project area. Therefore, no further analysis or mitigation is required.

**Geology and Soils. a. ii.** *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

**Answer: Less than Significant.**

#### Discussion:

The potential for strong seismic ground shaking in the Project area is similar to that in surrounding areas. Because the Proposed Project consists of facilities that are not intended for human habitation, the Proposed Project will not expose people or critical structures to adverse effects resulting from seismic-related ground failure, including liquefaction. In addition, the Proposed Project facilities are specifically designed to withstand seismic conditions anticipated to occur at the Proposed Project site. Seismic conditions expected to occur in the Proposed Project area can be mitigated by special design using reasonable construction and/or maintenance practices common to the Plumas County area. Any potential impacts would be considered less than significant and no further analysis or mitigation is required.

**Geology and Soils. a. iii.** *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

**Answer: Less than Significant.**

#### Discussion:

According to the Plumas County General Plan Draft Environmental Impact Report, the risk of ground shaking and liquefaction (transformation of water-saturated granular soils to a liquid state during ground shaking) in the Project area is considered low. Any potential impacts would be considered less than significant; therefore, no further analysis or mitigation is required.

**Geology and Soils. a. 4.** *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

**Answer: No Impact.**

#### Discussion:

According to the Plumas County General Plan Draft Environmental Impact Report, seismically triggered landslides or other types of ground failure, including expansive soils (those that swell when wet and shrink when dry) and subsidence (gradual settling or sinking of an area with little or no horizontal movement) are not considered a significant hazard in the Project area. Therefore, no further analysis or mitigation is required.

**Geology and Soils. b.** *Would the project result in substantial soil erosion or the loss of topsoil?*

**Answer:** *Less than Significant with Mitigation Incorporated.*

#### Discussion:

The soil types in the Project area have a moderate potential for wind erosion. Up to 28.2 acres of these soils could be exposed during installation of the solar equipment at the Plumas-Sierra Chilcoot site. However, strict adherence to NCPA's best management practices for air quality control would insure that these potential impacts were less than significant.

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

**Answer:** *No Impact.*

#### Discussion:

As stated above, the Project area is not located on a geologic unit or soil that would become unstable. Therefore, no further analysis or mitigation is required.

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

**Answer:** *No Impact.*

#### Discussion:

Expansive soils are largely composed of clay which expand in volume when water is absorbed and shrink when dried. The soils at the Project site are loams which are not susceptible to expansion and shrinking. Therefore, there would be no impacts and no further analysis or mitigation is required.

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

**Answer:** *No Impact.*

#### Discussion:

The Project does not include the use of septic tanks or alternative wastewater disposal systems. Therefore, there are no impacts associated with the use of septic tanks or alternative wastewater disposal systems and no mitigation is required.

**Geology and Soils. f.** *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Answer:** *Less than Significant with Mitigation Incorporated.*

#### Discussion:

There is always the possibility of an inadvertent discovery of paleontological resources during construction. However, NCPA's construction documents for the Project will include the following best management practices:

- ❖ In the unlikely event that potentially significant paleontological materials (e.g., fossils) are encountered during construction of the project, all work shall be halted in the vicinity of the paleontological discovery until a qualified paleontologist can visit the site of discovery, assess the significance of the paleontological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of paleontological material that might be discovered during excavation shall be in accordance with applicable laws and regulations.

#### 3.11.3 Conclusion

Strict adherence to NCPA's best management practices outlined above would insure that no significant impacts to geology and soils would occur; therefore, no further analysis or additional mitigation is required.

## 3.12 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the Project:</i>				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emission of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 3.12.1 Environmental Setting

Under Assembly Bill 32 (AB 32) greenhouse gases (GHGs) are defined as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (NO<sub>2</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF<sub>6</sub>),

GWP is a measure of how much a given mass of greenhouse gas is estimated to contribute to global warming. It is a relative scale that compares the gas in question to the same mass of carbon dioxide (whose GWP by definition is 1). A GWP is calculated over a specific time interval and the value of this must be stated whenever a GWP is quoted or else the value is meaningless. A substance's GWP depends on the time span over which the potential is calculated. A gas which is quickly removed from the atmosphere may initially have a large effect but for longer time periods as it has been removed becomes less important. For the purposes of a CEQA analysis, especially an analysis of operating emissions, the maximum GWP is typically used, regardless of the actual atmospheric lifetime. This approach simplifies the analysis and provides a very conservative analysis, especially for the fluorinated gases. The GWP of the six Kyoto GHGs is shown in Table 3.12-1 [U.S. EPA ([www.epa.gov](http://www.epa.gov))].

**Table 3.12-1  
Global Warming Potential of Kyoto GHGs**

Gas	Atmospheric Lifetime	GWP
Carbon Dioxide (CO <sub>2</sub> )	50 – 200	1
Methane (CH <sub>4</sub> )	12 ± 3	21
Nitrous Oxide (NO <sub>2</sub> )	120	310
HFC-23 (Hydrofluorocarbons)	264	11,700
HFC-32	5.6	650
HFC-125	32.6	2,800
HFC-134a	14.6	1,300
HFC-143a	48.3	3,800
HFC-152a	1.5	140
HFC-227ea	36.5	2,900
HFC-236fa	209	6,300
HFC-4310mee	17.1	1,300
CF <sub>4</sub> (Perfluorocarbons)	50,000	6,500
C <sub>2</sub> F <sub>6</sub>	10,000	9,200
C <sub>4</sub> F <sub>10</sub>	2,600	7,000
C <sub>6</sub> F <sub>14</sub>	3,200	7,400
Sulfur Hexafluoride (SF <sub>6</sub> )	3,200	23,900

Source: U.S. EPA ([www.epa.gov](http://www.epa.gov))

According to the California Air Resources Board's *California Greenhouse Gas Emission for 2000 to 2016 Trends of Emissions and Other Indicators*, California uses the annual statewide greenhouse gas (GHG) emission inventory to track progress toward meeting statewide GHG targets. The inventory for 2016 shows that California's GHG emissions continue to

decrease, a trend observed since 2007. In 2016, emissions from routine GHG emitting activities statewide were 429 million metric tons of CO<sub>2</sub> equivalent (MMTCo<sub>2e</sub>), 12 MMTCo<sub>2e</sub> lower than 2015 levels. This puts total emissions just below the 2020 target of 431 million metric tons. Emissions vary from year-to-year depending on the weather and other factors, but California will continue to implement its greenhouse gas reductions program to ensure the state remains on track to meet its climate targets in 2020 and beyond. These reductions come while California's economy grows and continues to generate jobs. Compared to 2015, California's GDP grew 3% while the carbon intensity of its economy declined by 6%.

- ❖ The largest reductions came from the electricity sector which continues to see decreases as a result of the state's climate policies, which led to growth in wind generation and solar power, including growth in both rooftop and large solar array generation.
- ❖ The abundant precipitation in 2016 provided higher hydropower to the state.
- ❖ The industrial sector shows a slight decrease in emissions in the past two years.
- ❖ The transportation sector remains the largest source of GHG emissions in the state and saw a 2% increase in emissions in 2016.
- ❖ Emissions from the remaining sectors are relatively constant in recent years, although emissions from high Global Warming Potential (GWP) gases also continued to increase as they replace Ozone Depleting Substances (ODS) banned under the 1987 Montreal Protocol.

### 3.12.2 Discussion and Mitigation Measures

**Greenhouse Gas Emissions. a.** *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?*

**Answer: No Impact.**

#### Discussion:

As shown in the Air Quality section, construction of the Project would generate exhaust emissions, including GHGs, from the construction equipment and on-road vehicles. The carbon dioxide equivalent of those emissions (CO<sub>2</sub> and CH<sub>4</sub>) are estimated at 275 metric tons during 2019. The Northern Sierra AQMD has not established threshold limits for GHGs. However, NCPA established a de minimus level of 1,100 metric tons per year. Based on this threshold limit, emissions of GHGs during construction of the Project would be less than significant. Therefore, no further analysis or mitigation is required.

Operation of the Project has the potential to lower GHG emissions as the production of solar power does not produce GHGs as opposed to fossil fuel or gas-fired generation facilities.

**Greenhouse Gas Emissions. b.** *Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emission of greenhouse gases?*

**Answer: No Impact.**

#### Discussion:

As previously stated in the Energy section, the addition of approximately 4.90 MW<sub>dc</sub> of renewable energy generation would assist NCPA and the Plumas Sierra Rural Electric Cooperative in meeting its goals of a 50 percent Renewable Portfolio Standard (RPS) by 2030. Therefore, implementation of the Project would not conflict or obstruct implementation of that plan. Consequently, no further analysis or mitigation is required.

### 3.12.3 Conclusion

No significant impacts were identified; therefore, no further analysis or mitigation is required.

### 3.13 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably upset 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 handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that 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, and if so, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.13.1 Environmental Setting

##### Hazards

##### *Seismic and Geologic Hazards*

Seismic and geologic hazards were discussed in Section 3.11.

##### *Fire*

According to Cal Fire maps, the Project site is within a State Responsibility Area and classified as a Moderate Fire Hazard Severity Zone.

##### *Flooding*

The Project site is shown on the Federal Emergency Management Agency's Flood Insurance Rate Map 06063C1375F as an Area of Minimal Flood Risk (Zone X).

##### Hazardous Materials

Several standard environmental record services are available to determine the potential for recognized environmental conditions in an area. Those databases are briefly described in the following paragraphs.

### ***Superfund Enterprise Management System (SEMS)***

In 2014, the Superfund Program implemented a new information system, the Superfund Enterprise Management System (SEMS). SEMS integrates multiple legacy systems (e.g., CERCLIS, ICTS, SDMS) into a comprehensive tracking and reporting tool, providing data on the inventory of active and archived hazardous waste sites evaluated by the Superfund program. It contains sites that are either proposed to be, or are on, the National Priority List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. SEMS also includes information from the California Department of Toxic Substances Control's Envirostor database. The SEMS search did not reveal any sites near the Project site.

### ***Envirostor***

Envirostor is a database maintained and primarily used by the California Department of Toxic Substances Control (DTSC) to determine the location of all hazardous waste sites. The Envirostor search did not reveal any active sites near the Project site.

### ***Geotracker***

Geotracker is the State Water Resources Control Board's data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites. The Geotracker search did not reveal any active sites near the Project site.

### ***Leaking Underground Storage Tank Information System (LUSTIS)***

The State Water Resources Control Board (State Water Board) administers the Leaking Underground Storage Tank Information System (LUSTIS). The LUSTIS database includes all reported leaks from underground storage tanks. The LUSTIS database is now reported in the Geotracker results.

### ***Site Mitigation Program Property Database (formerly CalSites)***

The California Environmental Protection Agency's Department of Toxic Substances Control (DTSC) administers the CalSites program. Information in the CalSites database is preliminary in nature; therefore, most sites listed in the database need additional work to determine if contamination exists. There are no sites in the CalSites database within the Project area.

### ***Hazardous Waste and Substances Sites List (Cortese)***

California's Government Code §65962.5 requires the California Department of Toxic Substances Control to develop, at least annually, an updated list of Hazardous Waste and Substances Sites. This list, known as the Cortese List, is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local agencies are required to provide additional hazardous materials release information for the Cortese List. The Cortese List is to be submitted to the Secretary of the California Environmental Protection Agency. There are no sites on the Cortese List within the Project area.

### ***Solid Waste Information System (SWIS)***

The Solid Waste Information System (SWIS) is a database provided by the California Department of Resources Recycling and Recovery (CalRecycle) which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations. There are no active sites in the SWIS database within the Project area.

### 3.13.2 Discussion and Mitigation Measures

**Hazards and Hazardous Materials. a.** *Would the project create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?*

**Answer:** *Less than Significant with Mitigation Incorporated.*

#### Discussion:

Implementation of the proposed Project would not create any significant hazards as a result of the routine transport, use, storage, or disposal of hazardous materials. However, construction would include the temporary use and transport of fuels, lubricating fluids, solvents and other hazardous materials. The contractor would be required to adhere to the requirements of a *Health and Safety Plan* that it would develop for the Project pursuant to Chapter 6.95, Division 20 of the Health and Safety Code (§§ 25500—25532) as shown in the following mitigation measures.

- ❖ During Project construction, the construction contractor shall implement the following measures to address the potential environmental constraints associated with the presence of hazardous materials associated construction of the Project to the satisfaction of NCPA:
  - The contractor shall prepare a Health and Safety Plan in compliance with the requirements of Chapter 6.95, Division 20 of the Health and Safety Code (§25500 – 25532). The plan shall include measures to be taken in the event of an accidental spill.
  - The contractor shall enforce strict on-site handling rules to keep construction and maintenance materials out of receiving waters and storm drains. In addition, the contractor shall store all reserve fuel supplies only within the confines of designated construction staging areas; refuel equipment only with the designated construction staging areas; and regularly inspect all construction equipment for leaks.
  - The construction staging area shall be designed to contain contaminants such as oil, grease, and fuel products to ensure that they do not drain towards receiving waters or storm drain inlets.

**Hazards and Hazardous Materials. b.** *Would the project create a significant hazard to the public or the environment through reasonably upset accident conditions involving the release of hazardous materials into the environment?*

**Answer:** *Less than Significant with Mitigation Incorporated.*

#### Discussion:

Construction equipment used to construct the Project facilities would have the potential to release oils, grease, solvents and other finishing products through accidental spills. However, adherence to the above mitigation measures would result in less-than-significant impacts. Therefore, no further analysis or additional mitigation is required.

**Hazards and Hazardous Materials. c.** *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

**Answer:** *No Impact.*

#### Discussion:

There are no known schools, existing or proposed, within one-quarter mile of the Project site. Therefore, no further analysis or mitigation is required.

**Hazards and Hazardous Materials. d.** *Would the project be located on a site that 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?*

**Answer: No Impact.**

#### Discussion:

Several standard environmental record services are available to determine the potential for recognized environmental conditions in an area. Those databases include:

- ❖ Superfund Enterprise Management System (SEMS)
- ❖ Envirostor
- ❖ Geotracker
- ❖ Site Mitigation Program Property Database (formerly CalSites)
- ❖ Hazardous Waste and Substances Sites List (Cortese)
- ❖ Solid Waste Information System (SWIS)

These databases were searched for the presence of hazardous materials sites within the Project area. According to those databases, there are no active sites in the Project area. Therefore, no further analysis or mitigation is required.

**Hazards and Hazardous Materials. e.** *Would the project be 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, and if so, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

**Answer: No Impact.**

#### Discussion:

The closest airport to the Project site is the Plumas County Nervino Airport which is located approximately 10 miles west of the Project site. Therefore, there would be no impacts and no further analysis or mitigation is required.

**Hazards and Hazardous Materials. f.** *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**Answer: No Impact.**

#### Discussion:

Implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan as it would not be constructed within public rights-of-way. Therefore, there would be no impacts and no further analysis or mitigation is required.

**Hazards and Hazardous Materials. h.** *Would the project expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?*

**Answer: No Impact.**

#### Discussion:

The Project area is within a moderate fire severity zone and a state fire responsibility area. Implementation of the Project would include the installation of solar panels in an area that is presently vacant land and subject to the growth of wild vegetation. Removal of this vegetation would lower the fire danger of the site. Therefore, there would be no impacts and no further analysis or mitigation is required.

### 3.13.3 Conclusion

Implementation of the above mitigation measures will ensure that the impacts associated with hazards and hazardous materials are reduced to a less than significant level and no further environmental review or mitigation is required.

### 3.14 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
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 ground management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.14.1 Environmental Setting

The Project site is within the Middle Fork Feather River Basin. The Feather River is a major tributary to the Sacramento River which drains 27,210 square miles. The Feather River falls under the jurisdiction of the California Regional Water Quality Control Board, Central Valley Region. The Regional Board has established beneficial uses and water quality objectives for the Feather River in its Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin.

The Feather River was designated a Wild and Scenic River by Congress in 1968. Thus, it is under the jurisdiction of the Plumas National Forest. Public Law 92-542 (October 2, 1968) declares that "...certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreation, geologic, fish and wildlife, historic, cultural or other similar values shall be preserved in free-flowing condition, and that their immediate environs shall be protected for the benefit and enjoyment of present and future generations." The Act continues, "...the appropriate Secretary shall issue guidelines, specifying standards for local zoning ordinances, which are consistent with the purposes of the Act. The standards specified in such guidelines shall have the object of (A) prohibiting new commercial or industrial uses other than commercial or industrial uses which are consistent with purposes of the Act, and (B) the protection of the bank lands by means of acreage, frontage, and setback requirements on development." (*City of Portola Conservation and Open Space Element, January 11, 2012*).

The Project site lies over the Sierra Valley Groundwater Basin. The Basin covers 125,250 acres and has an estimated storage capacity of 7,500,000 acre-feet.

#### 3.14.2 Discussion and Mitigation Measures

**Hydrology and Water Quality. a.** *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

**Answer:** *Less than Significant with Mitigation Incorporated.*

#### Discussion:

Generally, during site grading and excavation activities, bare soil would be exposed to wind and water erosion. If precautions are not taken to contain sediments, construction activities could produce sediment laden storm runoff. In addition to increased erosion potential, hazardous materials associated with construction equipment could adversely affect water quality if spilled or stored improperly. (See Section 3.13.2 for a full discussion and mitigation measures associated with hazardous materials.) Implementation of the following mitigation measures would insure that all impacts to water quality were less than significant.

- ❖ All site grading and excavation activities associated with the construction of the Project facilities would be subject to the provisions of the National Pollutant Discharge Elimination System (NPDES) Construction Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities [NPDES No. CAS000002 (State Water Resources Control Board Order No. 2009-0009-DWQ)]. Compliance with the provisions of that Order would require NCPA to obtain coverage before the onset of construction activities. Construction activities would comply with the conditions of these permits that include preparation of storm water pollution prevention plans (SWPPP), implementation of BMP's, and monitoring to insure impacts to water quality are minimized. As part of this process, multiple BMP's should be implemented to provide effective erosion and sediment control. These BMP's should be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMP's to be implemented may include, but not be limited to, the following:
  - ✓ Temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other groundcover shall be employed for disturbed areas.
  - ✓ Storm drain inlets on the site and in downstream offsite areas shall be protected from sediment with the use of BMP's acceptable to NCPA, local jurisdictions and the California Regional Water Quality Control Board, Central Valley Region.
  - ✓ Dirt and debris shall be swept from paved streets in the construction zone on a regular basis, particularly before predicted rainfall events.
  - ✓ No disturbed surfaces shall be left without erosion control measures in place. NCPA, or its Construction Contractor, shall file a Notice of Intent with the Regional Board and require the preparation of a pollution prevention plan prior to commencement of construction. NCPA shall routinely inspect the construction site to verify that the BMP's specified in the pollution prevention plan are properly installed and maintained. NCPA shall immediately notify the contractor if there were a noncompliance issue and require immediate compliance.
- ❖ The SWPPP will also identify the method of final stabilization of the site to ensure no post-construction erosion and impacts to water quality will occur. The Notice of Termination (NOT) and release of the Project from the provisions of the Construction General Permit coverage will be granted by the California Regional Water Quality Control Board, Central Valley Region once it is satisfied that no impacts to water quality will occur.

**Hydrology and Water Quality. b.** *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable ground management of the basin?*

**Answer: No Impact.**

#### Discussion:

The proposed Project includes the installation of solar photovoltaic facilities and does not include any facilities to extract groundwater. It will not result in the use of groundwater and thus will not substantially deplete groundwater supplies or interfere with groundwater recharge. Therefore, no further analysis or mitigation is required.

**Hydrology and Water Quality. c.i.** *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*

**Answer: No Impact.**

#### Discussion:

The Project site is essentially level and will require only a minimum amount of grading. The panels will be installed on penetrating piers that would have a negligible effect on runoff from the site. Therefore, no impacts to the existing drainage pattern of the site would occur. Consequently, no further analysis or mitigation is required.

**Hydrology and Water Quality. c.ii.** *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would result in flooding on- or off-site?*

**Answer: No Impact.**

#### Discussion:

As discussed above, no impacts to the existing drainage pattern of the site would occur. Consequently, no further analysis or mitigation is required.

**Hydrology and Water Quality. c.iii.** *Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?*

**Answer: No Impact.**

#### Discussion:

As discussed above, no impacts to the existing drainage pattern of the site would occur. Consequently, no further analysis or mitigation is required.

**Hydrology and Water Quality. c.iv.** *Would the project impede or redirect flood flows?*

**Answer: No Impact.**

#### Discussion:

As discussed above, no impacts to the existing drainage pattern of the site would occur. Consequently, no further analysis or mitigation is required.

**Hydrology and Water Quality. d.** *Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

**Answer: No Impact.**

#### Discussion:

According to the Federal Emergency Management Agency's Flood Insurance Rate Map 06063C1375E, the proposed Project site is within an Area of Minimal Flood Risk (Zone X). Therefore, there would be no impacts and no further analysis or mitigation is required.

**Hydrology and Water Quality. e.** *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

**Answer: No Impact.**

**Discussion:**

As shown above, the Project would have no effect on water quality and therefore would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Consequently, no further analysis or mitigation is required.

**3.14.3 Conclusion**

Implementation of the above mitigation measures would insure that the impacts to water quality would be less than significant.

### 3.15 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.15.1 Environmental Setting

The proposed Project site is a vacant parcel that has a small rural residential development to the west and a small industrial facility to the east. Its northern boundary is State Route 70 and its southern boundary is the Union Pacific Railroad. It is designated as Suburban (S-1) in the Plumas County General Plan. Public facilities, such as solar installations, are permitted uses in this land use designation.

#### 3.15.2 Discussion and Mitigation Measures

**Land Use and Planning. a.** *Would the project physically divide an established community?*

**Answer:** No Impact.

##### Discussion:

As stated above, there is a small rural residential area to the west of the Project site; however, implementation of the Project would not change the access to this rural subdivision and, therefore, not physically divide an established community. Consequently, no further analysis or mitigation is required.

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

**Answer:** No Impact.

##### Discussion:

As stated above, solar installations are permitted uses in the designated land use. Therefore, no further analysis or mitigation is required.

#### 3.15.3 Conclusions

No significant effects were identified; therefore, no further analysis or mitigation is required.

### 3.16 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a. Result in the loss of availability of a known 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"/>

#### 3.16.1 Environmental Setting

According to the Plumas County Land Use Map, there are no mineral resources sites within the Project area.

#### 3.16.2 Discussion and Mitigation Measures

**Mineral Resources. a.** *Would the project result in the loss of availability of a known resource that would be of value to the region and the residents of the state?*

**Answer:** No Impact.

##### Discussion:

There are no known mineral resources in the Project area that would be of value to the region and the residents of the State. Therefore, there would be no impacts anticipated and no mitigation is required.

**Mineral Resources. b.** *Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

**Answer:** No Impact.

##### Discussion:

There are no locally-important mineral resource recovery sites delineated on the applicable local general plans, specific plan or other land use plan in the Project area. Therefore, there would be no impacts anticipated and no mitigation is required.

