Initial Study and Proposed Negative Declaration

for the

Wolf and Grizzly Creek Municipal Watershed Protection Project

Sierra Nevada Conservancy Grant Application # 837

PREPARED FOR

Sierra Nevada Conservancy

11521 Blocker Drive #205
Auburn, CA 95603

PREPARED BY

Ascent Environmental, Inc.

455 Capitol Mall, Suite 300
Sacramento, CA 95814

April 2016

TABLE OF CONTENTS

Section Page

ACRONYMS AND ABBREVIATIONS II

1 INTRODUCTION 1-1
- 1.1 Introduction and Regulatory Guidance 1-1
- 1.2 Summary of Findings 1-2
- 1.3 Environmental Permits 1-2
- 1.4 Document Organization 1-3

2 PROJECT DESCRIPTION AND BACKGROUND 2-5
- 2.1 Background 2-5
- 2.2 Prior CEQA Documents 2-5
- 2.3 Project Location 2-6
- 2.4 Need for the Proposed Project 2-6
- 2.5 Project Objectives 2-6
- 2.6 Description of Proposed Project 2-11

3 ENVIRONMENTAL CHECKLIST 3-1
- 3.1 Aesthetics 3-3
- 3.2 Agriculture and Forest Resources 3-4
- 3.3 Air Quality 3-6
- 3.4 Biological Resources 3-7
- 3.5 Cultural Resources 3-10
- 3.6 Geology and Soils 3-11
- 3.7 Greenhouse Gas Emissions 3-13
- 3.8 Hazards and Hazardous Materials 3-16
- 3.9 Hydrology and Water Quality 3-18
- 3.10 Land Use and Planning 3-20
- 3.11 Mineral Resources 3-21
- 3.12 Noise 3-22
- 3.13 Population and Housing 3-23
- 3.14 Public Services 3-24
- 3.15 Recreation 3-25
- 3.16 Transportation/Traffic 3-26
- 3.17 Utilities and Service Systems 3-28
- 3.18 Mandatory Findings of Significance - Including Cumulative Impacts 3-29

4 REFERENCES 4-1

Exhibits

Exhibit 2-1 Vicinity of Round Valley, Ingalls, and Jenkins Projects Areas 2-7
Exhibit 2-2 Ingalls Units 2-8
Exhibit 2-3 Jenkins Units 2-9
Exhibit 2-4 Round Valley Units 2-10

Appendices

A Freeman Project Design Criteria, Standard Operating Procedures, and Other Requirements
B Ingalls Project Design Criteria, Standard Operating Procedures, and Other Requirements
C Keddie Ridge Project Design Criteria, Standard Operating Procedures, and Other Requirements
D Renewal of Conditional Waiver of Waste Discharge Requirements for Discharges Related to Timber Harvesting Activities

ACRONYMS AND ABBREVIATIONS

ARB	California Air Resources Board
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNRA	California Natural Resources Agency
CVRWQCB	Central Valley Regional Water Quality Control Board
CWPP	County Community Wildfire Protection Plan
dbh	diameter at breast height
EA	Environmental Assessment
FONSI	Finding of No Significant Impact
EIS	Environmental Impact Statement
FVS	Forest Vegetation Simulator
GHGs	greenhouse gases
HFQLG	Herger-Feinstein Quincy Library Group
IRWM	Feather River Integrated Regional Watershed Management
IS/Proposed ND	Initial Study/Proposed Negative Declaration
MT CO_2e	metric tons of a carbon dioxide equivalent
NEPA	National Environmental Policy Act
NSAQMD	Northern Sierra Air Quality Management District
PC FSC	Plumas County Fire Safe Council
Plumas NF	U.S. Forest Service, Plumas National Forest
ROD	Record of Decision
SNC	Sierra Nevada Conservancy
SOPs	Standard Operating Procedures

1 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This Initial Study/Proposed Negative Declaration (IS/Proposed ND) has been prepared by the Sierra Nevada Conservancy (SNC) to evaluate the potential environmental effects resulting from implementation of the proposed Wolf and Grizzly Creek Municipal Watershed Protection Project. The project site is in Plumas County, and would consist of fuel reduction and forest restoration treatments on 500 acres of National Forest lands, which would be implemented by the Plumas County Fire Safe Council.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). An IS is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a "public agency shall prepare…a proposed negative declaration or mitigated negative declaration…when: (a) The Initial Study shows that there is no substantial evidence…that the project may have a significant impact on the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed project would not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). By contrast, an EIR is required when the project may have one or more significant environmental effects that cannot clearly be reduced to less-than-significant levels by adoption of mitigation or by revisions in the project design.

As described in the environmental checklist (Chapter 3), the proposed project would not result in significant environmental impacts. Therefore, an IS/ND is the appropriate document for compliance with the requirements of CEQA. This IS/ND conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the proposed project. The SNC is considering a discretionary action to award $500,000 to fund implementation of the project. As such, SNC is the lead agency and has directed the preparation of an analysis that complies with CEQA so as to inform decision-makers and the public of the environmental consequences of implementing the proposed project. This disclosure document is being made available to the public for review and comment. The IS/Proposed ND is available for a 30-day public review period from April 6, 2016 to May 5, 2016.

Supporting documentation referenced in this document is available for review at the SNC office:

Sierra Nevada Conservancy
11521 Blocker Drive #205
Auburn, CA 95603
Phone: (530) 823-4670

Comments or questions should be addressed to:

Patrick Eidman
Sierra Nevada Conservancy
11521 Blocker Drive #205
Auburn, CA 95603
Phone: (530) 823-4689
Email: Patrick.Eidman@sierranevada.ca.gov

If you wish to send written comments (including via e-mail), they must be postmarked by May 5, 2016.