#### 3.16.3 Conclusion

No impacts are anticipated; therefore, no further analysis or mitigation is required.

### 3.17 Noise

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project result in:</i>				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Generation of excessive groundbourne vibration or groundbourne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.17.1 Environmental Setting

The ambient noise level of a region is the total noise generated within the specific environment and is usually composed of sounds emanating from natural and manmade sources. Noise levels monitored in a region tend to have wide spatial and temporal variation due to the great diversity of contributing sources. This is especially true for the greater project area with its blend of rural land uses adjacent to a mix of residential and industrial uses.

Characterization of the Project area noise levels is difficult due to the lack of actual field measurements. Very little noise measurement data are available for the Project area in general. However, typical noise levels for areas like the Project area are in the range of 45 to 55 dB(A).

Generally, the noise levels in the Project area are affected by natural and manmade sources. However, the sound levels are more strongly influenced by human rather than natural sound sources. Within the Project area, the major sources of noise include aircraft and vehicular traffic, including trains.

#### 3.17.2 Discussion and Mitigation Measures

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

**Answer:** *No Impact.*

#### Discussion:

Plumas County has not adopted a noise ordinance relative to construction noise. Consequently, no further analysis or mitigation is required.

**Noise. b.** *Would the project result in generation of excessive groundbourne vibration or groundbourne noise levels?*

**Answer:** *No Impact.*

#### Discussion:

Construction activities associated with the Project could result in some minor amount of ground vibration. The California Department of Transportation (Caltrans) has developed a vibration manual. According to that manual, the use of large bulldozers, vibratory rollers, and loaded trucks during grading activities could produce vibration. Depending on the level of vibration, the vibration could cause annoyance or damage structures within the project vicinity. Caltrans has developed a screening tool to determine if vibration from construction equipment is substantial enough to impact surrounding uses. Those thresholds are presented in Tables 3.17-1 and 3.17-2.

**Table 3.17-1**

**Vibration Damage Potential Threshold Criteria**

Structural Integrity	Maximum PPV (in/sec)	
	Transient	Continuous
Historic and some older buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial and commercial structures	2.00	0.50

**Table 3.17-2**

**Vibration Annoyance Potential Threshold Criteria**

Human Response	Maximum PPV (in/sec)	
	Transient	Continuous
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.90	0.10
Severely perceptible	2.00	0.40

Construction equipment, such as bulldozers, are repetitive sources of vibration; therefore, the continuous threshold should be used in the vibration analysis for this project. The nearest residences to any part of the project site is approximately 150 feet. As shown in Table 3.17-3, the ground vibration from small bulldozers and loaded trucks would not be perceptible to those residences within 150 feet of the construction activity.

**Table 3.17-3**

**Construction Vibration Impacts**

Equipment	PPVref	Distance (feet)	PPV (in/sec)
Small Bulldozer	0.003	150	0.0004
Loaded Truck	0.076	150	0.0106

Therefore, no impacts would occur and no further analysis or mitigation is required.

### **3.17.3 Conclusion**

No impacts were identified; therefore, no further analysis or mitigation is required.,

### 3.18 Population and Housing

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

#### 3.18.1 Environmental Setting

The Project area is within U.S. Postal Zip Code Area 96105. The estimated 2018 population for that zip code was 550 with a housing stock of 412 units.

#### 3.18.2 Discussion and Mitigation Measures

**Population and Housing. a.** *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

**Answer:** *No Impact.*

#### Discussion:

The Project includes the installation of solar photovoltaic systems at the Plumas-Sierra Chilcoot site. It does not include construction of homes, businesses or other infrastructure that would induce unplanned population growth. Therefore, no further analysis or mitigation is required.

**Population and Housing. b.** *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

**Answer:** *No Impact.*

#### Discussion:

The Project facilities would be constructed on PSREC-controlled land that does not include housing and therefore would not displace people or housing. Consequently, no further analysis or mitigation is required.

#### 3.18.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

### 3.19 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1. Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.19.1 Environmental Setting

Several entities provide public services to residents in the Project area. They include:

- ❖ Police Protection: Plumas County Sheriff's Department
- ❖ Fire Protection: California Department of Forestry and Fire Protection  
Sierra Valley Fire Protection District
- ❖ Schools: Plumas-Sierra Unified School District

#### 3.19.2 Discussion and Mitigation Measures

**Public Services. a.1.** *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for **fire protection services**?*

**Answer: No Impact.**

#### Discussion:

Implementation of the Project would not result in the need for additional fire protection services because the Project involves a negligible expansion of operations for which fire protection services would be required. Therefore, there would be no impacts anticipated and no mitigation is required.

**Public Services. a.2.** *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for **police protection services**?*

**Answer: No Impact.**

#### Discussion:

Implementation of the Project would not result in the need for additional police protection services because the Project involves a negligible expansion of operations for which police services would be required. Additional police protection services (e.g., equipment, sworn officers) would not be required. Therefore, there would be no impacts anticipated and no mitigation is required.

**Public Services. a.3.** *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?*

**Answer:** No Impact.

#### Discussion:

Implementation of the Project would not result in a need for additional schools because the Project does not include the development of residential uses for which school services would be required. Therefore, there would be no impacts anticipated and no mitigation is required.

**Public Services. a.4.** *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?*

**Answer:** No Impact.

#### Discussion:

Implementation of the Project would not result in a need for additional park facilities because the Project does not include the development of uses for which public parks would be required. Therefore, there would be no impacts anticipated and no mitigation is required.

**Public Services. a.5.** *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public services?*

**Answer:** No Impact.

#### Discussion:

Implementation of the Project would not result in a need for expansions to other public services. Therefore, there would be no impacts anticipated and no mitigation is required.

### 3.19.3 Conclusion

There were no significant impacts identified; therefore, no further analysis or mitigation is required.

### 3.20 Recreation

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

#### 3.20.1 Environmental Setting

There are many acres of forest service lands as well as several parks, golf courses and water-oriented recreational facilities in the greater Project area.

#### 3.20.2 Discussion and Mitigation Measures

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

**Answer: No Impact.**

##### Discussion:

The proposed Project would not increase the use or demand for park or recreational facilities because the Project does not include the development of uses that would place demands on these facilities, such as residential dwellings or office employment. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

**Recreation. b.** *Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?*

**Answer: No Impact.**

##### Discussion:

The Project does not include recreational facilities. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

#### 3.20.3 Conclusion

No significant impacts were identified; therefore, no further analysis or mitigation is required.

### 3.21 Transportation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a. Conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian paths?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. For a transportation project, would the project conflict with CEQA Guidelines section 15064.3, subdivision (b)(3)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.23.1 Environmental Setting

Regional access to the Project sites is via State Highways 49 and 70.

The California Department of Transportation’s (Caltrans) latest traffic counts (2017) for these highways near the Project area are shown in Table 3.23-1.

**Table 3.23-1  
Selected Traffic Counts by Caltrans  
(2017)**

Location	Southbound or Westbound			Northbound or Eastbound		
	Peak Hour	Peak Month	AADT <sup>1</sup>	Peak Hour	Peak Month	AADT <sup>1</sup>
<b>Highway 49</b>						
Junction Highway 70	120	1,300	1,050	--	--	--
<b>Highway 70</b>						
Junction Highway 49	460	4,550	3,450	500	5,300	4,000

<sup>1</sup> AADT = Average Annual Daily Traffic  
Source: Caltrans 2019, [www.dot.ca.gov](http://www.dot.ca.gov) (4/21/2019)

#### 3.23.2 Discussion and Mitigation Measures

**Transportation. a.** *Would the project conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian paths?*

**Answer: No Impact.**

#### Discussion:

The Project consists of solar photovoltaic installation at the Plumas-Sierra Chilcoot site. Therefore, the Project would not conflict with a plan, ordinance or policy addressing the circulation system. Consequently, no further analysis or mitigation is required.

**Transportation. b.** *For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?*

**Answer: No Impact.**

**Discussion:**

The Project is not a land use project; therefore, this potential impact category would not apply to the Project. Consequently, there would be no impacts anticipated and no further analysis or mitigation is required.

*Transportation. c. For a transportation project, would the project conflict with CEQA Guidelines section 15064.3, subdivision (b)(3)??*

*Answer: No Impact.*

**Discussion:**

The Project is not a transportation project; therefore, this potential impact category would not apply to the Project. Consequently, there would be no impacts anticipated and no further analysis or mitigation is required.

*Transportation. d. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

*Answer: No Impact.*

**Discussion:**

Implementation of the Project would not substantially increase other hazards due to a geometric design feature or incompatible uses. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

*Transportation. e. Would the project result in inadequate emergency access?*

*Answer: No Impact.*

**Discussion:**

Implementation of the Project would not result in inadequate emergency access. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

**3.23.3 Conclusion**

No impacts were identified; therefore, no further analysis or mitigation is required.

### 3.24 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, 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:				
1) Listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code §5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) A resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.24.1 Environmental Setting

##### AB 52 Coordination

On April 10, 2019, K.S. Dunbar & Associates, Inc., sent a request to the Native American Heritage Commission to perform a search of its Sacred Lands file. Subsequently, on April 12, 2019, Gayle Totton, B.S., M.A., Ph.D., Associate Program Analyst, responded in an email to Keith S. Dunbar in which she stated:

*A record search of the Native American Heritage Commission (NAHC) Sacred Lands file (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.*

Also, on April 12, 2019, K.S. Dunbar & Associates, Inc., emailed AB 52 Notifications to the following based on Dr. Totton's recommended Native American Contact List:

Glenda Nelson, Chairperson  
 Enterprise Rancheria of Maidu Indians  
 2133 Monte Vista Avenue  
 Oroville, California 95966  
[info@enterpriserancheria.us](mailto:info@enterpriserancheria.us)

Kyle Self, Chairman  
 Greenville Rancheria of Maidu Indians  
 Post Office Box 279  
 Greenville, California 95947-0279  
[kself@greenvillerancheria.com](mailto:kself@greenvillerancheria.com)

Benjamin Clarke, Chairperson  
 Mooretown Rancheria of Maidu Indians  
 #1 Alverde Drive  
 Oroville, California 95966  
[frontdesk@mooretown.org](mailto:frontdesk@mooretown.org)

Melany Johnson  
Tribal Historic Preservation Officer  
Susanville Indian Rancheria  
745 Joaquin Street  
Susanville, California 96130  
[mjohnson@siir-nsn.gov](mailto:mjohnson@siir-nsn.gov)

Grayson Coney, Cultural Director  
T'SI-akim Maidu  
Post Office Box 510  
Browns Valley, California 95918-0510  
[tsi-akim-maidu@att.net](mailto:tsi-akim-maidu@att.net)

Darrel Cruz, Cultural Resources Department  
Washoe Tribe of Nevada and California  
919 Highway 395 South  
Gardnerville, Nevada 89410  
[darrel.cruz@washoetribe.us](mailto:darrel.cruz@washoetribe.us)

To date, none of these tribes have responded to the Notification or asked for formal consultation.

During the preparation of its cultural resources assessment for the Project, Anza Resource Consultants performed a records search at the Northeast Information Center at the Department of Anthropology, California State University, Chico. Based on that search, no historic or cultural resources have been previously identified on the Project site. Anza's complete report is contained in Appendix D.

### 3.24.2 Discussion and Mitigation Measures

**Tribal Cultural Resources. 1).** *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as 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, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code §5020.1(k).*

**Answer: No Impact.**

#### Discussion:

Based on record searches at the Native American Heritage Commission and the California Historic Resources Information System, field surveys and Native American consultation, there are no tribal cultural resources within the Proposed Project area. Therefore, no further analysis or mitigation is required.

**Tribal Cultural Resources. 2).** *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code §5023.1(c), and considering the significance of the resource to a California Native American tribe.*

**Answer: No Impact.**

#### Discussion:

Based on record searches at the Native American Heritage Commission and the California Historic Resources Information System, field surveys and Native American consultation, there are no tribal cultural resources within the Proposed Project area. Therefore, no further analysis or mitigation is required.

### 3.24.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

### 3.25 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.25.1 Environmental Setting

Several entities provide utilities and service systems within the Project area including:

- ❖ Water Individual wells.
- ❖ Wastewater On-site individual disposal systems.
- ❖ Electricity Plumas Sierra Rural Electric Cooperative.
- ❖ Natural Gas None.
- ❖ Trash Intermountain Disposal.

#### 3.25.2 Discussion and Mitigation Measures

**Utilities and Service Systems. a.** *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?*

**Answer: No Impact.**

#### Discussion:

The Project includes the construction and operation of a solar photovoltaic system at the Plumas-Sierra Chilcoot site. It will not result in the relocation or construction of new or expanded services. The connections to the local electrical grid are immediately adjacent to the Project site. The local grid has the capacity to accept the additional electricity generated by the Project. Therefore, there would be no impacts and no further analysis or mitigation is required.

**Utilities and Service Systems. b.** *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

**Answer: No Impact.**

#### Discussion:

The Project will require a minimal amount of water to periodically clean the solar panels. It is anticipated that the required water would be trucked to the site for this use. Therefore, there would be no impacts and no further analysis or mitigation is required.

**Utilities and Service Systems. c.** *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

**Answer: No Impact.**

#### Discussion:

The Project will not require wastewater service. Therefore, there would be no impacts and no further analysis or mitigation is required.

**Utilities and Service Systems. d.** *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

**Answer: No Impact.**

#### Discussion:

The Project will not generate solid waste. Therefore, there would be no impacts and no further analysis or mitigation is required.

**Utilities and Service Systems. e.** *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

**Answer: No Impact.**

#### Discussion:

The Project would comply with all federal, state and local regulations related to solid waste. Therefore, there would be no impacts and no further analysis or mitigation is required.

### 3.25.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

### 3.26 Wildfire

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>				
a. Impair and adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risks or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.26.1 Environmental Setting

Data provided by the California Department of Forestry and Fire Protection (Calfire) indicate that the Project area is within a state fire responsibility area which has been designated a moderate fire severity zone.

#### 3.26.2 Discussion and Mitigation Measures

**Wildlife. a.** *Would the project impair an adopted emergency response plan or emergency evacuation plan?*

**Answer:** No Impact.

#### Discussion:

As discussed in the Transportation section, the Project would not impair an adopted emergency response plan. Therefore, no further analysis or mitigation is required;

**Wildlife. b.** *Would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

**Answer:** No Impact.

#### Discussion:

The Project site is relatively flat with only a moderate risk of wildland fires. Implementation of the Project would remove combustible vegetation from the site which would actually lower the risk of wildfires. Therefore, there would be no adverse impacts and no further analysis or mitigation is required.

**Wildlife. c.** *Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risks or that may result in temporary or ongoing impacts to the environment?*

**Answer:** No Impact.

#### Discussion:

The Project would be connected to the local electrical grid. However, the connections would be made immediately adjacent to the Project site and be underground. Therefore, there would be no impacts and no further analysis or mitigation is required.

*Wildlife. d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

**Answer: No Impact.**

#### Discussion:

The Project area is relatively flat and not subject to flooding or landslides. In addition, as stated above, implementation of the project would actually lower the potential for wildland fires on the site. Therefore, there would be no adverse impacts and no further analysis or mitigation is required.

### 3.26.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

### 3.27 Mandatory Findings of Significance

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

#### 3.27.1 Discussion and Mitigation Measures

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

**Answer:** *Less than Significant with Mitigation Incorporated.*

#### Discussion:

Compliance with the mitigation measures included in Sections 3.5 through 3.26 above will ensure that implementation of the proposed Project does not have the potential to significantly 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.

**Mandatory Findings of Significance. b.** *Would the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)*

**Answer:** *Less than Significant with Mitigation Incorporated.*

#### Discussion:

Compliance with the mitigation measures included in Sections 3.5 through 3.26 above will ensure that implementation of the proposed Project does not have impacts that are individually limited, but cumulatively considerable. NCPA is not aware of any other projects in the area that could result in cumulative construction impacts.

**Mandatory Findings of Significance. c.** *Would the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*

**Answer:** *Less than Significant with Mitigation Incorporated.*

**Discussion:**

Compliance with the mitigation measures included in Sections 3.5 through 3.26 above will ensure that implementation of the proposed Project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

**3.27.2 Conclusion**

All potential significant impacts associated with the proposed Project can be mitigated to a less than significant level. Therefore, no further environmental review or mitigation is required.

## 4 Persons and Organizations Consulted

On July 1, 2019, K.S. Dunbar & Associates, Inc., the Northern California Power Agency's environmental consultant, mailed copies of the Notice of Intent to Adopt a Mitigated Negative Declaration with a link to the Northern California Power Agency's website where the Initial Study and Mitigated Negative Declaration could be electronically downloaded to the following;

### 4.1 Federal Agencies

Jennifer Norris, Field Supervisor  
Sacramento Fish & Wildlife Office  
U.S. Fish & Wildlife Service  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825-1888

Michael S. Jewell, Chief  
Regulatory Division  
U.S. Army Corps of Engineers – Sacramento District  
1325 J Street, Room 1350  
Sacramento, California 95814-2922

Amy Dutschke, Regional Director  
Pacific Region Regional Office  
Bureau of Indian Affairs  
U.S. Department of the Interior  
2800 Cottage Way, Room W-2820  
Sacramento, California 94825-1885

### 4.2 State Agencies

Scott Morgan, Director  
State Clearinghouse  
Governor's Office of Planning and Research  
Post Office Box 3044  
Sacramento, California 95812-3044

Tina Bartlett, Regional Manager  
North Central Region (Region 2)  
California Department of Fish and Wildlife  
1701 Nimbus Road  
Rancho Cordova, California 95670

Clint Snider, Assistant Executive Officer  
California Regional Water Quality Control Board, Central Valley Region  
364 Knollcrest Drive, Suite 205  
Redding, California 96002

Julianne Polanco  
State Historic Preservation Officer  
Office of Historic Preservation  
California Department of Parks and Recreation  
1725 23<sup>rd</sup> Street, Suite 100  
Sacramento, California 95816-7100

Wade Crowfoot, Secretary  
California Natural Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento, California 95814

t

Christina Snider, Executive Secretary  
California Native American Heritage Commission  
1550 Harbor Boulevard, Suite 100  
West Sacramento, California 95691-3830

## 4.3 County Agencies

Gretchen Bennitt  
Air Pollution Control Officer  
Northern Sierra Air Quality Management District  
200 Lytton Drive, Suite 320  
Grass Valley, California 95945

Randy Wilson, Planning Director  
Plumas County  
555 Main Street  
Quincy, California 95971

## 4.4 City Agencies

Tom Cooley, Mayor  
City of Portola  
35 Third Avenue  
Portola, California 96122

## 4.5 Interested Entities

Jason Harston, Manager  
Engineering and Operations  
Plumas Sierra Rural Electric Cooperative  
73233 State Route 70  
Portola, California 96122-7069

Glenda Nelson, Chairperson  
Enterprise Rancheria of Maidu Indians  
2133 Monte Vista Avenue  
Oroville, California 95966  
[info@enterpriserancheria.us](mailto:info@enterpriserancheria.us)

Kyle Self, Chairman  
Greenville Rancheria of Maidu Indians  
Post Office Box 279  
Greenville, California 95947-0279  
[kself@greenvillerancheria.com](mailto:kself@greenvillerancheria.com)

Benjamin Clarke, Chairperson  
Mooretown Rancheria of Maidu Indians  
#1 Alverde Drive  
Oroville, California 95966  
[frontdesk@mooretown.org](mailto:frontdesk@mooretown.org)

Melany Johnson  
Tribal Historic Preservation Officer  
Susanville Indian Rancheria  
745 Joaquin Street  
Susanville, California 96130  
[mjohnson@sir-nsn.gov](mailto:mjohnson@sir-nsn.gov)

Grayson Coney, Cultural Director  
T'SI-akim Maidu  
Post Office Box 510  
Browns Valley, California 95918-0510  
[tsi-akim-maidu@att.net](mailto:tsi-akim-maidu@att.net)

Darrel Cruz, Cultural Resources Department  
Washoe Tribe of Nevada and California  
919 Highway 395 South  
Gardnerville, Nevada 89410  
[darrel.cruz@washoetribe.us](mailto:darrel.cruz@washoetribe.us)

## 5 Report Authors/Contributors

### 5.1 Report Authors

This Initial Study and Mitigated Negative Declaration was prepared under contract to the Northern California Power Agency by:

**K.S. Dunbar & Associates, Inc.**

**Environmental Engineering**

45375 Vista Del Mar  
Temecula, California 92590-4314  
(951) 699-2082  
Cell: (949) 412-2634  
Email: [ksdpe67@gmail.com](mailto:ksdpe67@gmail.com)

Erica D. Dunbar, President  
Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE, Project Manager

**Anza Resource Consultants**

(Cultural Resources)  
Kevin Hunt, President  
Katherine Collins, M.A., RPA, Principal Investigator  
Spencer Bietz, GIS Specialist

**ELMT Consulting**

(Biological Resources)  
Thomas J. McGill, Managing Director  
Travis J. McGill, Director/Biologist

### 5.2 Report Contributors

**Northern California Power Agency**

Ron Yuen, Director of Engineering, Generation Services

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**Appendix A**  
**Mitigated Negative Declaration**



## Mitigated Negative Declaration

### NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site

1. Name of project:	<b>NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site</b>		
2. Project location – Identify street address and cross streets or attach a map showing the project site (preferably a USGS 7½' or 15' topographical map identified by quadrangle name):	See attachment.		
3. Entity or Person undertaking project:			
A. Entity			
(1) Name:	Northern California Power Agency		
(2) Address:	651 Commerce Drive, Roseville, California 95678-6420		
B. Other (Private)			
(1) Name:			
(2) Address:			
<p>Northern California Power Agency, having reviewed the Initial Study of this proposed project, having reviewed the written comments received prior to the public meeting of the Northern California Power Agency, having reviewed the recommendations of the Northern California Power Agency's Staff, does hereby find and declare that the proposed project will not have a significant effect on the environment. A brief statement of the reasons supporting the Northern California Power Agency's findings are as follows:</p> <p style="padding-left: 40px;">The Initial Study concluded that all significant impacts can be reduced to a level of less than significant by implementation of the Mitigation Monitoring and Reporting Program developed for this Project.</p>			
The Northern California Power Agency finds that the Mitigated Negative Declaration reflects its independent judgment. A copy of the Initial Study and Mitigation Monitoring and Reporting Program are attached.			
The location and custodian of the documents and any other materials which constitute the record of proceedings upon which the Northern California Power Agency based its decision to adopt this Mitigated Negative Declaration are as follows:			
Custodian:	Ron Yuen Director of Engineering, Generation Services	Location:	Northern California Power Agency 651 Commerce Driver Roseville, California 95678-6420
Phone:	(916) 781-4258		
Date:		Signature	

## Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service before the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

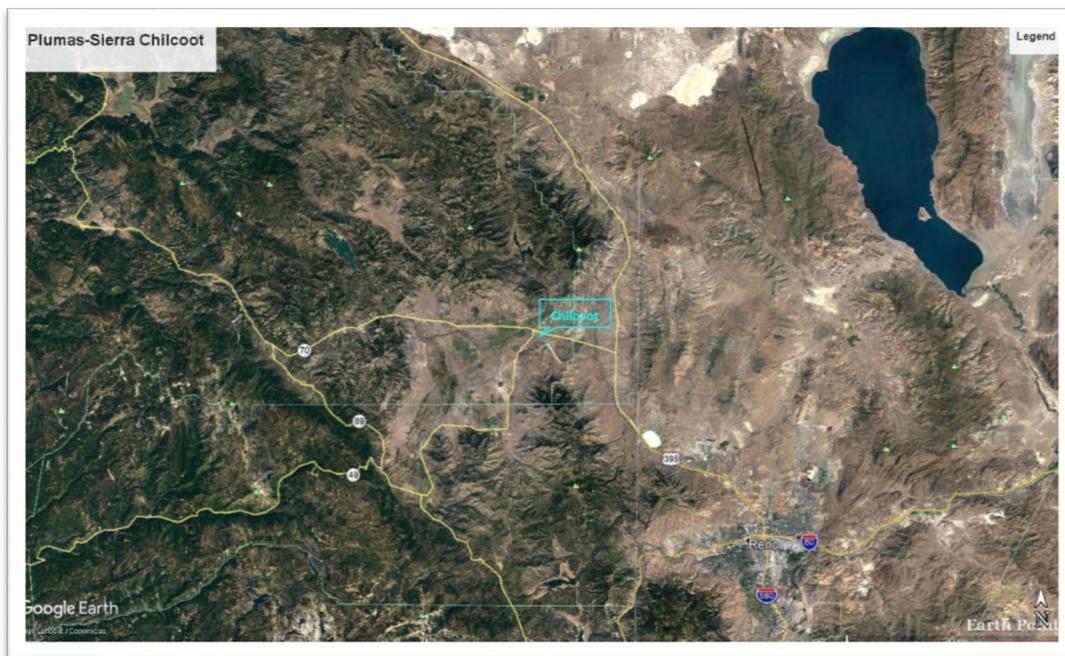
The project will be executed in three phases:

- ❖ Phase 1 – Determine member interest and requirements and identify potential sites.
- ❖ Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- ❖ Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. Plumas-Sierra Rural Electric Cooperative (PSREC) selected a site near Chilcoat for development. That site is the subject of this Initial Study and Mitigated Negative Declaration (IS&MND).

## Location of the Proposed Project

PSREC selected a potential site near the intersection of State Highways 49 and 70 at Chilcoat for further analysis. The location of this site is shown on Figure 1.



**Figure 1 Proposed Photovoltaic Site near Chilcoat**

The Project site is located within a 36-acre vacant parcel located just south of Highway 70 east of its intersection with Highway 49. The site is bordered by Highway 70 to the north, an industrial facility to the east, Union Pacific Railroad to the south, and scattered

residences to the east (Figure 2). This site would accommodate a 5.64 MW<sub>ac</sub> facility with a first-year output of 9,720 megawatt-hours.



**Figure 1 Plumas-Sierra Chilcoat Project Site**

**Appendix B**  
**Air Quality Modeling Results**

**NCPA Solar Project 1**  
**Northern California Power Agency**  
**Estimated Construction Emissions from Off-Road Heavy Duty Construction Equipment During Solar Equipment Installation**

**2019 Construction Year**

Equipment	Emission Factor		Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
	gr/hp-hr	lb/hp-hr						
<b>Reactive Organic Gases (ROG)</b>								
Compressor	0.538	0.00118502	1	106	0.48	8	0.48	
Crane	0.3491	0.00076894	1	399	0.43	8	1.06	
Drill Rig	0.1292	0.00028458	1	291	0.75	8	0.50	
Sweeper	0.2347	0.00051696	1	500	0.68	2	0.35	
Tractors/Backhoes/Loaders	0.3678	0.00139075	1	108	0.55	4	0.33	
Trencher	0.6314	0.00058040	1	63	0.75	4	0.11	
Utility Trucks	0.2635	0.00058040	1	479	0.57	4	0.63	
Water Trucks	0.2635	0.00058040	1	500	0.5	2	0.29	
Totals							3.75	

Equipment	Emission Factor		Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
	gr/hp-hr	lb/hp-hr						
<b>Carbon Monoxide (CO)</b>								
Compressor	3.718	0.00818943	1	106	0.48	8	3.33	
Crane	2.96983	0.00654148	1	399	0.43	8	8.98	
Drill Rig	1.03449	0.00227861	1	291	0.75	8	3.98	
Sweeper	1.23013	0.00270954	1	500	0.68	2	1.84	
Tractors/Backhoes/Loaders	3.63777	0.00845104	1	108	0.55	4	2.01	
Trencher	3.83677	0.00326753	1	63	0.75	4	0.62	
Utility Trucks	1.48346	0.00326753	1	479	0.57	4	3.57	
Water Trucks	1.48346	0.00326753	1	500	0.5	2	1.63	
Totals							25.96	

Equipment	Emission Factor		Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
	gr/hp-hr	lb/hp-hr						
<b>Oxides of Nitrogen (NO<sub>x</sub>)</b>								
Compressor	3.706	0.00816300	1	106	0.48	8	3.32	2.82
Crane	4.29654	0.00946374	1	399	0.43	8	12.99	11.04
Drill Rig	1.55098	0.00341626	1	291	0.75	8	5.96	5.07
Sweeper	2.86598	0.00631273	1	500	0.68	2	4.29	3.65
Tractors/Backhoes/Loaders	3.69287	0.01254423	1	108	0.55	4	2.98	2.53
Trencher	5.69508	0.00587778	1	63	0.75	4	1.11	0.94
Utility Trucks	2.66851	0.00587778	1	479	0.57	4	6.42	5.46
Water Trucks	2.66851	0.00587778	1	500	0.5	2	2.94	2.50
Totals							40.02	34.02

Equipment	Emission Factor		Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
	gr/hp-hr	lb/hp-hr						
<b>Oxides of Sulfur (SO<sub>x</sub>)</b>								
Compressor	0.007	0.00001542	1	106	0.48	8	0.01	
Crane	0.0049	0.00001079	1	399	0.43	8	0.01	
Drill Rig	0.0048	0.00001057	1	291	0.75	8	0.02	
Sweeper	0.0049	0.00001079	1	500	0.68	2	0.01	
Tractors/Backhoes/Loaders	0.0049	0.00001079	1	108	0.55	4	0.00	
Trencher	0.0049	0.00001079	1	63	0.75	4	0.00	
Utility Trucks	0.0049	0.00001079	1	479	0.57	4	0.01	
Water Trucks	0.0049	0.00001079	1	500	0.5	2	0.01	
Totals							0.07	

Equipment	Emission Factor		Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
	gr/hp-hr	lb/hp-hr						
<b>Respirable Particulate Matter (PM<sub>10</sub>)</b>								
Compressor	0.287	0.00063216	1	106	0.48	8	0.26	0.04
Crane	0.173	0.00038106	1	399	0.43	8	0.52	0.08
Drill Rig	0.0479	0.00010551	1	291	0.75	8	0.18	0.03
Sweeper	0.0989	0.00021784	1	500	0.68	2	0.15	0.02
Tractors/Backhoes/Loaders	0.2465	0.00094846	1	108	0.55	4	0.23	0.03
Trencher	0.4306	0.00021366	1	63	0.75	4	0.04	0.01
Utility Trucks	0.097	0.00021366	1	479	0.57	4	0.23	0.04
Water Trucks	0.097	0.00021366	1	500	0.5	2	0.11	0.02
Totals							1.72	0.26

Equipment	Emission Factor		Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
	gr/hp-hr	lb/hp-hr						
<b>Fine Particulate Matter (PM<sub>2.5</sub>)</b>								
Compressor	0.287	0.00063216	1	106	0.48	8	0.26	0.04
Crane	0.1592	0.00035066	1	399	0.43	8	0.48	0.07
Drill Rig	0.0441	0.00009714	1	291	0.75	8	0.17	0.03
Sweeper	0.091	0.00020044	1	500	0.68	2	0.14	0.02
Tractors/Backhoes/Loaders	0.2268	0.00087247	1	108	0.55	4	0.21	0.03
Trencher	0.3961	0.00019670	1	63	0.75	4	0.04	0.01
Utility Trucks	0.0893	0.00019670	1	479	0.57	4	0.21	0.03
Water Trucks	0.0893	0.00019670	1	500	0.5	2	0.10	0.01
Totals							1.60	0.24

Equipment	Emission Factor		Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
	gr/hp-hr	lb/hp-hr						
<b>Carbon Dioxide (CO<sub>2</sub>)</b>								
Compressor	568.299	1.25175991	1	106	0.48	8	510	
Crane	483.1422	1.06418987	1	399	0.43	8	1,461	
Drill Rig	477.0462	1.05076256	1	291	0.75	8	1,835	
Sweeper	480.5735	1.05853194	1	500	0.68	2	720	
Tractors/Backhoes/Loaders	486.8508	1.06897247	1	108	0.55	4	254	
Trencher	485.3135	1.06912599	1	63	0.75	4	202	
Utility Trucks	485.3832	1.06912599	1	479	0.57	4	1,168	
Water Trucks	485.3832	1.06912599	1	500	0.5	2	535	
Totals							6,683	

Equipment	Emission Factor		Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
	gr/hp-hr	lb/hp-hr						
<b>Methane (CH<sub>4</sub>)</b>								
Compressor	0.101	0.00022247	1	106	0.48	8	0.09	
Crane	0.1529	0.00033678	1	399	0.43	8	0.46	
Drill Rig	0.1505	0.00033150	1	291	0.75	8	0.58	
Sweeper	0.152	0.00033480	1	500	0.68	2	0.23	
Tractors/Backhoes/Loaders	0.1537	0.00033833	1	108	0.55	4	0.08	
Trencher	0.1536	0.00033833	1	63	0.75	4	0.06	
Utility Trucks	0.1536	0.00033833	1	479	0.57	4	0.37	
Water Trucks	0.1536	0.00033833	1	500	0.5	2	0.17	
Totals							2.04	

**Appendix C**  
**Biological Resources Technical Report**



May 8, 2019

**K.S. DUNBAR & ASSOCIATES**

Contact: Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F.ASCE  
45375 Vista Del Mar  
Temecula, California 92590

**SUBJECT: Habitat and Jurisdictional Assessment for the Northern California Power Agency Solar Project 1 – Plumas Sierra Chilcoot Site Located Near the Community of Chilcoot, Plumas County, California**

**Introduction**

This report contains the findings of ELMT Consulting’s (ELMT) habitat and jurisdictional assessment for the Northern California Power Agency (NCPA) Solar Project 1 – Plumas Sierra Chilcoot (project site or site) located near the Community of Chilcoot, Plumas County, California. The habitat and jurisdictional assessment was conducted by biologist Travis J. McGill on May 1, 2019 to document baseline conditions and assess the potential for special-status<sup>1</sup> plant and wildlife species to occur within the project site that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the project site to support special-status plant and wildlife species identified by the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDDB), and other electronic databases as potentially occurring in the general vicinity of the project site.

**Project Location**

The project site is generally located west of U.S. Route 395, east of State Route 49, south of State Route 70, and north of the Tahoe National Forest west of the Community of Chilcoot, Plumas County, California. The project site is depicted on the Chilcoot quadrangle of the United States Geological Survey’s (USGS) 7.5-minute topographic map series within Sections 34 and 35 of Township 23 North, Range 16 East. Specifically, the project site is bordered by State Route 70 along its northern boundary, and the Union Pacific (UP) Railroad along its southern boundary with scattered residences to the west, and an existing industrial facility to the east. The site is located approximately 0.5 mile east of State Route 49, and approximately 1 mile west of State Route 284. Refer to Exhibits 1 thru 3 in Attachment A.

**Project Description**

Burns & McDonnell estimated the developable area of the site to be approximately 28.2 acres, or enough

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<sup>1</sup> As used in this report, “special-status” refers to plant and wildlife species that are federally and State listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

land to potentially yield a project size of 4.7 MW (based on an estimate of 6 acres of land needed per MW developed). The project site was positioned in an area to provide reasonable setbacks from the railroad south of the site, the existing residences to the west and the fencing to the east of the site. The proposed technology type for the solar project is horizontal single axis tracker (HSAT).

### **Methodology**

A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. In addition to the literature review, a general habitat assessment or field investigation of the project site was conducted to document existing conditions and assess the potential for special-status biological resources to occur within the project site.

### **Literature Review**

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the CDFW's QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred within the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Google Earth Pro historic aerial imagery (1992-2014);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey<sup>2</sup>;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS Endangered Species Profiles.

The literature review provided a baseline from which to inventory the biological resources potentially occurring within the project site. The CNDDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project site.

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2 A soil series is defined as a group of soils with similar profiles developed from similar parent materials under comparable climatic and vegetation conditions. These profiles include major horizons with similar thickness, arrangement, and other important characteristics, which may promote favorable conditions for certain biological resources.

### Habitat Assessment/Field Investigation

Following the literature review, biologist Travis J. McGill inventoried and evaluated the condition of the habitat within the project site on May 1, 2019. Plant communities and land cover types identified on aerial photographs during the literature review were verified by walking meandering transects throughout the project site. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified on aerial photography were then walked during the field investigation.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Plant species observed during the field investigation were identified by visual characteristics and morphology in the field. Unusual and less familiar plant species were photographed during the field investigation and identified in the laboratory using taxonomical guides. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities and land cover types, and presence of potential jurisdictional drainage and/or wetland features were noted.

### Soil Series Assessment

On-site and adjoining soils were researched prior to the field investigation using the USDA NRCS Soil Survey for Plumas County, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes that the project site have undergone.

### Plant Communities

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009), delineated on an aerial photograph, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community and/or land cover type in acres.

### Plants

Common plant species observed during the field investigation were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

### Wildlife

Wildlife species detected during the field investigation by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are well standardized, scientific names are provided immediately following common names in this report (first reference only).

### Jurisdictional Drainages and Wetlands

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program “My Waters” data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project site.

### Existing Site Conditions

The project site is located on a vacant privately-owned property that is comprised of approximately 30 acres. The site is bordered by the Union Pacific Railroad to the south, scattered residences to the west and an existing industrial facility to the east. The northern edge of the parcel is a presumed city easement that has been excluded as a developable area for the project. According to the Federal Emergency Management Agency (FEMA) data, the site is located within the 500-year flood hazard zone; however, the risk of flooding appears to be low based on observations made during the field investigation and the Union Pacific Railroad to the south.

Elevation on the project site ranges from approximately 4,965 to 4,995 feet above mean sea level and generally slopes from east to west with no areas of significant topographic relief. Based on the NRCS USDA Web Soil Survey, the project site is underlain by the following soil units: Bidwell sandy loam, sandy substratum (0 to 2 percent slopes), Mottsville loamy sand (2 to 9 percent slopes), and Ormsby loamy coarse sand (2 to 5 percent slopes). Refer to Exhibit 4, *Soils*, in Attachment A. Soils on-site have been disturbed by historic cattle grazing and weed abatement activities.

### Vegetation

Due to existing land uses, no native plant communities or natural communities of special concern were observed on or adjacent to the project site. The project site primarily consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances, primarily cattle grazing activities. These disturbances have eliminated the natural plant communities that once occurred within the boundaries of the project site. Refer to Attachment B, *Site Photographs*, for representative site photographs. No native plant communities will be impacted from implementation of the proposed project.

The project site consists of a land cover type that would be classified as disturbed/non-native grassland. Refer to Exhibit 5, *Vegetation* in Attachment A. Plant species observed on and immediately adjacent to the project footprint include Great basin sagebrush (*Artemisia tridentate*), peony (*Paeonia brownii*), filaree (*Erodium sp.*), fiddleneck (*Amsinckia sp.*), short-podded mustard (*Hirschfeldia incana*), mule ear (*Wyethia mollis*), few flowered blue eyed mary (*Collinsia parviflora*), crested wheatgrass (*Agropyron cirstatum*), narrow leaved willow (*Salix exigua*), Mexican rush (*Juncus mexicanus*), Douglas sedge (*Carex douglasii*).

## Wildlife

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed or are expected to occur within the project site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather conditions in which the field investigation was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. The project site provides limited habitat for wildlife species except those adapted to a high degree of anthropogenic disturbances and development.

## Fish

No hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the project site. No fish are expected to occur and are presumed absent from the project site.

## Amphibians

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on the project site. No amphibians are expected to occur and are presumed absent from the project site.

## Reptiles

During the field investigation no reptilian species were observed on the project site. Common reptilian species adapted to a high degree of anthropogenic disturbances that have the potential to occur on the project site include western side-blotched lizard (*Uta stansburiana elegans*), and alligator lizard (*Elgaria multicarinata*). Due to existing site disturbances, no special-status reptilian species are expected to occur within project site.

## Birds

The project site provides foraging and cover habitat for bird species adapted to a high degree of human disturbance. Bird species detected during the field investigation included northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), American crow (*Corvus brachyrhynchos*), killdeer (*Charadrius vociferus*), western meadowlark (*Sturnella neglecta*), red-tailed hawk (*Buteo jamaicensis*), Brewer's blackbird (*Euphagus cyanocephalus*), and turkey vulture (*Cathartes aura*). Due to existing disturbances and lack of native habitats, the project site does not provide suitable habitat for special-status bird species known to occur in the area.

## Mammals

During the field investigation no mammalian species were observed on the project site. Common mammalian species adapted to a high degree of anthropogenic disturbances that have the potential to occur within the project site include California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), opossum (*Didelphis virginiana*), mule deer (*Odocoileus hemionus*), and raccoon (*Procyon lotor*).

### **Nesting Birds**

During the field investigation an active killdeer nest was observed within the project footprint, and an occupied red-tailed hawk nest was observed in a power pole immediate south of the project site. The project site and surrounding area provides foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. In particular, the project site has the potential to provide suitable nesting opportunities for birds that nest on the open ground. Additionally, the trees on the western boundary of the project site associated with the residential developments also have the provide suitable nesting opportunities. A pre-construction nesting bird clearance survey should be conducted within three (3) days prior to ground disturbance to ensure no nesting birds will be impacted from site development.

### **Migratory Corridors and Linkages**

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The proposed project will be confined to an existing disturbed area that is bordered by a railroad on its southern boundary, State Route 70 on its northern boundary, residential developments on the western boundary, and an existing industrial facility on its eastern boundary. As a result, the project site is isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping stone habitat (natural areas) within or connecting the project site to any identified wildlife corridors or linkages. As a result, implementation of the proposed project will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

### **Jurisdictional Areas**

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into “waters of the United States” pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

The project site does not support any discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the Corps, Regional Board, or CDFW. Therefore, project activities will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.

Standing patches of water were observed at the toe of slope on the north side of the raised Union Pacific Railroad during the field investigation. It should be noted that scattered rain showers had passed through

the area the day prior to the field investigation. The standing water did not display a surface hydrologic connection to downstream “waters of the United States” and ponds following storm events. During the initial design of the proposed project, the project footprint was designed to avoid these areas. Further, a review of recent and historic aerial photographs of the project site and its immediate vicinity did not provide visual evidence of an astatic or vernal pool conditions within the project site. From this review of historic aerial photographs and observations during the field investigations, it can be concluded that there is no indication of vernal pools occurring within the proposed project site.

It should be noted that the vacant property south of the Union Pacific Railroad has been mapped as supporting freshwater emergent wetland habitats and riverine resources by the NWI. This area, outside of the project footprint, and south of the Union Pacific Railroad has not been subject to anthropogenic disturbances and supports undisturbed habitats. As a result, no impacts to the mapped freshwater wetland habitats or riverine resources are expected to occur from the proposed project.

### **Special-Status Biological Resources**

The CNDDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Chilcoot and Beckwourth USGS 7.5-minute quadrangles. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified thirteen (13) special-status plant species and nine (9) special-status wildlife species as having potential to occur within the Chilcoot and Beckwourth USGS 7.5-minute quadrangles. No special-status plant communities have been recorded on the Chilcoot and Beckwourth USGS 7.5-minute quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the project site are presented in the table provide in Attachment C: *Potentially Occurring Special-Status Biological Resources*.

#### *Special-Status Plants*

According to the CNDDDB and CNPS, thirteen (13) special-status plant species have been recorded in the Chilcoot and Beckwourth quadrangles (refer to Attachment C). No special-status plant species were observed onsite during the habitat assessment. The project site consists of vacant, undeveloped land that has been subject to existing cattle grazing and weed abatement activities. These disturbances have eliminated the natural plant communities that once occurred onsite which has removed suitable habitat for special-status plant species known to occur in the general vicinity of the project site. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent. No focused surveys are recommended.

### *Special-Status Wildlife*

According to the CNDDDB, nine (9) special-status wildlife species have been reported in the Chilcoot and Beckwourth quadrangles (refer to Attachment C). No special-status wildlife species were observed onsite during the habitat assessment. The project site consists of vacant, undeveloped land that has been subject to existing cattle grazing and weed abatement activities. These disturbances have eliminated the natural plant communities that once occurred on-site which has removed suitable habitat for special-status wildlife species known to occur in the general vicinity of the project site.

Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site does have a low potential to provide suitable habitat for Swainson's hawk (*Buteo swainsoni*) and prairie falcon (*Falco mexicanus*). The project site primarily provides suitable foraging habitat for these species, but does not provide suitable nesting opportunities. All remaining special-status wildlife species were presumed to be absent from the project site since the project sites have been heavily disturbed from onsite disturbances and surrounding development.

In order to ensure impacts to the aforementioned species do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey should be conducted prior to ground disturbance. With implementation of mitigation through the pre-construction clearance survey, impacts to the aforementioned species will be less than significant.

### **Critical Habitat**

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located with federally designated Critical Habitat. Refer to Exhibit 6, *Critical Habitat* in Attachment A. The nearest designated Critical Habitat is located approximately 2.4 miles southwest of the project site for Webber's ivesia (*Ivesia webberi*). Therefore, the loss or adverse modification of Critical Habitat from site development will not occur and consultation with the USFWS for impacts to Critical Habitat will not be required for implementation of the proposed project.

## **Recommendations**

### **Migratory Bird Treaty Act and Fish and Game Code**

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season.

If construction occurs between February 1<sup>st</sup> and August 31<sup>st</sup>, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer (generally 300 feet for migratory and non-migratory song birds and 500 feet raptors and special-status species) will be determined by the wildlife biologist, in coordination with the CDFW, and will depend on the level of noise and/or surrounding disturbances, line of sight between the nest and the construction activity, ambient noise, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

## **Conclusion**

Based on the proposed project footprint and existing site conditions discussed in this report, none of the special-status plant or wildlife species known to occur in the general vicinity of the project site are expected to be directly or indirectly impacted from implementation of the proposed project. With completion of the recommendations provided above, no impacts to year-round, seasonal, or special-status avian residents will occur from implementation of the proposed project. Therefore, it was determined that implementation of the project will have “no effect” on federally or State listed species known to occur in the general vicinity of the project site. Additionally, the development of the project will not impact designated Critical Habitats or regional wildlife movement corridors/linkages.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or [tmcgill@elmtconsulting.com](mailto:tmcgill@elmtconsulting.com) or Travis McGill at (909) 816-1646 or [travismcgill@elmtconsulting.com](mailto:travismcgill@elmtconsulting.com) should you have any questions this report.

Sincerely,



Thomas J. McGill, Ph.D.  
Managing Director



Travis J. McGill  
Director

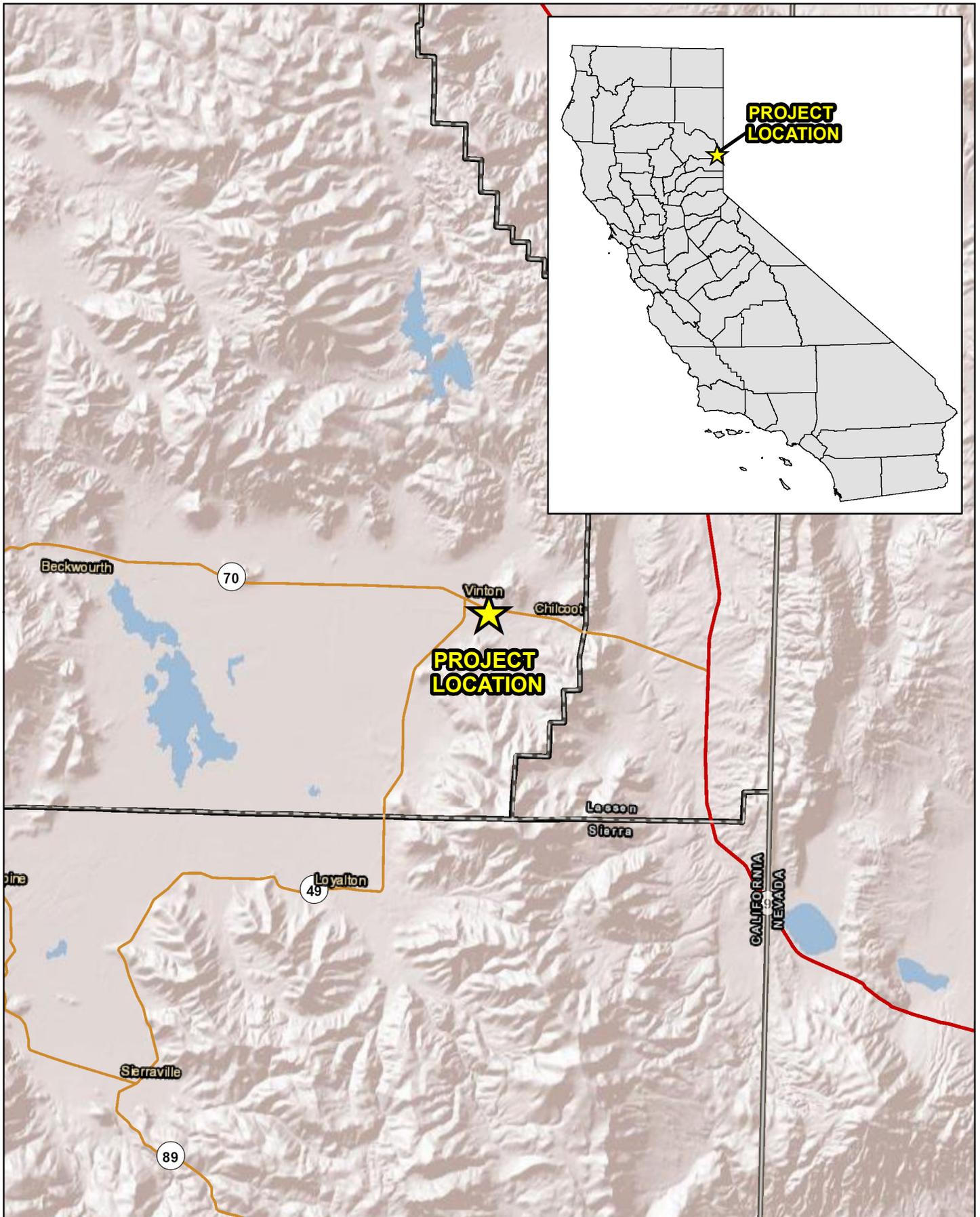
Attachments:

- A. *Project Exhibits*
- B. *Site Photographs*
- C. *Potentially Occurring Special-Status Biological Resources*
- D. *Regulations*

## **Attachment A**

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Project Exhibits

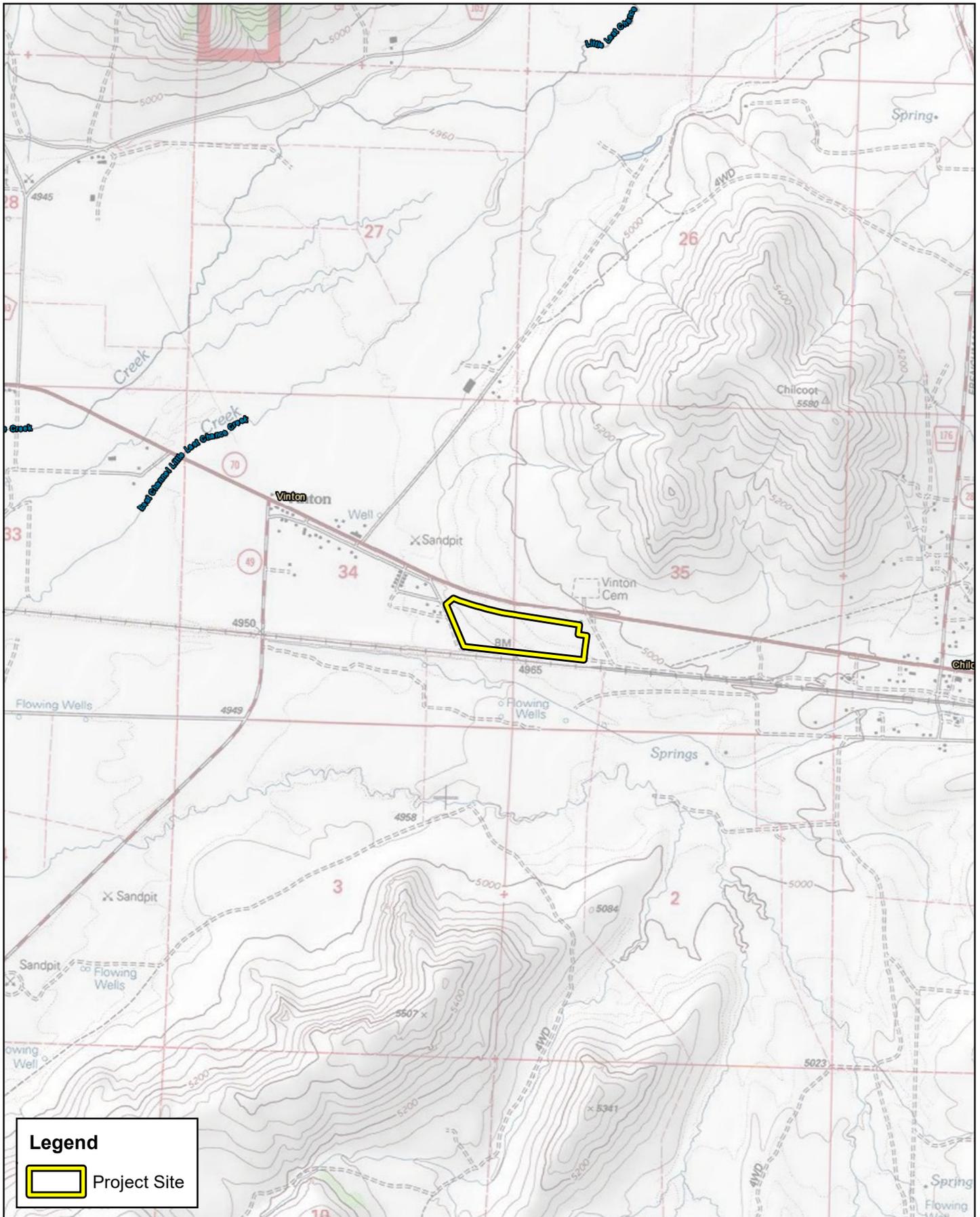


NCPA SOLAR PROJECT 1 - PLUMAS SIERRA CHILCOOT SITE  
HABITAT AND JURISDICTIONAL ASSESSMENT

## Regional Vicinity



Source: World Transportation, World Shaded Relief, Plumas County

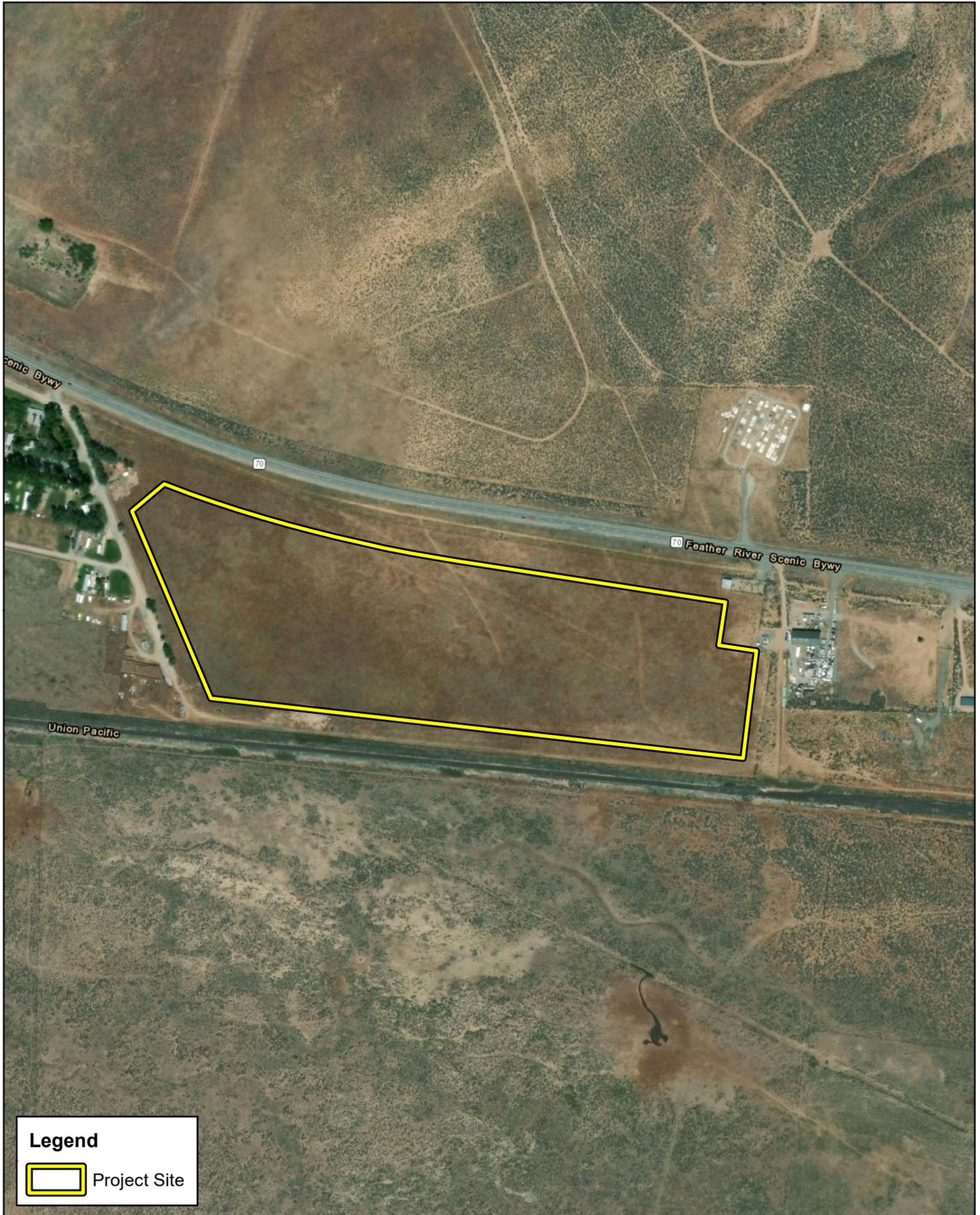


NCPA SOLAR PROJECT 1 - PLUMAS SIERRA CHILCOOT SITE  
HABITAT AND JURISDICTIONAL ASSESSMENT

Site Vicinity



Source: USA Topographic Map, Plumas County



NCPA SOLAR PROJECT 1 - PLUMAS SIERRA CHILCOOT SITE  
HABITAT AND JURISDICTIONAL ASSESSMENT

# Project Site



Source: ESRI Aerial Imagery, World Transportation, Plumas County



**Legend**

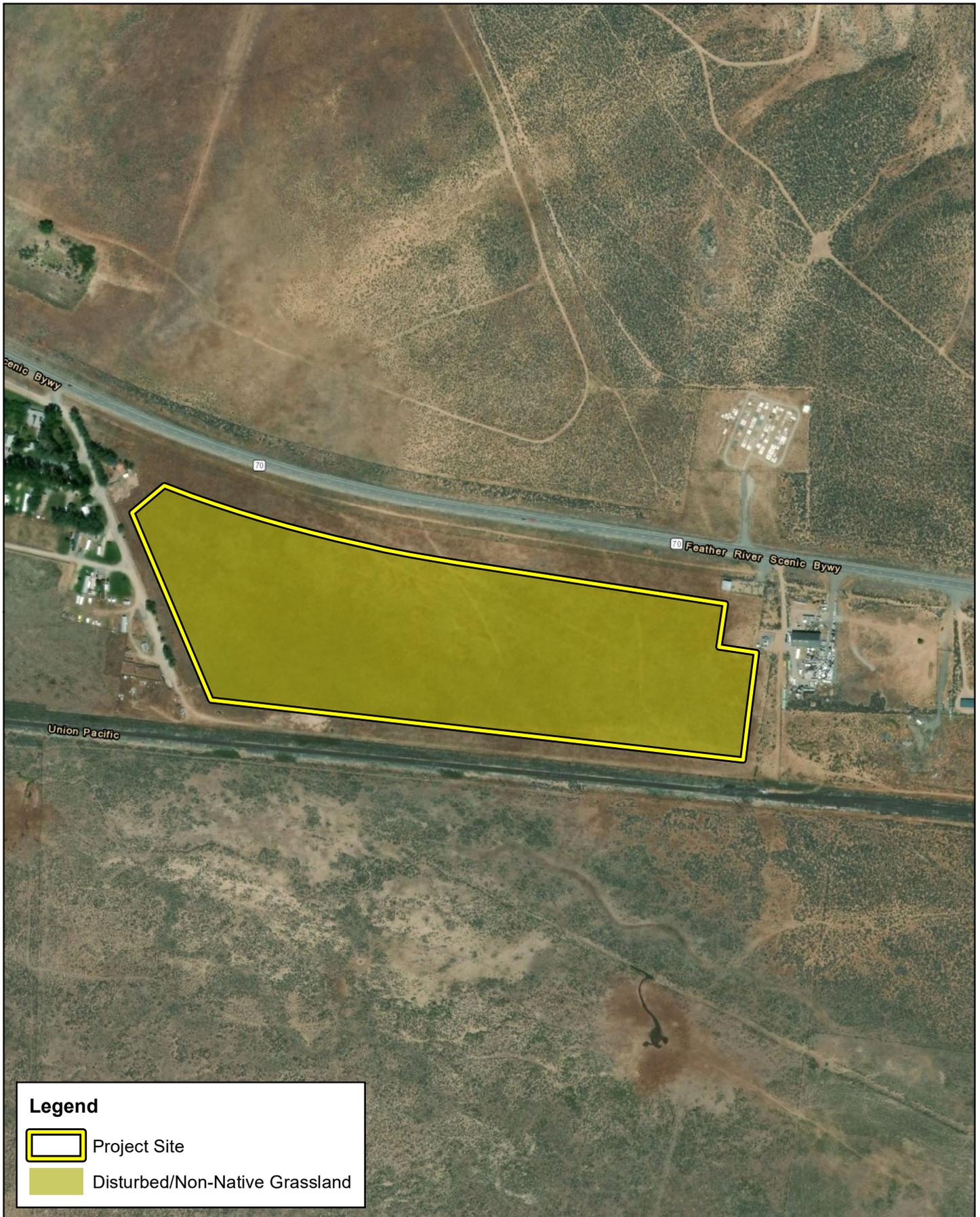
-  Project Site
-  Bidwell sandy loam, sandy substratum, 0 to 2 percent slopes (BsA)
-  Mottsville loamy sand, 2 to 9 percent slopes (MrC)
-  Ormsby loamy coarse sand, 2 to 5 percent slopes (OrB)

NCPA SOLAR PROJECT 1 - PLUMAS SIERRA CHILCOOT SITE  
HABITAT AND JURISDICTIONAL ASSESSMENT



Source: ESRI Aerial Imagery, NRCS Soil Survey Geographic Database, World Transportation, Plumas County

**Soils**



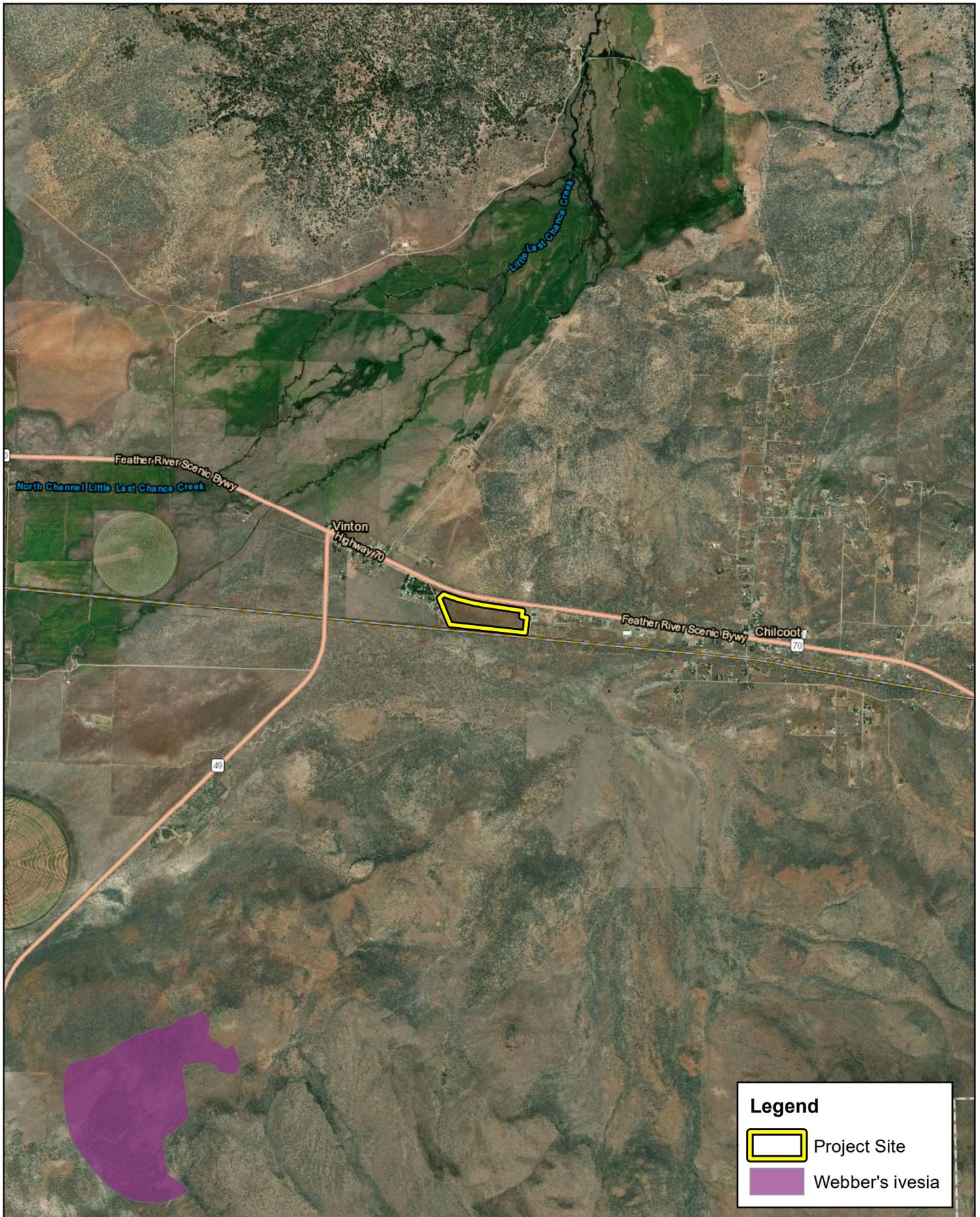
**Legend**

-  Project Site
-  Disturbed/Non-Native Grassland

NCPA SOLAR PROJECT 1 - PLUMAS SIERRA CHILCOOT SITE  
HABITAT AND JURISDICTIONAL ASSESSMENT

**Vegetation**





NCPA SOLAR PROJECT 1 - PLUMAS SIERRA CHILCOOT SITE  
HABITAT AND JURISDICTIONAL ASSESSMENT

# Critical Habitat



Source: ESRI Aerial Imagery, World Transportation, Plumas County

## **Attachment B**

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Site Photographs



**Photograph 1:** From the northeast corner of the project site looking west along the northern boundary.



**Photograph 2:** From the southeast corner of the project site looking north along the eastern boundary.



**Photograph 3:** From the southeast corner of the project site looking west along the southern boundary.



**Photograph 4:** From the southern boundary of the site looking west.



**Photograph 5:** From the southwest corner of the project site looking north along the western boundary.



**Photograph 6:** From the middle of the western portion of the project site looking east.



**Photograph 7:** From the middle of the project site looking west.



**Photograph 8:** From the middle of the eastern portion of the project site looking west.



**Photograph 9:** Looking west at the area were water ponds on the southern boundary of the site between the railroad and the project footprint.



**Photograph 10:** Looking east at the area were water ponds on the southern boundary of the site between the railroad and the project footprint.



**Photograph 11:** Occupied red-tailed hawk nest in a power pole just south of the project site.

## **Attachment C**

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Potentially Occurring Special-Status Biological Resources

Scientific Name	Common Name	Federal Status	State Status	CDFW Listing	CNPS Rare Plant Rank	Potential to Occur
<b>Special-Status Wildlife Species</b>						
<i>Aquila chrysaetos</i>	golden eagle	None	None	FP ; WL	-	Presumed Absent
<i>Argochrysis lassena</i>	Lassen cuckoo wasp	None	None	-	-	Presumed Absent
<i>Bombus morrisoni</i>	Morrison bumble bee	None	None	-	-	Presumed Absent
<i>Buteo swainsoni</i>	Swainson's hawk	None	Threatened	-	-	Low
<i>Canis lupus</i>	gray wolf	Endangered	Endangered	-	-	Presumed Absent
<i>Erethizon dorsatum</i>	North American porcupine	None	None	-	-	Presumed Absent
<i>Falco mexicanus</i>	prairie falcon	None	None	WL	-	Low
<i>Pyrgulopsis longae</i>	Long Valley pyrg	None	None	-	-	Presumed Absent
<i>Spizella breweri</i>	Brewer's sparrow	None	None	-	-	Presumed Absent
<b>Special-Status Plant Species</b>						
<i>Astragalus pulsiferae</i> var. <i>pulsiferae</i>	Pulsifer's milk-vetch	None	None	-	1B.2	Presumed Absent
<i>Eriastrum sparsiflorum</i>	few-flowered eriastrum	None	None	-	4.3	Presumed Absent
<i>Erigeron eatonii</i> var. <i>nevadincola</i>	Nevada daisy	None	None	-	2B.3	Presumed Absent
<i>Eriogonum baileyi</i> var. <i>praebens</i>	Bailey's woolly buckwheat	None	None	-	4.3	Presumed Absent
<i>Eriogonum ochrocephalum</i> var. <i>ochrocephalum</i>	ochre-flowered buckwheat	None	None	-	2B.2	Presumed Absent
<i>Ivesia aperta</i> var. <i>aperta</i>	Sierra Valley ivesia	None	None	-	1B.2	Presumed Absent
<i>Ivesia baileyi</i> var. <i>baileyi</i>	Bailey's ivesia	None	None	-	2B.3	Presumed Absent
<i>Ivesia webberi</i>	Webber's ivesia	Threatened	None	-	1B.1	Presumed Absent
<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>	sagebrush loeflingia	None	None	-	2B.2	Presumed Absent
<i>Lupinus nevadensis</i>	Nevada lupine	None	None	-	4.3	Presumed Absent
<i>Potamogeton epihydrus</i>	Nuttall's ribbon-leaved pondweed	None	None	-	2B.2	Presumed Absent
<i>Rumex venosus</i>	winged dock	None	None	-	2B.3	Presumed Absent
<i>Stanleya viridiflora</i>	green-flowered prince's plume	None	None	-	2B.3	Presumed Absent

U.S. Fish and Wildlife Service (Fed) - Federal	California Department of Fish and Wildlife (CA) - California	California Native Plant Society (CNPS) California Rare Plant Rank	CNPS Threat Ranks
END- Federal Endangered	END- California Endangered	1B Plants Rare, Threatened, or Endangered in California and Elsewhere	0.1- Seriously threatened in California
THR- Federal Threatened	THR- California Threatened	2B Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere	0.2- Moderately threatened in California
	Candidate- Candidate for listing under the California Endangered Species Act	3 Plants About Which More Information is Needed – A Review List	0.3- Not very threatened in California
	FP- California Fully Protected	4 Plants of Limited Distribution – A Watch List	
	SSC- Species of Special Concern		
	WL- Watch List		

## **Attachment D**

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Regulations

*Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.*

## **Federal Regulations**

### ***Endangered Species Act of 1973***

As defined within the Federal Endangered Species Act (FESA) of 1973, an endangered species is any animal or plant listed by regulation as being in danger of extinction throughout all or a significant portion of its geographical range. A threatened species is any animal or plant that is likely to become endangered within the foreseeable future throughout all or a significant portion of its geographical range. Without a special permit, federal law prohibits the “take” of any individuals or habitat of federally listed species. Under Section 9 of the FESA, take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” The term “harm” has been clarified to include “any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.” The presence of any federally threatened or endangered species within a project area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. Under the regulations of the FESA, the United States Fish and Wildlife Service (USFWS) may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an FESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If the USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

### ***Migratory Bird Treaty Act***

Pursuant to the Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) of 1918, as amended in 1972, federal law prohibits the taking of migratory birds or their nests or eggs (16 USC 703; 50 CFR 10, 21). The statute states:

*Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill...any migratory bird, any part, nest, or egg of any such bird...included in the terms of the [Migratory Bird] conventions...*

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered “take.” This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

### **State Regulations**

#### ***California Environmental Quality Act (CEQA)***

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines “endangered” and “rare” species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, “endangered” species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while “rare” species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

#### ***California Endangered Species Act (CESA)***

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in “take” of individuals (defined in CESA as; “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) are regulated by CDFW. Habitat degradation or modification is not included in the definition of “take” under CESA. Nonetheless, CDFW has interpreted “take” to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

### ***Fish and Game Code***

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds’ nest or any birds’ eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

### ***Native Plant Protection Act***

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at

least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

***California Native Plant Society Rare and Endangered Plant Species***

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

- 1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere
- 1B- Plants Rare, Threatened, or Endangered in California and Elsewhere
- 2A- Plants Presumed Extirpated in California, But More Common Elsewhere
- 2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- 3- Plants about Which More Information is Needed - A Review List
- 4- Plants of Limited Distribution - A Watch List

Threat Ranks

- .1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- .3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

## **Federal Regulations**

### ***Section 404 of the Clean Water Act***

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of “waters of the U.S.,” including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define “fill material” to include any “material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States.” Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and “materials used to create any structure or infrastructure in the waters of the United States.” In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term “waters of the United States” is defined as follows:

- (i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (ii) All interstate waters, including interstate wetlands<sup>1</sup>.
- (iii) The territorial seas.
- (iv) All impoundments of waters otherwise defined as waters of the United States under the definition.
- (v) All tributaries<sup>2</sup> of waters identified in paragraphs (i) through (iii) mentioned above.
- (vi) All waters adjacent<sup>3</sup> to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

<sup>1</sup> The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

<sup>2</sup> The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (iv) mentioned above), to a water identified in paragraphs (i) through (iii) mentioned above, that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

<sup>3</sup> The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (i) through (v) mentioned above, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.

- (vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernal pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) mentioned above.
- (viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

The following features are not defined as “waters of the United States” even when they meet the terms of paragraphs (iv) through (viii) mentioned above:

- (i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.
- (ii) Prior converted cropland.
- (iii) The following ditches:
  - (A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
  - (B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
  - (C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.
- (iv) The following features:
  - (A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
  - (B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
  - (C) Artificial reflecting pools or swimming pools created in dry land;
  - (D) Small ornamental waters created in dry land;
  - (E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
  - (F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
  - (G) Puddles.
- (v) Groundwater, including groundwater drained through subsurface drainage systems.
- (vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

- (vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

### ***Section 401 of the Clean Water Act***

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

### **State Regulations**

#### ***Fish and Game Code***

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

- (1) substantially obstruct or divert the natural flow of a river, stream, or lake;
- (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake;  
or
- (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

***Porter Cologne Act***

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state’s authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although “waste” is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.

**Appendix D**  
**Cultural Resources Technical Report**



**CULTURAL RESOURCES SURVEY  
FOR THE  
NORTHERN CALIFORNIA POWER AGENCY  
SOLAR PROJECT 1 – PLUMAS-SIERRA CHILCOOT PROJECT  
PLUMAS COUNTY, CALIFORNIA**

*Prepared for*  
**K.S. Dunbar and Associates, Inc.**  
45375 Vista Del Mar  
Temecula, CA 92590-4314

*Prepared by*  
**Anza Resource Consultants**  
603 Seagaze Drive, #1018  
Oceanside, CA 92054  
[www.anzaresourceconsultants.com](http://www.anzaresourceconsultants.com)

USGS Quadrangle  
*Chilcoot, California*  
Anza Project No. 19-0008

**May 2019**

Hunt, Kevin and Katherine Collins

2019 *Cultural Resources Survey for the Northern California Power Agency Solar Project 1 – Plumas-Sierra Chilcoat Project, Plumas County, California*. Anza Resource Consultants Project No. 19-0008. Report on file at the Northeastern Information Center, California State University, Chico.

## EXECUTIVE SUMMARY

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Plumas-Sierra Chilcoot Project (project) located south of State Route 70, east of Ede Street, north of the Union Pacific Railroad, and west of Simple Fuels Biodiesel in the community of Chilcoot-Vinton, Plumas County, California. The proposed project would develop an approximately 28.2-acre photovoltaic solar power plant within a 36-acre privately owned parcel. The project is subject to the California Environmental Quality Act (CEQA) with NCPA serving as lead agency.

This study includes a cultural resources records search, Sacred Lands File search and Native American scoping, a pedestrian survey of the project site, and preparation of this technical report in compliance with the cultural resources requirements of CEQA.

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within the project site. Two prehistoric sparse lithic scatters were recorded in 1979 outside but adjacent to the project site; neither of these was relocated during the survey and neither would likely be found CRHR eligible if relocated and subjected to archaeological testing. Anza recommends a finding of *no impact to historical resources* under CEQA. No further cultural resources study is recommended; however, the following standard measures are recommended to avoid potential impacts from the unanticipated discovery of cultural resources during project related ground disturbing activities.

### CULTURAL RESOURCES WORKER SENSITIVITY TRAINING

Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.

### UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

### UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and

notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

## TABLE OF CONTENTS

<b>Executive Summary</b> .....	<b>i</b>
Cultural Resources Worker Sensitivity Training .....	i
Unanticipated Discovery of Cultural Resources .....	i
Unanticipated Discovery of Human Remains .....	i
<b>1. Introduction</b> .....	<b>1</b>
1.1 Project Description .....	1
1.2 Regulatory Setting .....	1
1.2.1 State .....	1
1.2.2 Plumas County .....	2
1.3 Personnel .....	2
<b>2. Environmental Setting</b> .....	<b>4</b>
<b>3. Cultural Setting</b> .....	<b>5</b>
3.1 Prehistoric Overview .....	5
3.2 Ethnographic Overview .....	6
3.3 Historic Overview .....	7
3.3.1 Plumas County .....	8
3.3.2 Chilcoot-Vinton .....	8
<b>4. Background Research</b> .....	<b>9</b>
4.1 California Historical Resource Information System .....	9
4.1.1 Previous Studies .....	9
4.1.2 Previously Recorded Resources .....	10
4.1.3 Historic Maps .....	12
4.2 Native American Scoping .....	12
<b>5. Fieldwork</b> .....	<b>13</b>
5.1 Survey Methods .....	13
5.2 Results .....	13
<b>6. Management Recommendations</b> .....	<b>17</b>
6.1 Cultural Resources Worker Sensitivity Training .....	17
6.2 Unanticipated Discovery of Cultural Resources .....	17
6.3 Unanticipated Discovery of Human Remains .....	17
<b>7. References</b> .....	<b>18</b>

## LIST OF FIGURES

Figure 1. Project Location Map .....	3
--------------------------------------	---

## LIST OF TABLES

Table 1. Previous Cultural Resource Studies within a One-Mile Radius of the Project Site.....	9
Table 2. Previously Recorded Cultural Resources within One Mile of the Project Site.....	10

## **LIST OF PHOTOGRAPHS**

---

Photograph 1. View of project site from outside southeast corner, facing northwest.....	14
Photograph 2. View of standing water along southern edge of project site, facing northeast. ....	14
Photograph 3. View of portion of project site, facing northeast. ....	15
Photograph 4. View from southern edge of project site, facing east. ....	15
Photograph 5. View of portion of project site, facing west. ....	16

## **APPENDICES**

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Appendix A. Record Search Summary
Appendix B. Native American Scoping

## 1. INTRODUCTION

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Plumas-Sierra Chilcoot Project (project) located south of State Route 70, east of Ede Street, north of the Union Pacific Railroad (UPRR), and west of Simple Fuels Biodiesel in the community of Chilcoot-Vinton, Plumas County, California (Figure 1). This study has been prepared in accordance with the California Environmental Quality Act (CEQA) statutes and guidelines (Section 1.2). This cultural resources study includes a cultural resources records search, a summary of Native American scoping for the project, pedestrian survey, and the preparation of this report following the *Archaeological Resources Management Report (ARMR): Recommended Content and Format* guidelines (California Office of Historic Preservation 1990).

### 1.1 PROJECT DESCRIPTION

The objective of the NCPA Solar Project 1 – Plumas-Sierra Chilcoot Project is to develop an approximately 28.2-acre photovoltaic (PV) solar power plant within the 36-acre privately owned parcel. The proposed project has an estimated 4.7 megawatts capacity and the point of interconnection is located at the Chilcoot 69 kilovolt Substation, directly adjacent to the eastern project site boundary. The Site is bordered by the UPRR to the south, a mobile home park to the west, and an existing industrial (biofuel) facility to the east. The northern edge of the 36-acre parcel is a presumed city easement that has been excluded as a developable area for the project.

### 1.2 REGULATORY SETTING

#### 1.2.1 State

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

“A resource shall be considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.”

In addition, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and PRC, Section 21083.2(g) defines a unique archaeological resource as “an archaeological artifact, object, or site about which it can be clearly

demonstrated that, without merely adding to the current body of knowledge, the probability is high that it meets any of the following criteria:

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

California Assembly Bill 52 of 2014 (AB 52) took effect July 1, 2015, 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.” According to the legislative intent for AB 52, “tribes may have knowledge about land and cultural resources that should be included in the environmental analysis for projects that may have a significant impact on those resources.” 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. See also PRC 21074 (a)(1)(A)-(B).

## **1.2.2 Plumas County**

The Draft Plumas County General Plan Update includes elements, goals, and policies to encourage the identification and protection of significant Native American and historic cultural resources (Plumas County n.d.). Specifically, the Conservation and Open Space (COS) Element includes Goal 7.5:

“To protect and preserve historic and prehistoric sites, structures, features, objects, and properties important in Native American history for their aesthetic, historical, scientific, educational, and cultural values.”

COS Goal 7.5 is supported by 10 policies to help achieve this objective (Plumas County n.d.:174-176).

## **1.3 PERSONNEL**

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt requested the Sacred Lands File search, conducted the survey, and was the primary author of this report. Mr. Hunt was accompanied for part of the field survey by John Williamson, agent for the property landowner. Principal Investigator Katherine Collins, M.A., Registered Professional Archaeologist (RPA), coauthored this report and served as principal investigator for the study. Ms. Collins meets the Secretary of the Interior’s Professional Qualifications Standards for prehistoric and historic archaeology (National Park Service 1983). GIS Specialist Spencer Bietz prepared all maps and figures.

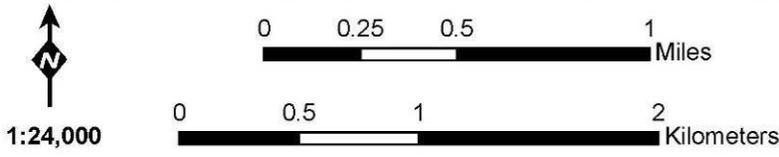
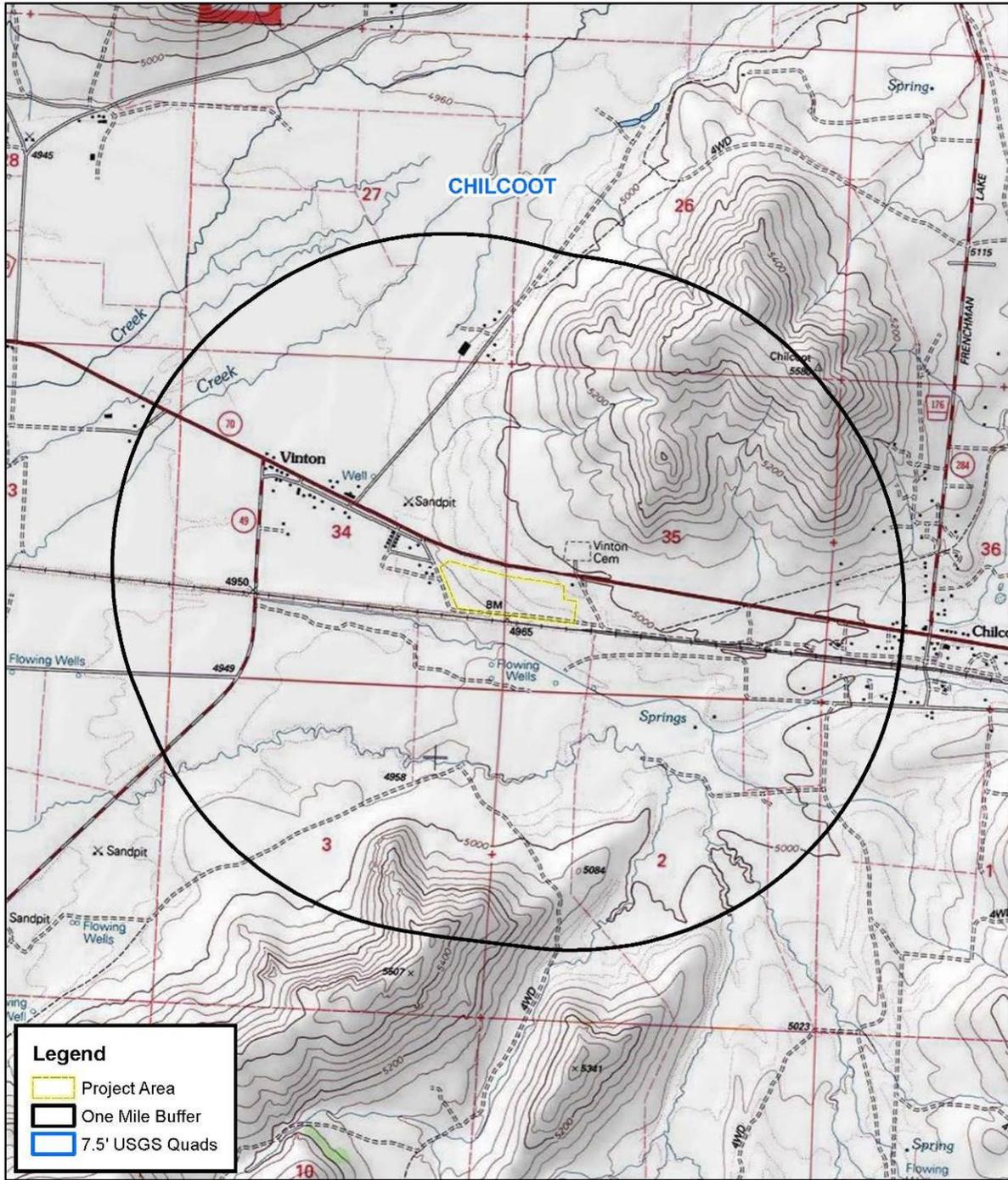


Figure 1. Project Location Map

## 2. ENVIRONMENTAL SETTING

The Plumas-Sierra Chilcoot Project is located in the community of Chilcoot-Vinton on the south side of State Route 70. Chilcoot-Vinton is in the northeast corner of the Sierra Valley, in the southeast corner of Plumas County, at an elevation of approximately 4965 feet (1513 meters) above mean sea level. According to the Köppen climate classification system, Chilcoot-Vinton has a dry-summer continental climate, averaging 13.73 inches of rain and 38.3 inches of snow per year (Wikipedia 2019). The region can have huge diurnal temperature swings, commonly as much as 40-50 degrees Fahrenheit during the summer (Harnach 2016). The project site is very close to multiple springs, including some to the south identified as “flowing wells” on the *Chilcoot, California* U.S. Geological Survey 7.5-minute quadrangle map (Figure 1). The project site is covered in grass, with the occasional tumbleweed, and has standing water pooled near the middle of the south edge of the parcel.

In a generalized sense, the geology of the Sierra Valley region is a down-faulted block basin (graben) that is filled with volcanic ash deposits and lake sediments (Harnach 2016). Sierra Valley is similar to Lake Tahoe in geologic origin and the valley floor is underlain by valley fill, made of volcanic ash topped with younger recent erosional deposits (Harnach 2016). The surrounding elevations are granitic. Prior to agriculture and ranching, the project site was most likely vegetated with sageland scrub, with nearby springs possibly marshland. The Sierra Valley region has a broad range of fauna including deer, pronghorn, bear, squirrel, rodents, snakes, lizards, birds (including bald eagles, hawks, osprey, Canada geese, and waterfowl), fish (such as German brown trout), and insects.

### 3. CULTURAL SETTING

#### 3.1 PREHISTORIC OVERVIEW

Northern Sierra Nevada and western Great Basin prehistory is often understood by recognizing the adaptive strategies employed by prehistoric populations to cope with environmental and social change. Major changes in adaptive strategies used by prehistoric cultures about 8,000 years before present (BP) in this region mark the transition between the Pre-Archaic and the Archaic. The Archaic is further divided into the Early, Middle, and Late based on changes of lesser magnitude. Within this overarching framework, researchers have devised regional chronologies to explain culture change within a defined area. A regional chronology for the northern Sierra Nevada Mountains and adjacent inter-montane basins such as the Tahoe Basin, Truckee Basin, and Sierra Valley is known as the Eastern Front Chronology and is briefly described below (Elston 1986, Elston et al. 1994).

The **Pre-Archaic**, regionally represented by the Tahoe Reach Phase (ca 10,000 to 8,000 BP), is characterized by the presence of highly mobile hunter-gatherer groups in pursuit of big-game animals. Plant gathering focused on expedient resources with minimal processing. Pre-Archaic tool assemblages included large, stemmed, edge-ground projectile points of the Great Basin Stemmed series and flaked stone crescents. These artifact types represent temporal markers of prehistoric occupation in the northern Sierra Nevada during the Tahoe Reach Phase (Elston 1986, Elston et al. 1994).

The **Early Archaic** in the northern Sierra Nevada, known as the Spooner Phase (ca 8000 to 5000 BP) represents a period of warmer climatic conditions resulting in the drying of lakes and marshes. Drought tolerant plant species such as shadscale, saltbrush, and greasewood advanced into lowland areas; while changes in rainfall patterns promoted the advance of piñon-juniper woodlands into the western Great Basin. These climatic changes required a new adaptive strategy that involved the exploitation of a more diverse resource base and the processing and storage of seeds.

Archaeological evidence of Spooner Phase occupation in the northern Sierra Nevada Mountains is rare. Only a few sites, including the type-site Spooner Lake site, have been found. Work at these sites has recovered ground stone artifacts such as metates, bifacial manos, and unshaped pestles, and several types of projectile points, including Pinto series (Elston 1986, Moratto 1984). No temporally diagnostic artifacts associated with Spooner Phase sites have been identified. Given the available evidence it is likely high-elevation Spooner Phase sites represent temporary hunting camps rather than long term habitation sites (Elston 1986).

The **Middle Archaic** includes the Martis Phase, which is further divided into the Early Martis (ca 5000 to 3000 BP) and Late Martis (ca 3000 to 1300 BP). Climatic conditions during this period are characterized as cool and moist, becoming drier at the end of the Martis Phase. Settlement patterns indicate sites were consistently re-occupied. Winter settlements often contain pit house with hearth features, storage pits, and burials. Big-game hunting remained an important source of sustenance as was the processing of plants foods as evidence by the presence of ground stone artifacts (Elston 1986).

Flake stone technology focused on the production of large bifaces using locally quarried basalt. Diagnostic artifacts for this phase include Elko series and Martis series projectile points. The Martis Phase cultural complex was first identified at site CA-Pla-5 in the Martis Valley north of Lake Tahoe with other Marits Phase sites located at Chilcoot rockshelter in Plumas County and Loyalton rockshelter in Sierra County (Moratto 1984).

The **Late Archaic** in the northern Sierra Nevada is represented by the Kings Beach Phase, which is divided onto the Early Kings Beach (ca 1300 to 700 BP) and Late Kings Beach (ca 700 to 150 BP). This period is marked by a warming and drying trend that reached its peak about 500 years ago. In addition to climatic changes several cultural changes occurred during this period, such as increased population density and the introduction of the bow and arrow. Lithic technology shifted from the manufacture large bifaces to the production of simple flaked tools and pottery was introduced during this period. Subsistence practices exploited a larger number of ecological zones and a greater diversity of plant resources. Plant processing became more elaborate as evidence by a variety of mortar forms and the use of hullers. Diagnostic artifacts for this period include Rose Spring series projectile points during the Early Kings Beach Phase and Desert Side Notch and Cottonwood series projectile points during the Late Kings Beach Phase (Elston 1986).

### 3.2 ETHNOGRAPHIC OVERVIEW

The project site is located in the traditional territory of the Washoe people (Kroeber 1925). Washoe territory occupied the valleys east of the Sierra Nevada Mountains from Antelope Valley on the north to Honey Lake including the Carson Valley and Lake Tahoe region. The Washoe language has no close relatives but is likely a member of the Hokan language family and is the only non-Numic language spoken in the Great Basin region (Mithun 1999).

The basic social and economic unit for the Washoe was the family or household. Families moved together in search of food as a composite cultural group at times coming together with other households for hunting trips and cooperative endeavors. Family size would vary from five or less to a dozen people with no set rules on who could be considered a family member. The basic family unit was usually a man, his wife and children, but a widower might also be head of the unit. It could also include siblings and their spouses or “friends” (Downs 1966). Washoe households occasionally combined to form clusters of closely related households known as “the bunch” (D’Azevedo 1986, Downs 1966). The size and composition of each bunch varied on environmental and interpersonal conditions. Each bunch was led by a headman or chief which seems to have been a hereditary position passed on through either parent; however, a separate leader would be selected to organize fishing, hunting, and ceremonial functions. Leaders gained status through actions of wisdom, expertise and benevolent qualities. They regularly expounded on goodness and proper behavior to their community. Headmen met with other headmen to exchange information on Washoe life and appoint “bosses” with special knowledge to research locations that might have abundant hunting or gathering possibilities in a given year (D’Azevedo 1986, Downs 1966, Kroeber 1925).

Washoe subsistence primarily relied on the gathering of pine nuts and fishing (primarily trout and suckers). Pine nuts were gathered in late fall and winter when other plant resources were scarce. Fishing was a year-round activity. The rivers and lakes in Washoe territory held an abundance of fish, including the mountain whitefish in Lake Tahoe tributaries, cutthroat trout along the Truckee River, and suckers, chubs, and minnows which could be scooped from streams with baskets. In the winter, ice-fishing provided food when resources were low (D’Azevedo 1986). The Washoe obtained Pinyon pine nuts (*Pinus monophylla*) on treks through the pinon-juniper woodland of the Pine Nut Mountains near Woodsfords–Markleeville (D’Azevedo 1986: 472). The nuts were cracked and eaten, but were usually converted into a meal from which a mush was made. Other plant resources gathered included sego lily, sand seeds, cat tails, tule roots, currants, elderberries, sweet elderberry roots, gooseberries, chokecherries, buckberries, rose tea, Indian tea, and wild varieties of mustard, spinach, potatoes, sweet potatoes, celery, turnips, onions, and strawberries. The Washoe obtained acorns on their own or through trade with neighboring tribes.

Hunting was conducted using the bow and arrow. Communal drives led by “bosses” were common for hunting small game such as rabbits, prairie dogs, ground hogs, woodchucks, sagehens, quail, and waterfowl and antelope. Deer and mountain goats were hunted at higher elevations in the winter using snow shoes (D’Azevedo 1986).

The Washoe built two basic structures: the winter house which consisted of a conical framework of poles covered by overlapping slabs of cedar and/or other conifer bark, with a short covered doorway or vestibule; and the summer brush house which varied from a simple low enclosure resembling a windbreak to a completely covered, dome-shaped house. Washoe constructed covered fishing platforms over streams that were often described as floating houses by observers. Washoe also built sweat lodges and large earth-covered dance houses but there is disagreement regarding whether or not these structures were regularly used prior to the historic period (D’Azevedo 1986).

Washoe material culture included chipped stone tools such as knives; arrow and spear points; club heads; and scrapers, for use in hunting and food processing. Mortars and pestles were commonly used to grind acorns, pine nuts, seeds and other plant foods, and meat. Manos and metates were also used in nut flour preparation. Fist-sized, heated stones were used to cook and/or warm acorn gruel and pine nut meal. Whole acorns were stored in granaries and pine nuts were stored in large brush and pine bough covered caches.

Sustained contact with Euro-American populations did not occur until 1800’s when migrants from the eastern United States began to cross into California using one of several passes through the Sierra Nevada Mountains. Some of these migrants established trading posts and settlements in Washoe territory and began to fence off tracts as ranch land (D’Azevedo 1986). These initial encounters were the start of a long history of conflict with Euro-American settlers that lead to the dispossession of their land and regulation onto reservations. Today the Washoe people live in California on the Woodfords Indian Colony in Alpine County, and on the eastern side of Lake Tahoe in Nevada on and near the Washoe colonies of Alpine, Carson, Dresslerville, and Sparks. All these colonies are governed by a single tribal council (White 2019).

### **3.3 HISTORIC OVERVIEW**

The historic period for the state of California generally begins with the establishment of the first Spanish mission and presidio in San Diego in 1769. This marks the beginning of the Spanish period of California history which lasted until 1822, when news of Mexico’s independence from Spain in 1821 finally reached California. The Spanish period saw the establishment of a permanent European presence in California in the form of 21 missions located along the coast between San Diego and Sonoma, four military presidios located in San Diego, Monterey, San Francisco and Santa Barbara, and three pueblos (towns) that later became the cities of Los Angeles, San Jose and Santa Cruz (Robinson 1948). The Mexican period of California history saw the seizure of lands once held by the missions through the Mexican Secularization Act of 1833 and the redistribution of those lands to individuals in the form of land grants known as “ranchos” (Robinson 1948). During this period the Mexican government in California issued about 700 land grants to Mexican citizens and foreign immigrants (Shumway 1988). The outbreak of war between the United States and Mexico and the signing of the Treaty of Guadalupe Hidalgo in 1848 ended the Mexican period and signaled the beginning of the American period of California history. The early American period is marked by the discovery of gold at Sutter’s Mill in 1848 resulting in a gold rush that saw a massive influx of settlers from other parts of the United States and around the world, greatly impacting California’s native population. In 1869 the transcontinental railroad was completed linking California with the rest of the United States. The gold rush and the establishment of the railroad played major roles in the development of California into a national and worldwide leader in agricultural and

industrial production. These early developments also resulted in making California one of the most racially and ethnically diverse states in the Union.

### **3.3.1 Plumas County**

Plumas County was established in 1854 from a portion of Butte County. The county derives its name from the original Spanish name for the Feather River, El Rio de las Plumas, coined by explorer Luis Arguello in 1820. Arguello, a native Californian or *Californio*, would later become the first governor of California during the Mexican period. The gold rush that started at Sutter’s Mill in 1848 also spread to parts of Plumas County. Prospectors flocked to the region to work its streams in the hope of striking it rich. Some gold was discovered such as at Rich Bar on the Feather River. Thousands of migrants from the eastern United States entered California using the Lassen Emigrant Trail which passed through Plumas County. During this time Big Meadows, now the site of Lake Almanor, was an important stopping place for food and water. Mountain man James P. Beckwourth was the first European American to discover the lowest pass across the Sierra Nevada in 1850 (now called the Beckwourth Pass), and in 1851 completed a wagon trail for California-bound emigrants from western Nevada, through Plumas County, to the Sacramento Valley, which State Route 70 generally follows in the vicinity of Chilcoot-Vinton. The beginning of the twentieth century saw the establishment of the Western Pacific Railroad (now part of the Union Pacific Railroad) in 1910 through the Middle Fork of the Feather River to Salt Lake City. In addition to mining, logging and agriculture have played important economic roles in the Plumas County (Hoover et al. 2002).

### **3.3.2 Chilcoot-Vinton**

The census-designated place of Chilcoot-Vinton is actually two communities approximately two miles apart on California State Route (SR) 70, with the project site located more or less in the middle. Vinton is located at the intersection of SR 70 and SR 49. Chilcoot is east at the intersection of SR 70 and SR 284, a short spur highway that runs only from Chilcoot north to Frenchman Lake. The Beckwourth Pass – the lowest mountain pass in the Sierra Nevada at 5,221 feet above mean sea level – is east of Chilcoot and is a California Historical Landmark (No. 336). The Vinton post office opened in 1897, named after Vinton Bowen, the daughter of a Sierra Valley Railway official. The Chilcoot post office opened in 1898. Chilcoot was a resting place for covered wagon, or “prairie schooner,” emigrants and later a stagecoach stop. Today agriculture and ranching still dominate the local economy but outdoor tourism has become an important addition because of the area’s considerable beauty and great fishing.

## 4. BACKGROUND RESEARCH

### 4.1 CALIFORNIA HISTORICAL RESOURCE INFORMATION SYSTEM

Anza requested a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), Northeast Information Center (NEIC) located at California State University, Chico. The search was conducted by NEIC on May 6, 2019, to identify all previous cultural resources work and previously recorded cultural resources within a one-mile radius of the project site (Appendix A). The CHRIS search included a review of the NRHP, CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic United States Geological Survey (USGS) 7.5-, 15-, and 30-minute quadrangle maps.

#### 4.1.1 Previous Studies

The NEIC records search identified ten cultural resources studies that were conducted within a one-mile radius of the project site, one of which (000839) is mapped including the project site; however, this study was an overview that did not include pedestrian survey within the project site (Table 1). Another report (005890) included survey adjacent to the east of the project site.

**Table 1. Previous Cultural Resource Studies within a One-Mile Radius of the Project Site**

Report Number	Author	Year	Title	Proximity to Project Site
000839	Kowta, Makoto	1988	The Archaeology and Prehistory of Plumas and Butte Counties, California: An Introduction and Interpretive Model	Regional overview that includes project site (no survey)
005120	Jensen, Peter M.	2002	Archaeological Survey, c. 6-acres Earle Little Property, Between Vinton And Chilcoot On Highway 70, Plumas County, California	Outside
005820	McCombs, Diane	2003	A Heritage Resource Survey For The Proposed Sierra Sands Sand And Gravel Mine, An Eighty Acre Survey Near Vinton In Plumas County, California	Outside
005890	Westwood, Lisa with, Deanna Grimstead And, and Brandon Patterson	2004	Archaeological Survey Report For The Sierra Slot Source Project, Near Chilcoot, Plumas County, California	Adjacent to east
005992	Jensen, Peter M.	2004	Archaeological Survey, c 15-acre Little Property, Highway 70 near The Vinton Cemetery, Plumas County, California	Outside
007126	Bennett, Elizabeth A.	1989	Archaeological Survey Report For A Proposed Highway Rehabilitation And Widening Project On State Route 760, Plumas County, California	Outside

Report Number	Author	Year	Title	Proximity to Project Site
007132	Henrici, Dawn	1979	Archaeological Reconnaissance for the Tenetive Parcel Map-Sneed APN# 010-120-13, Plumas County	Outside
007137	Henton, Gregory	1983	An Archaeological Reconnaissance of June A. Gottschalk's Property	Outside
009912	McCombs, Diane	2006	Heritage Resource Survey for the Little Last Chance Creek Restoration Project	Outside
012349	Meyer, Jack	2013	A Geoarchaeological Overview and Assessment of Northeast California, Cultural Resources Inventory of Caltrans District 2 Rural Conventional Highways: Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama, and Trinity Counties	Outside

Source: NEIC, May 2019

### 4.1.2 Previously Recorded Resources

Seven prehistoric archaeological sites, four historic built or archaeological resources, and one multicomponent site were identified within one mile of the project site (Table 2). Two prehistoric sparse lithic artifact scatters (P-32-000390 and -000392) were identified adjacent to the project site to the south (discussed in Sections 4.1.2.1 and 4.1.2.2). The historic Beckwourth Trail (P-32-001635) was informally recorded crossing within the site but actually runs approximately 0.1 mile south of the project site, as recorded on its resource record and other maps (Section 4.1.2.3).

**Table 2. Previously Recorded Cultural Resources within One Mile of the Project Site**

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-32-000122	CA-PLU-000122	Prehistoric lithic artifact scatter; the "Vinton Cemetery Site"	Insufficient information	1965 (Bryan)	Approximately 0.2 mile north
P-32-000388	CA-PLU-000388	Prehistoric lithic artifact scatter. Chert including projectile point	Insufficient information	1979 (Henrici)	Approximately 0.1 mile north
P-32-000389	CA-PLU-000389H	Historic refuse deposit associated with the railroad	Insufficient information	1979 (Henrici)	Approximately 0.25 mile east
P-32-000390	CA-PLU-000390	Prehistoric sparse lithic artifact scatter (6 chert flakes)	Insufficient information	1979 (Henrici)	<b>Adjacent to south</b>
P-32-000391	CA-PLU-000391	Prehistoric sparse lithic artifact scatter (6 chert "waste" flakes)	Insufficient information	1979 (Henrici)	Approximately 0.15 mile east
P-32-000392	CA-PLU-000392	Prehistoric sparse lithic artifact scatter (7 chert "waste" flakes)	Insufficient information	1979 (Henrici)	<b>Adjacent to south</b>
P-32-000542	CA-PLU-000542	Prehistoric sparse lithic artifact scatter (or isolate): 2 chert flakes and one basalt projectile point	Insufficient information	1979 (Henrici)	Approximately 0.25 mile east

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-32-001635	CA-PLU-001635H	Beckwourth Trail; historic wagon road constructed in 1851	Insufficient information	Recorded or updated 26 times from 1980 through 2016	Approximately 0.1 mile south
P-32-002445	CA-PLU-002445	Large prehistoric lithic artifact scatter with multiple tools and bedrock milling	Not yet evaluated for NRHP or CRHR (Status Code 7)	2003 (D. Mc Combs)	Approximately 1 mile north
P-32-002462	CA-PLU-002462H	Historic refuse deposit	Insufficient information	2004 (Patterson, Grimstead, Lisa Westwood)	Approximately 0.5 mile east
P-32-002522		Four geographically distinct isolates (three historic refuse items, one prehistoric chert flake) recorded as a single multicomponent site; one locus overlaps P-32-000389	Presumed ineligible	2004 (Patterson, Grimstead, Lisa Westwood)	Approximately 0.25 mile east
P-32-003542		Last Chance Creek Water District; The Last Chance Creek Water District ditch system	Found ineligible for NR, CR or Local designation through survey evaluation (Status Code 6Z)	2006 (Diane McCombs); 2017 (Lisa Shapiro, Graham Dalldorf, Jackie Farrington, and Nic Grosjean)	Approximately 0.75 mile northwest
P-32-005892	CA-PLU-005892H	Segment of the Sierra Valley and Mohawk Railroad grade	Insufficient information	2017 (Lisa Shapiro, Graham Dalldorf, Jackie Farrington and Nic Grosjean)	Approximately 0.75 mile east

Source: NEIC, May 2019

#### 4.1.2.1 **P-32-000390**

This prehistoric sparse lithic artifact scatter was recorded by Henrici in 1979. The site comprises six red chert waste flakes (i.e., the byproducts of tool manufacture) within a 3x3-meter area between two east-west dirt roads approximately five meters north of the UPRR. Based on this description, the resource is outside the project site (development footprint) but within the same parcel. Henrici notes that this artifact scatter is unlikely to possess depth. No CRHR eligibility evaluation was provided; however, sparse lithic scatters of this nature (i.e., very few artifacts, less than three artifacts per square meter, a single material type, no tools or diagnostic artifacts, common for the area, surface scatter only) are typically considered not eligible for CRHR listing as they lack significant data potential.

#### **4.1.2.2 P-32-000392**

This prehistoric sparse lithic artifact scatter was recorded by Henrici in 1979. The site comprises seven red chert waste flakes (i.e., the byproducts of tool manufacture) within a 4x4-meter area between two east-west dirt roads approximately seven meters north of the UPRR. Based on this description, the resource is outside the project site (development footprint) but within the same parcel. Henrici notes that this artifact scatter is unlikely to possess depth. No CRHR eligibility evaluation was provided; however, sparse lithic scatters of this nature (i.e., very few artifacts, less than three artifacts per square meter, a single material type, no tools or diagnostic artifacts, common for the area, surface scatter only) are typically considered not eligible for CRHR listing as they lack significant data potential.

#### **4.1.2.3 P-32-001635**

Portions of Resource P-32-00392, the Beckwourth Trail, within California have been recorded or updated 26 times between 1980 and 2016. Despite a 220-page resource record, multiple websites, articles and books on the subject, and the listing of Beckwourth Pass (a separate resource) on the NRHP and as a California Historical Landmark, no evidence of CRHR or NRHP eligibility evaluation for the Beckwourth Trail was identified during this study. Nevertheless, it is likely that, at minimum, segments of the trail with sufficient integrity are eligible for the CRHR and NRHP because of the trail's association with legendary African American mountain man James Beckwourth, the Gold Rush's massive emigration of European Americans into California.

NEIC provided conflicting data regarding the location of the Beckwourth Trail in the immediate vicinity of the project site. One figure, labeled "Informal Resource Location," depicts the trail within the project site. However, page 204 of the resource record depicts the trail south of the UPRR in the vicinity of the project site on the USGS *Chilcoot, California* 7.5-minute quadrangle map. Similarly, the figure titled "Resource Locations" depicts an unlabeled linear resource that better matches the alignment on the resource record. Combined with review of online references and Google Earth, the preponderance of evidence supports Anza's conclusion that the Beckworth Trail does not cross within the project site. Rather, the trail runs south of the UPRR alignment until just west of the southwest corner of the project site, where the trail turns northwest and crosses the (later constructed) railroad alignment.

### **4.1.3 Historic Maps**

The 1864 General Land Office (GLO) plat map depicts the Mohawk Valley Road going through or near the project site (map scale prevents further confirmation). The 1890 *Sierraville* quadrangle map similarly depicts an unnamed road and a blue line stream going through or adjacent to the project site.

## **4.2 NATIVE AMERICAN SCOPING**

K.S. Dunbar & Associates, Inc. requested a review of the Sacred Lands File (SLF) by the Native American Heritage Commission. The NAHC sent a response on April 12, 2019, stating that a search of the SLF was completed with negative results. That is, no sacred lands or other resources important to Native Americans were identified near the project site during the SLF search (Appendix B). The NAHC provided a list of seven Native American contacts that may have knowledge regarding Native American cultural resources within or near the project site.

K.S. Dunbar & Associates, Inc. mailed letters dated April 15, 2019, to the seven Native American contacts asking if they had knowledge regarding cultural resources of Native American origin within or near the project site (Appendix B). As of May 9, 2019, no responses have been received.

## **5. FIELDWORK**

### **5.1 SURVEY METHODS**

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt conducted a pedestrian survey of the project site on April 25, 2019. Mr. Hunt surveyed the entire project site using transects spaced 10 meters apart and oriented east-west.

Mr. Hunt examined all exposed ground surface for artifacts (e.g., flaked stone tools and tool-manufacture debris, ground stone tools, ceramic sherds, fire-affected rock), ecofacts (marine shell, bone), soil discoloration that could indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of trails, structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramic sherds, cut bone). Ground disturbances such as burrows and drainages were visually inspected. Photographs documenting the project site and survey are maintained by Anza in cloud storage online.

### **5.2 RESULTS**

The project site is within a fenced flat field covered in grass and heavily saturated with water along the center of the southern boundary (Photographs 1-5). Ground visibility was poor to fair (30 to 40 percent) throughout most of the project site with bare patches between grasses providing some visibility. The survey was negative; that is, no cultural (i.e., archaeological, historic built, or tribal cultural) resources were identified within the project site. No evidence of prehistoric sparse lithic scatters P-32-000390 and P-32-000392, both recorded in 1979 outside the project site but within the same parcel, was observed despite the fact these areas outside and south of the project boundary were surveyed. No evidence of the Beckwourth Trail was observed within or adjacent to the project site. Modern broken and burned domestic refuse was observed to the south of the project site west of the standing water along the southern boundary.



**Photograph 1. View of project site from outside southeast corner, facing northwest.**



**Photograph 2. View of standing water along southern edge of project site, facing northeast.**



**Photograph 3. View of portion of project site, facing northeast.**



**Photograph 4. View from southern edge of project site, facing east.**



**Photograph 5. View of portion of project site, facing west.**

## 6. MANAGEMENT RECOMMENDATIONS

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within the project site. Two prehistoric sparse lithic scatters were recorded in 1979 outside but adjacent to the project site; neither of these was relocated during the survey and neither would likely be found CRHR eligible if relocated and subjected to archaeological testing. Anza recommends a finding of *no impact to historical resources* under CEQA. No further cultural resources study is recommended; however, the following standard measures are recommended to avoid potential impacts from the unanticipated discovery of cultural resources during project related ground disturbing activities.

### 6.1 CULTURAL RESOURCES WORKER SENSITIVITY TRAINING

Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.

### 6.2 UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

### 6.3 UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

## 7. REFERENCES

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[https://en.wikipedia.org/wiki/Chilcoot-Vinton,\\_California](https://en.wikipedia.org/wiki/Chilcoot-Vinton,_California)

**Appendix A:  
Records Search Summary**

**Northeast Center of the  
California Historical Resources  
Information System**

BUTTE  
GLENN  
LASSEN  
MODOC  
PLUMAS  
SHASTA

SIERRA  
SISKIYOU  
SUTTER  
TEHAMA  
TRINITY

123 West 6th Street, Suite 100  
Chico CA 95928  
Phone (530) 898-6256  
*neinfocntr@csuchico.edu*

May 6, 2019

Anza Resource Consultants  
603 Seagaze Drive, #1018  
Oceanside, CA 92054  
Attn.: Mr. Kevin Hunt

**I.C. File # D19-61  
Priority Records Search**

RE: NCPA Plumas Sierra Chilcoot Solar PV Project  
T23N, R16E, Sections 34 & 35 MDBM  
USGS Chilcoot 7.5' and Chilcoot (1950) 15' quads  
Approximately 28.86 acres, estimated from project maps (Plumas County)

Dear Mr. Hunt,

In response to your request, a priority records search for the project cited above was conducted by examining the official maps and records for archaeological sites and surveys in Plumas County. Please note, the search includes the requested 1-mile radius surrounding the project area.

**RESULTS:**

**Resources:** According to our records, 13 sites and one informal resource have been recorded within the project area and 1-mile project radius. Resource locations are plotted on the enclosed NEIC-generated maps. A Resource List, Resource Details, a spreadsheet, and copies of the site records are included. The project is located in a region utilized prehistorically by Washoe populations. Unrecorded prehistoric and historic cultural resources may be located within the project area.

The USGS Chilcoot (1950) 15' quad map indicates that Sierra Valley and a trail are located in the project area, while the towns of Vinton, Chilcoot, the Western Pacific Railroad, Last Chance Creek, a cemetery, jeep trails, streams, roads, and structures are located in the general project vicinity.

A copy of the GLO plat map (1864) depicting the Mohawk Valley Road adjacent to the project area is enclosed. Also enclosed is a copy of the historic Sierraville (1890) quad map depicting a road and stream adjacent to the project area. Finally, a copy of the Oregon-California Trails Association (OCTA) map depicting the Beckwourth Trail within the project area is also enclosed.

**Previous Archaeological Investigations:** According to our records, the project area has not been previously surveyed for cultural resources. However, portions of the 1-mile project radius have been previously surveyed. Study locations are plotted on the enclosed NEIC-generated map. A Report List and spreadsheet are included. Copies of the reports are NOT enclosed, per your request.

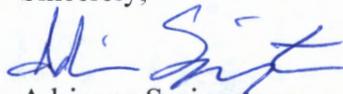
**Literature Search:** The official records and maps for archaeological sites and surveys in Plumas County were reviewed. Also reviewed: **National Register of Historic Places - Listed properties and Determined Eligible Properties** (2012); **Directory of Properties in the Historic Property Data File for Plumas County** (2012); **California Register of Historical Resources** (2012); **California Points of Historical Interest** (2012); and **Handbook of North American Indians, Vol. 8, California** (1978).

#### **RECOMMENDATIONS:**

We recommend that you contact the appropriate local Native American representatives for information regarding traditional cultural properties that may be located within project boundaries for which we have no records.

The fee for this records search is \$864.30 (please refer to the following page for more information). An invoice will follow from CSU, Chico Research Foundation for billing purposes. Thank you for your dedication to preserving California's irreplaceable cultural heritage, and please feel free to contact us if you have any questions or need further information or assistance.

Sincerely,



Adrienne Springsteen  
Research Associate

**Appendix B:  
Native American Scoping**



**K.S. Dunbar & Associates, Inc.**  
**Environmental Engineering**  
45375 Vista Del Mar  
Temecula, CA 92590-4314  
(951) 699-2082  
Cell: (949) 412-2634  
ksdpe67@gmail.com

Erica D. Dunbar, President  
Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE  
Chief Executive Officer

April 10, 2019

Christina Snider, Executive Secretary  
California Native American Heritage Commission  
1550 Harbor Boulevard, Room 100  
West Sacramento, California 95691

**Request for a Sacred Lands File Search**  
**NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site**  
**Northern California Power Agency**

Dear Christina:

The Northern California Power Agency (NCPA) intends to implement its NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site. The project is described in the attachments to this letter.

We respectfully request that you complete a search of your Sacred Lands files for this Project. A completed request form as well as maps showing the project elements are attached for your use in the search.

We also respectfully request that you provide us with a list of tribes and individuals that you believe might have cultural resources information regarding the project area.

It would be greatly appreciated if you could email your response to [ksdpe67@gmail.com](mailto:ksdpe67@gmail.com).

If you have any questions concerning this request, please contact me.

Sincerely,

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE

Attachments

pc: Ron Yuen  
Director of Engineering, Generation Services  
**Northern California Power Agency**  
651 Commerce Drive,  
Roseville California 95678

## **Sacred Lands File & Native American Contacts List Request**

### **Native American Heritage Commission**

1550 Harbor Blvd, Suite 100

West Sacramento, CA 95691

916-373-3710

FAX: 916-373-5471

[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)

*Information Below is Required for a Sacred Lands File Search*

### **Project: NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site**

**County: Plumas**

**USGS Quadrangle Name: Chilcoot, California**

**See attachment for detailed project location.**

**Company/Firm/Agency: K.S. Dunbar & Associates, Inc.**

**Street Address: 45375 Vista Del Mar**

**City: Temecula**

**Zip: 92590-4314**

**Phone: 951-699-2082**

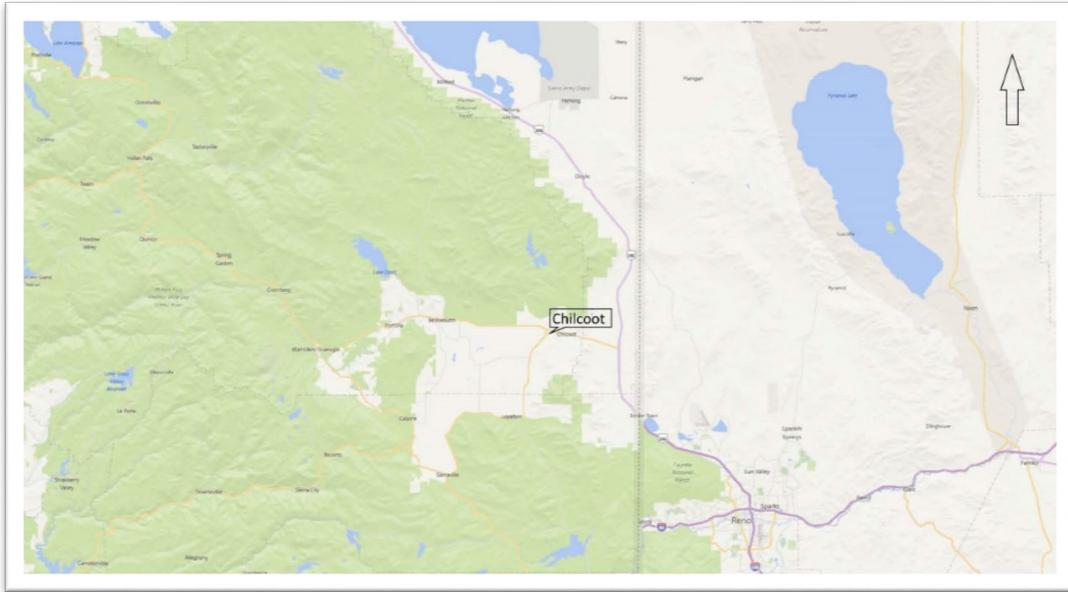
**Email: ksdpe67@gmail.com**

**Project Description:** The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- ❖ Phase 1 – Determine member interest and requirements and identify potential sites.
- ❖ Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- ❖ Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The Plumas-Sierra Rural Electric Cooperative selected a site at Chilcoot (Figure 1). That site is the subject of this Notification.



**Figure 1 Plumas-Sierra Chilcoot Project Location**

The Project site is located within a 36-acre vacant parcel located just south of Highway 70 east of its intersection with Highway 49. The site is bordered by Highway 70 to the north, an industrial facility to the east, Union Pacific Railroad to the south, and scattered residences to the east (Figure 2). This site would accommodate a 4.7 MW facility with a one-year output of 9,720 megawatt-hours.



**Figure 2 Plumas-Sierra Chilcoot Project Site**

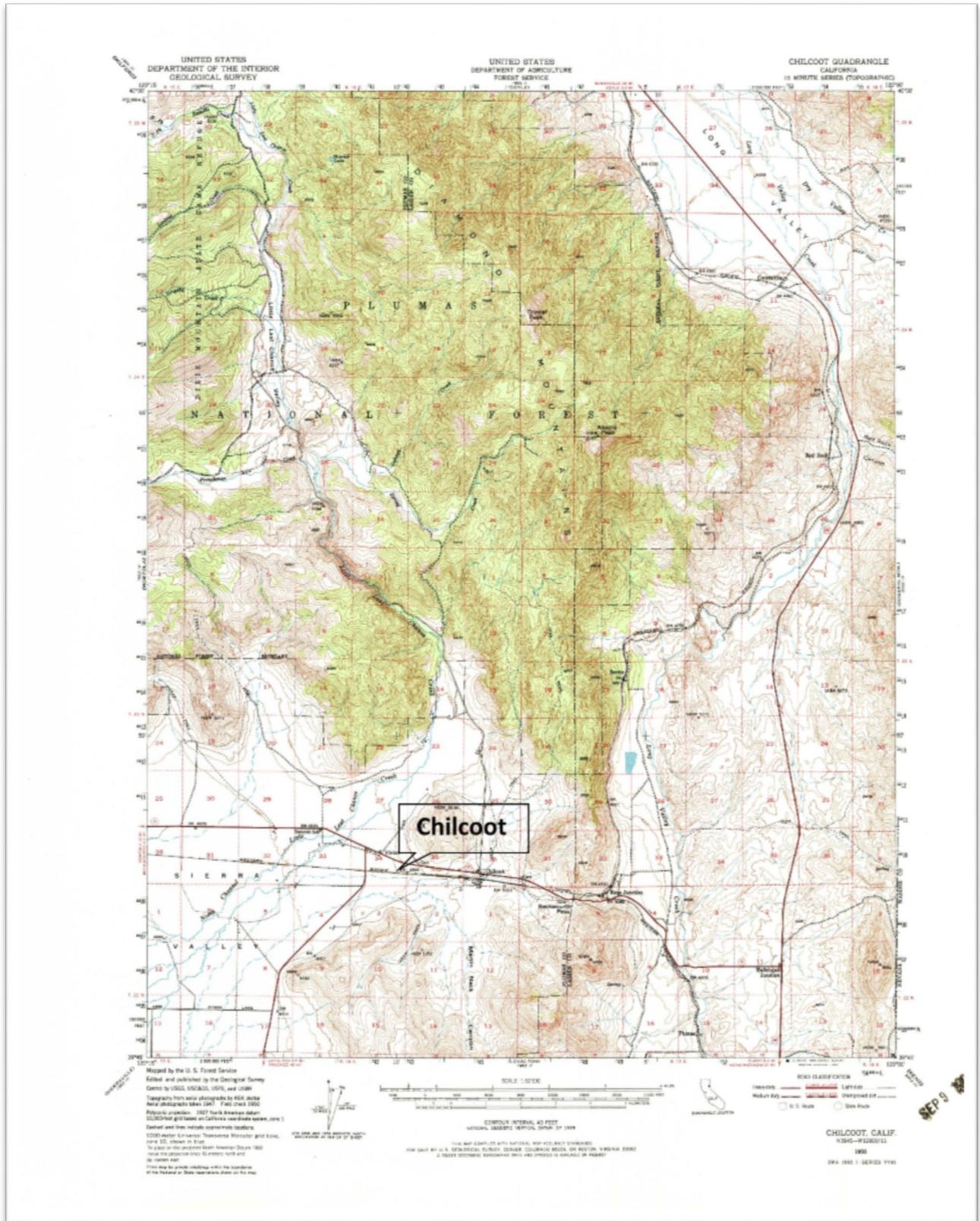


Figure 3 Proposed Solar Site shown on Chilcoot Quadrangle.



**Native American Heritage Commission  
Native American Contact List  
Plumas County  
4/12/2019**

***Estom Yumeka Maidu Tribe of  
the Enterprise Rancheria***

Glenda Nelson, Chairperson  
2133 Monte Vista Avenue Maidu  
Oroville, CA, 95966  
Phone: (530) 532 - 9214  
Fax: (530) 532-1768  
info@enterpriserancheria.org

***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

***Greenville Rancheria of Maidu  
Indians***

Kyle Self, Chairperson  
P.O. Box 279 Maidu  
Greenville, CA, 95947  
Phone: (530) 284 - 7990  
Fax: (530) 284-6612  
kself@greenvillerrancheria.com

***Mooretown Rancheria of Maidu  
Indians***

Benjamin Clark, Chairperson  
#1 Alverda Drive KonKow  
Oroville, CA, 95966 Maidu  
Phone: (530) 533 - 3625  
Fax: (530) 533-3680  
frontdesk@mooretown.org

***Mooretown Rancheria of Maidu  
Indians***

Guy Taylor,  
#1 Alverda Drive KonKow  
Oroville, CA, 95966 Maidu  
Phone: (530) 533 - 3625

***Susanville Indian Rancheria***

Brandon Guitierrez, Chairperson  
745 Joaquin Street Maidu  
Susanville, CA, 96130 Paiute  
Phone: (530) 257 - 6264 Pit River  
Fax: (530) 257-7986 Washoe  
sirtribalchair@citlink.net

***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

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 Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed NCPA Solar Project 1 - Plumas-Sierra Chilcoot Site, Plumas County.

**Appendix E**  
**AB 52 Consultation**

## Northern California Power Agency

651 Commerce Drive  
Roseville, California 95678



## AB 52 Tribal Consultation Notification

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**Date:** April 12, 2019  
**To:** Glenda Nelson, Chairperson (info@enterpriserancheria.org)  
**Tribes:** Estom Yumeka Maidu Tribe of the Enterprise Rancheria  
**Subject:** Notification for Tribal Consultation  
**Project Name:** NCPA Solar Project 1 – Plumas- Sierra Chilcoot Project  
**Lead Agency:** Northern California Power Agency

### Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Plumas-Sierra Chilcoot Project which may be located in a geographical area that is traditionally and culturally affiliated with the Estom Yumeka Maidu Tribe of the Enterprise Rancheria

### Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE  
K.S. Dunbar & Associates, Inc.  
Environmental Engineering  
45375 Vista Del Mar  
Temecula, California 92590-4314  
(951) 699-2082  
E-Mail: ksddpe67@gmail.com

Confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, is done by formal letter, in person, or over the telephone, the tribes request to consult on the above-named project must be received no later than 30 days from the date of this notification.

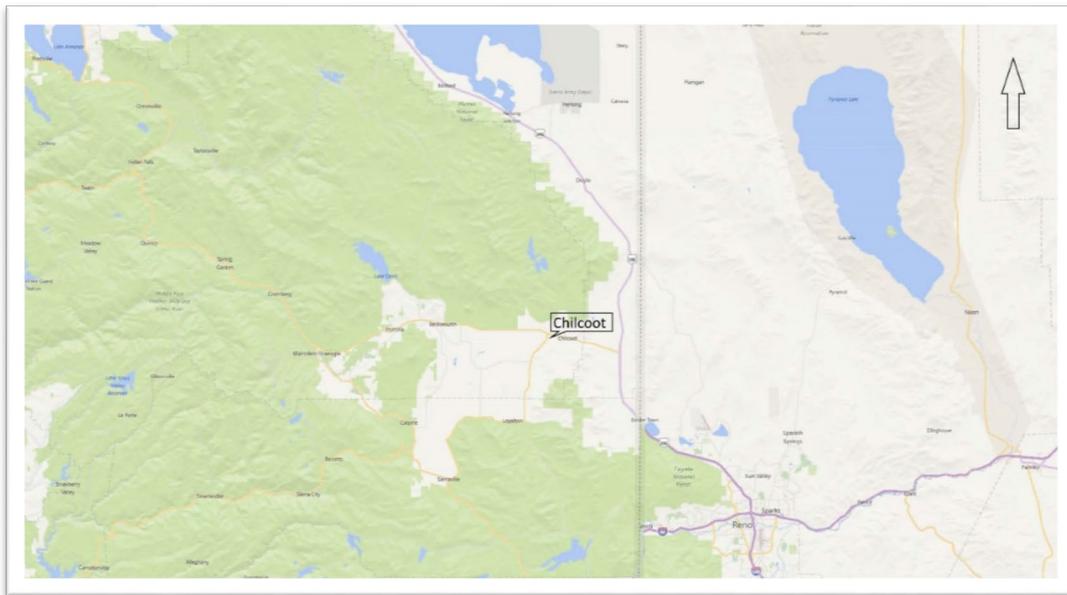
## Overview of the Proposed Project

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- ❖ Phase 1 – Determine member interest and requirements and identify potential sites.
- ❖ Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- ❖ Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The Plumas-Sierra Rural Electric Cooperative selected the Chilcoot site for further analysis (Figure 1). That site is the subject of this Notification.



**Figure 1 Plumas-Sierra Chilcoot Project Location**

The Project site is located within a 36-acre vacant parcel located just south of Highway 70 east of its intersection with Highway 49. The site is bordered by Highway 70 to the north, an industrial facility to the east, Union Pacific Railroad to the south, and scattered residences to the east (Figure 2). This site would accommodate a 4.7 MW facility with a one-year output of 9,720 megawatt-hours.



**Figure 2 Plumas-Sierra Chilcoat Project Site**

## Northern California Power Agency

651 Commerce Drive  
Roseville, California 95678



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## AB 52 Tribal Consultation Notification

---

**Date:** April 12, 2019  
**To:** Kyle Self, Chairman (kself@greenvillerancheria.com)  
**Tribe:** Greenville Rancheria of Maidu Indians  
**Subject:** Notification for Tribal Consultation  
**Project Name:** NCPA Solar Project 1 – Plumas- Sierra Chilcoot Project  
**Lead Agency:** Northern California Power Agency

### Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Plumas-Sierra Chilcoot Project which may be located in a geographical area that is traditionally and culturally affiliated with the Greenville Rancheria of Maidu Indians.

### Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE  
K.S. Dunbar & Associates, Inc.  
Environmental Engineering  
45375 Vista Del Mar  
Temecula, California 92590-4314  
(951) 699-2082  
E-Mail: ksddpe67@gmail.com

Confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, is done by formal letter, in person, or over the telephone, the tribes request to consult on the above-named project must be received no later than 30 days from the date of this notification.

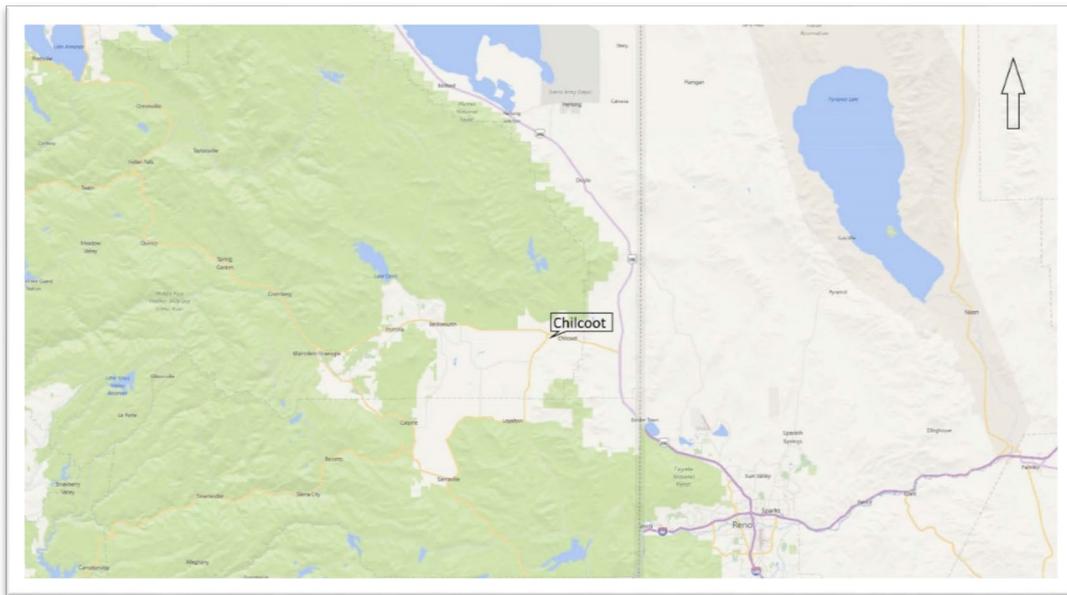
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**Figure 2 Plumas-Sierra Chilcoat Project Site**

## Northern California Power Agency

651 Commerce Drive  
Roseville, California 95678



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## AB 52 Tribal Consultation Notification

---

**Date:** April 12, 2019  
**To:** Benjamin Clarke, Chairperson (frontdesk@mooretown.org)  
**Tribe:** Mooretown Rancheria of Maidu Indians  
**Subject:** Notification for Tribal Consultation  
**Project Name:** NCPA Solar Project 1 – Plumas- Sierra Chilcoot Project  
**Lead Agency:** Northern California Power Agency

### Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Plumas-Sierra Chilcoot Project which may be located in a geographical area that is traditionally and culturally affiliated with the Mooretown Rancheria of Maidu Indians.

### Request for Consultation:

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Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE  
K.S. Dunbar & Associates, Inc.  
Environmental Engineering  
45375 Vista Del Mar  
Temecula, California 92590-4314  
(951) 699-2082  
E-Mail: ksddpe67@gmail.com

Confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, is done by formal letter, in person, or over the telephone, the tribes request to consult on the above-named project must be received no later than 30 days from the date of this notification.

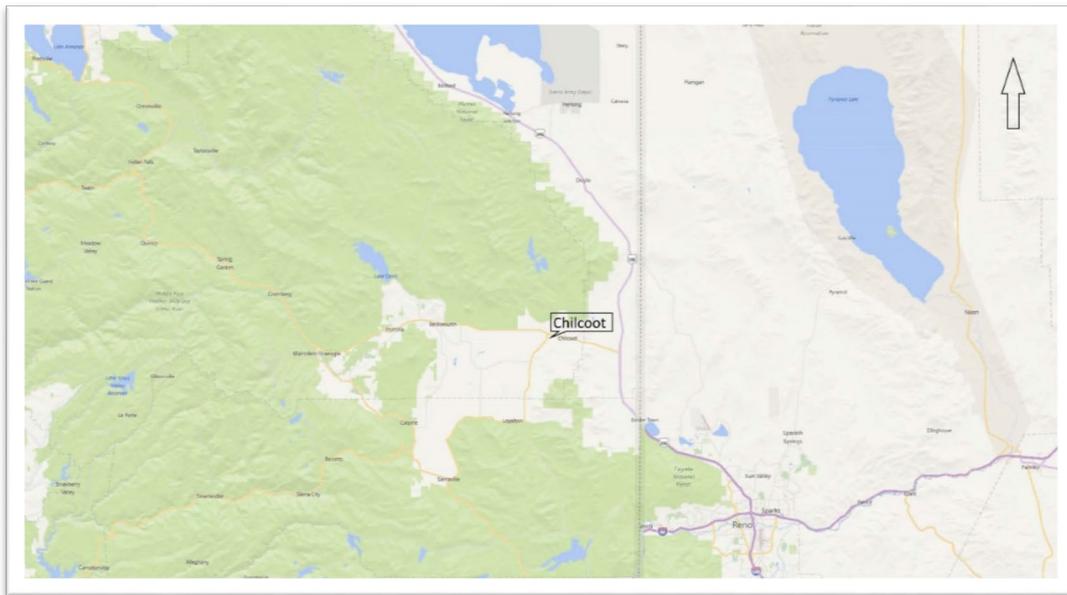
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NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The Plumas-Sierra Rural Electric Cooperative selected the Chilcoot site for further analysis (Figure 1). That site is the subject of this Notification.



**Figure 1 Plumas-Sierra Chilcoot Project Location**

The Project site is located within a 36-acre vacant parcel located just south of Highway 70 east of its intersection with Highway 49. The site is bordered by Highway 70 to the north, an industrial facility to the east, Union Pacific Railroad to the south, and scattered residences to the east (Figure 2). This site would accommodate a 4.7 MW facility with a one-year output of 9,720 megawatt-hours.



**Figure 2 Plumas-Sierra Chilcoat Project Site**

## Northern California Power Agency

651 Commerce Drive  
Roseville, California 95678



## AB 52 Tribal Consultation Notification

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**Date:** April 12, 2019  
**To:** Melany Johnson, Tribal Historic Preservation Officer (mjohnson@sir-nsn.gov)  
**Tribes:** Susanville Indian Rancheria  
**Subject:** Notification for Tribal Consultation  
**Project Name:** NCPA Solar Project 1 – Plumas- Sierra Chilcoot Project  
**Lead Agency:** Northern California Power Agency

### Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Plumas-Sierra Chilcoot Project which may be located in a geographical area that is traditionally and culturally affiliated with the Susanville Indian Rancheria.

### Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE  
K.S. Dunbar & Associates, Inc.  
Environmental Engineering  
45375 Vista Del Mar  
Temecula, California 92590-4314  
(951) 699-2082  
E-Mail: ksddpe67@gmail.com

Confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, is done by formal letter, in person, or over the telephone, the tribes request to consult on the above-named project must be received no later than 30 days from the date of this notification.

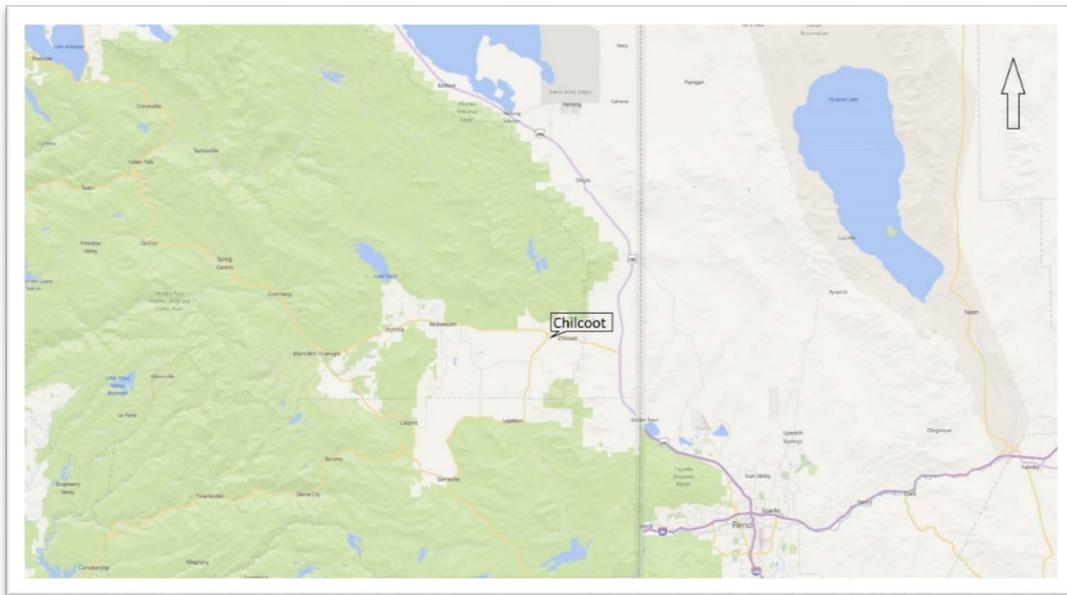
## Overview of the Proposed Project

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- ❖ Phase 1 – Determine member interest and requirements and identify potential sites.
- ❖ Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- ❖ Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The Plumas-Sierra Rural Electric Cooperative selected the Chilcoot site for further analysis (Figure 1). That site is the subject of this Notification.



**Figure 1 Plumas-Sierra Chilcoot Project Location**

The Project site is located within a 36-acre vacant parcel located just south of Highway 70 east of its intersection with Highway 49. The site is bordered by Highway 70 to the north, an industrial facility to the east, Union Pacific Railroad to the south, and scattered residences to the east (Figure 2). This site would accommodate a 4.7 MW facility with a one-year output of 9,720 megawatt-hours.



**Figure 2 Plumas-Sierra Chilcoat Project Site**

## Northern California Power Agency

651 Commerce Drive  
Roseville, California 95678



## AB 52 Tribal Consultation Notification

---

**Date:** April 12, 2019  
**To:** Grayson Coney, Cultural Director (tsi-akim-maidu@att.net)  
**Tribe:** T'SI-akim Maidu  
**Subject:** Notification for Tribal Consultation  
**Project Name:** NCPA Solar Project 1 – Plumas- Sierra Chilcoot Project  
**Lead Agency:** Northern California Power Agency

### Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Plumas-Sierra Chilcoot Project which may be located in a geographical area that is traditionally and culturally affiliated with the T'SI-akim Maidu.

### Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to:

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(951) 699-2082  
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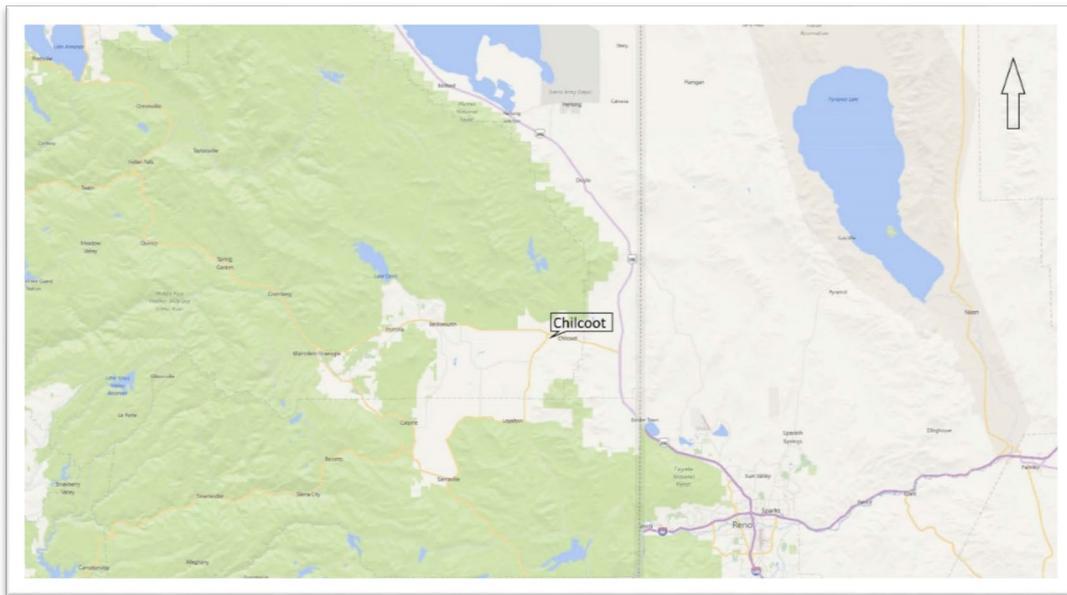
## Overview of the Proposed Project

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- ❖ Phase 1 – Determine member interest and requirements and identify potential sites.
- ❖ Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- ❖ Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The Plumas-Sierra Rural Electric Cooperative selected the Chilcoot site for further analysis (Figure 1). That site is the subject of this Notification.



**Figure 1 Plumas-Sierra Chilcoot Project Location**

The Project site is located within a 36-acre vacant parcel located just south of Highway 70 east of its intersection with Highway 49. The site is bordered by Highway 70 to the north, an industrial facility to the east, Union Pacific Railroad to the south, and scattered residences to the east (Figure 2). This site would accommodate a 4.7 MW facility with a one-year output of 9,720 megawatt-hours.



**Figure 2 Plumas-Sierra Chilcoat Project Site**

## Northern California Power Agency

651 Commerce Drive  
Roseville, California 95678



## AB 52 Tribal Consultation Notification

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**Date:** April 12, 2019  
**To:** Darrel Cruz, Cultural Resources Department (darrel.cruz@washoetribe.us)  
**Tribes:** Washoe Tribe of Nevada and California  
**Subject:** Notification for Tribal Consultation  
**Project Name:** NCPA Solar Project 1 – Plumas- Sierra Chilcoot Project  
**Lead Agency:** Northern California Power Agency

### Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Plumas-Sierra Chilcoot Project which may be located in a geographical area that is traditionally and culturally affiliated with the Washoe Tribe of Nevada and California.

### Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE  
K.S. Dunbar & Associates, Inc.  
Environmental Engineering  
45375 Vista Del Mar  
Temecula, California 92590-4314  
(951) 699-2082  
E-Mail: ksddpe67@gmail.com

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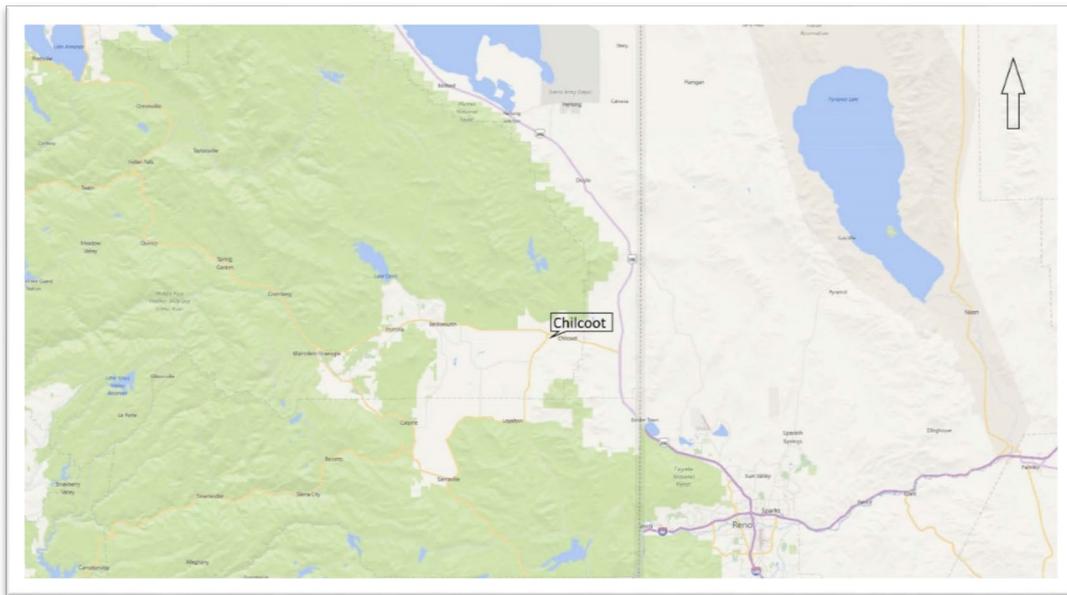
## Overview of the Proposed Project

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- ❖ Phase 1 – Determine member interest and requirements and identify potential sites.
- ❖ Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- ❖ Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The Plumas-Sierra Rural Electric Cooperative selected the Chilcoot site for further analysis (Figure 1). That site is the subject of this Notification.



**Figure 1 Plumas-Sierra Chilcoot Project Location**

The Project site is located within a 36-acre vacant parcel located just south of Highway 70 east of its intersection with Highway 49. The site is bordered by Highway 70 to the north, an industrial facility to the east, Union Pacific Railroad to the south, and scattered residences to the east (Figure 2). This site would accommodate a 4.7 MW facility with a one-year output of 9,720 megawatt-hours.



**Figure 2 Plumas-Sierra Chilcoat Project Site**

## **Appendix F**

### **MMRP**



Northern California Power Agency  
651 Commerce Drive  
Roseville, California 95678-6420

## Mitigation Monitoring & Reporting Program

### NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site



Photo Courtesy of SunPower Corporation

*Prepared by:*

**K.S. Dunbar & Associates, Inc.**  
Environmental Engineering  
45375 Vista Del Mar  
Temecula, California 92590-4314  
951-699-2082  
Email: [ksdpe67@gmail.com](mailto:ksdpe67@gmail.com)

April 2019



# Mitigation Monitoring and Reporting Program

## NCPA Solar Project – Plumas-Sierra Chilcoot Site

The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring program. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring program must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

In compliance with Public Resources Code Section 21081.6, the following MITIGATION MONITORING AND REPORTING CHECKLIST has been prepared for the NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site Project. This Mitigation Monitoring and Reporting Checklist is intended to provide verification that all applicable Conditions of Approval relative to significant environmental impacts are monitored and reported. Monitoring will include: 1) verification that each mitigation measure has been implemented, 2) recordation of the actions taken to implement each mitigation, and 3) retention of records in the NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site Project file.

This Mitigation Monitoring and Reporting Program delineates responsibilities for monitoring the Project, but also allows the Northern California Power Agency (NCPA) flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented.

Reporting consists of establishing a record that a mitigation measure is being implemented and generally involves the following steps:

- ❖ NCPA distributes reporting forms to the appropriate persons for verification of compliance.
- ❖ Departments/agencies with reporting responsibilities will review the Environmental Impact Report or Initial Study and Mitigated Negative Declaration, which provides general background information on the reasons for including specified mitigation measures.
- ❖ Problems or exceptions to compliance will be addressed to NCPA as appropriate.
- ❖ Periodic meetings may be held during project implementation to report on compliance of mitigation measures.
- ❖ Responsible parties provide NCPA with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented. Monitoring compliance may be documented through existing review and approval programs such as field inspection reports and plan review.
- ❖ NCPA or Applicant prepares a reporting form periodically during the construction phase and an annual reporting summarizing all project mitigation monitoring efforts.
- ❖ Appropriate mitigation measures will be included in construction documents and/or conditions of permits/approvals.

Minor changes to the Mitigation Monitoring and Reporting Program, if required, would be made in accordance with CEQA and would be permitted after further review and approval by NCPA. Such changes could include reassignment of monitoring and reporting responsibilities, program redesign to make any appropriate improvements, and/or modification, substitution or deletion of mitigation measures subject to conditions described in CEQA Guidelines Section 15162. No change will be permitted unless the Mitigation Monitoring and Reporting Program continues to satisfy the requirements of Public Resources Code Section 21081.6.

## Mitigation Monitoring and Reporting Program Checklist

### NCPA Solar Project 1 – Plumas-Sierra Chilcoot Site

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)	Date Completed
<b>Air Quality</b>				
NCPA shall appoint a construction relations officer to act as a community liaison concerning on-site construction activities including resolution of issues related to PM <sub>10</sub> generation. Additionally, best management practices shall be included in contract documents for this project.	Project Records.	Prior To Construction.	Project Manager.	By: Date:
<b>Standard Construction Practices/Design Features</b>				
<p>NCPA's contract documents for this project will include the following:</p> <p>The contractor shall:</p> <ul style="list-style-type: none"> <li>❖ Utilize electricity from power poles instead of from temporary diesel or gasoline power generators, when feasible.</li> <li>❖ Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the contractor shall use trucks that meet EPA 2007 model year NO<sub>x</sub> emissions requirements.</li> <li>❖ Require that all on-site construction equipment meet EPA Tier 3 or higher emissions standards according to the following: <ul style="list-style-type: none"> <li>➤ All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.</li> <li>➤ A copy of each unit's certified tier specification, BACT documentation, and CARB or Northern Sierra AQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.</li> </ul> </li> <li>❖ Maintain construction equipment engines by keeping them properly tuned and maintained according to manufacturer's specifications.</li> <li>❖ Use alternative fuels or clean and low-sulfur fuel for equipment.</li> <li>❖ Idle trucks in accordance with the Airborne Toxic Control Measure (ACTM) to Limit Diesel</li> </ul>	Project Records.	Prior To Construction.	Project Manager.	By: Date:

**Mitigation Monitoring and Reporting Program Checklist**

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)	Date Completed
<p>Fueled Commercial Motor Vehicle Idling and other applicable laws.</p> <ul style="list-style-type: none"> <li>❖ Spread soil binders on site, where appropriate.</li> <li>❖ Water active construction sites at least twice daily.</li> <li>❖ Sweep all streets at the end of the day if visible soil materials are carried onto adjacent public paved roads (recommend water sweeper with reclaimed water).</li> <li>❖ All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour as directed by the Northern Sierra AQMD.</li> <li>❖ If necessary, wash off trucks leaving the site.</li> <li>❖ Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114.</li> </ul>				

**Biological Resources**

**Standard Construction Practices/Design Features**

NCPA's contract documents for this project will include the following:

- ❖ If construction occurs between February 1<sup>st</sup> and August 31<sup>st</sup>, a pre-construction clearance survey for nesting birds shall be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. The size of the no-disturbance buffer (generally 300 feet for migratory and non-migratory song birds and 500 feet for raptors and special-status species) will be determined by the wildlife biologist, in coordination with the CDFW, and will depend on the level of noise and/or surrounding disturbances, line of sight between the nest and the construction activity, ambient noise, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes

Project Records.

Prior To Construction.

Project Manager.

By:  
Date:

## Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)	Date Completed
inactive under natural conditions, construction activities within the buffer area can occur.				
<b>Cultural Resources</b>				
Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.	Project Records.	Prior To Construction.	Project Manager.	By:  Date:
<b>Standard Construction Practices/Design Features</b>				
NCPA's contract documents for this project will include the following:  ❖ In the unlikely event that potentially significant archaeological materials are encountered during construction activities, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery, assess the significance of the archaeological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of cultural material that might be discovered during excavation shall be in accordance with applicable laws and regulations.	Project Records.	Prior To Construction.	Project Manager.	By:  Date:
❖ All sacred items, should they be encountered within the Project sites, shall be avoided and preserved as the preferred mitigation, if feasible. All cultural materials that are collected during excavation and other earth disturbing activities on the Project sites, with the exception of sacred items, burial goods and human remains which will be addressed in any required Treatment Agreement, shall be tribally curated according to the current repository standards. The collections and associated records shall be transferred, including title, to the closest tribe to the Project site.				
❖ In the event of an accidental discovery or recognition of any human remains, the County Coroner shall be notified and construction activities at the affected work site shall be halted. If the coroner determines the remains to be Native American: (1) the coroner shall contact the Native American Heritage Commission (NAHC) within 24-hours, and (2) the NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American. The treatment and disposition of human remains that might be discovered during excavation shall be in accordance with applicable laws and regulations.				

## Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)	Date Completed
<b>Geology and Soils</b>				
<b>Standard Construction Practices/Design Features</b>				
<p>NCPA's contract documents for this project will include the following:</p> <ul style="list-style-type: none"> <li>❖ In the unlikely event that potentially significant paleontological materials (e.g., fossils) are encountered during construction of the project, all work shall be halted in the vicinity of the paleontological discovery until a qualified paleontologist can visit the site of discovery, assess the significance of the paleontological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of paleontological material that might be discovered during excavation shall be in accordance with applicable laws and regulations.</li> </ul>	Project Records	Prior to Construction	Project Manager	By: Date:
<b>Hazards and Hazardous Materials</b>				
<b>Standard Construction Practices/Design Features</b>				
<p>NCPA's contract documents for this project will include the following:</p> <ul style="list-style-type: none"> <li>❖ During project construction, the construction contractor shall implement the following measures to address the potential environmental constraints associated with the presence of hazardous materials at the project sites to the satisfaction of NCPA:                             <ul style="list-style-type: none"> <li>✓ The contractor shall prepare a Health and Safety Plan in compliance with the requirements of Chapter 6.95, Division 20 of the Health and Safety Code (§25500 – 25532). The plan shall include measures to be taken in the event of an accidental spill.</li> <li>✓ The contractor shall enforce strict on-site handling rules to keep construction and maintenance materials out of receiving waters and storm drains. In addition, the contractor shall store all reserve fuel supplies only within the confines of designated construction staging areas; refuel equipment only with the designated construction staging areas; and regularly inspect all construction equipment for leaks.</li> <li>✓ The construction staging area shall be designed to contain contaminants such as oil, grease, and fuel products to ensure that they do not drain towards receiving waters or storm drain inlets.</li> </ul> </li> </ul>	Project Records.	Prior To Construction.	Project Manager.	By: Date:
<b>Hydrology and Water Quality</b>				
<b>Standard Construction Practices/Design Features</b>				
<p>All site grading and excavation activities associated with the construction of the Project facilities would be subject to the provisions of the National Pollutant Discharge Elimination System (NPDES) Construction Permit for Storm Water Discharges Associated with Construction</p>	Project Records.	Prior To Construction.	Project Manager.	By: Date:

**Mitigation Monitoring and Reporting Program Checklist**

<p>and Land Disturbance Activities [NPDES No. CAS000002 (State Water Resources Control Board Order No. 2009-0009-DWQ)]. Compliance with the provisions of that Order would require NCPA to obtain coverage before the onset of construction activities. Construction activities would comply with the conditions of these permits that include preparation of storm water pollution prevention plans (SWPPP), implementation of BMP's, and monitoring to insure impacts to water quality are minimized. As part of this process, multiple BMP's should be implemented to provide effective erosion and sediment control. These BMP's should be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMP's to be implemented may include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>✓ Temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other groundcover shall be employed for disturbed areas.</li> <li>✓ Storm drain inlets on the site and in downstream offsite areas shall be protected from sediment with the use of BMP's acceptable to NCPA, local jurisdictions and the California Regional Water Quality Control Board, Central Valley Region.</li> <li>✓ Dirt and debris shall be swept from paved streets in the construction zone on a regular basis, particularly before predicted rainfall events.</li> <li>✓ No disturbed surfaces shall be left without erosion control measures in place. NCPA, or its Construction Contractor, shall file a Notice of Intent with the Regional Board and require the preparation of a pollution prevention plan prior to commencement of construction. NCPA shall routinely inspect the construction site to verify that the BMP's specified in the pollution prevention plan are properly installed and maintained. NCPA shall immediately notify the contractor if there were a noncompliance issue and require immediate compliance.</li> </ul> <p>The SWPPP will also identify the method of final stabilization of the site to ensure no post-construction erosion and impacts to water quality will occur. The Notice of Termination (NOT) and release of the Project from the provisions of the Construction General Permit coverage will be granted by the California Regional Water Quality Control Board, Central Valley Region once it is satisfied that no impacts to water quality will occur.</p>				
<b>Noise</b>				
<p>NCPA shall appoint a construction relations officer to act as a community liaison concerning on-site construction activities. Prior to ground disturbing activities NCPA shall notify adjoining property owners of the potential for ground vibration impacts.</p>	Project Records.	Prior to Construction.	Project Manager.	By:  Date