After comments are received from the public and reviewing agencies, SNC may (1) adopt the ND and approve the project; (2) undertake additional environmental studies; or (3) abandon the project. If the SNC adopts the ND and authorizes a grant award, then the Plumas County Fire Safe Council may proceed with the project only after executing the required grant agreement and obtaining all necessary permits and other approvals.

1.2 SUMMARY OF FINDINGS

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the proposed project.

Based on the issues evaluated in that chapter, it was determined that the proposed project would have either no impact or a less-than-significant impact related to all of the issue areas identified in the Environmental Checklist, included as Appendix G of the State CEQA Guidelines. These include the following issue areas:

- aesthetics,
- agricultural resources,
- cultural resources,
- 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/traffic,
- utilities and service systems, and
- mandatory findings of significance, including cumulative impacts.

1.3 ENVIRONMENTAL PERMITS

The project will require the preparation of a Smoke Management Plan and the acquisition of an Air Pollution Permit from the Northern Sierra Air Quality Management District. The project would qualify for Category 5 of the Central Valley Regional Water Quality Control Board's (CVRWQCB) Conditional Waiver of Waste Discharge Requirements for Discharges Related to Timber Harvesting Activities (Board Order No. R5-2014-0144). This waiver includes required standards for water quality protection during forestry activities, post project restoration, and monitoring (see Appendix D).

The U.S. Forest Service, Plumas National Forest (Plumas NF) will be responsible for preparing the Smoke Management Plan, acquiring the Air Pollution Permit, and submitting required materials to the CVRWQCB prior to initiation of applicable project activities. The Plumas NF is also responsible for ensuring compliance with the terms of the Air Pollution Permit and Conditional Waiver of Waste Discharge Requirements.

1.4 DOCUMENT ORGANIZATION

This IS/ND is organized as follows:

Chapter 1: Introduction. This chapter provides an introduction to the environmental review process. It describes the purpose and organization of this document. It also presents a summary of findings.

Chapter 2: Project Description and Background. This chapter describes the purpose of and need for the proposed project, identifies project objectives, and provides a detailed description of the proposed project.

Chapter 3: Environmental Checklist. This chapter presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist and determines if each of a range of impacts would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If any impacts were determined to be potentially significant, an EIR would be required. For this project, however, none of the impacts were determined to be significant after implementation of mitigation measures.

Chapter 4: References. This chapter lists the references used in preparation of this IS/Proposed ND.

This page intentionally left blank.

2 PROJECT DESCRIPTION AND BACKGROUND

2.1 BACKGROUND

The Round Valley, Ingalls, and Jenkins Projects (now known as the Wolf and Grizzly Creek Municipal Watershed Protection Project) were initially developed and planned under the Quincy Library Group (QLG) Pilot Project as part of the Herger-Feinstein Quincy Library Group (HFQLG) Act of Congress. Funding for HFQLG projects ended in 2012, leaving the Plumas NF looking for other solutions to continue their efforts to increase the pace and scale of landscape level forest treatments. The project has gone through the National Environmental Policy Act (NEPA) process with public scoping, input, and collaboration, but the implementation of the project was left unfunded. This project is the product of a forest collaborative effort that has been developed during the past year, this effort is a joint project of the Plumas County Fire Safe Council (PC FSC) and the Plumas NF. The PC FSC submitted a grant application to the SNC requesting $500,000 to fund implementation of the project.

The Wolf and Grizzly Creek Watershed Protection Project is consistent with Feather River Integrated Regional Watershed Management (IRWM) forest management strategies; is consistent with the Plumas County Community Wildfire Protection Plan (CWPP), 1988 Plumas National Forest Land and Resource Management Plan, USFS Watershed Condition Framework, and the California Department of Forestry and Fire Protection Lassen–Modoc–Plumas unit fire plan. The proposed projects address elements identified in the action plans for both lower Wolf and Big Grizzly Creek priority watersheds.

2.2 PRIOR CEQA DOCUMENTS

Environmental documents in compliance with NEPA have been completed for all proposed work activities, but CEQA compliance has not been completed. The purpose of this IS/ND is to provide CEQA compliance for the Wolf and Grizzly Creek Watershed Project.

The proposed project is located entirely on Plumas National Forest System Land. The proposed treatments would fully comply with the 1988 Plumas National Forest Land and Resource Management Plan as amended by the 2004 Sierra Nevada Framework Plan Amendment Record of Decision. These plans set forth acceptable activities, standards and guidelines, and necessary monitoring requirements to meet long-term sustainability goals. In addition, project-level design criteria and project-level monitoring requirements for proposed treatments and compliance with the National Forest Management Act are set forth in the following NEPA analyses (available at: http://www.sierranevada.ca.gov/other-assistance/applying-for-a-grant/september-1-2015-applications/837ed.pdf):

- 2011 Keddie Ridge Project Final Environmental Impact Statement and Record of Decision (Keddie Ridge Project EIS) – evaluated activities at the Round Valley project site
- 2006 Freeman Project Environmental Impact Statement and Record of Decision (Freeman Project EIS) – evaluated activities at the Jenkins project site
- 2011 Ingalls Project Environmental Assessment and Decision Notice and Finding of No Significant Impact (Ingalls Project EA) – evaluated activities at the Ingalls project site

Design criteria, implementation, and monitoring requirements would be implemented under the proposed project to be compliant with the Plumas National Forest guiding direction. Additionally, an agreement would be developed between the Plumas NF and the SNC to ensure that the SNC would be able to perform monitoring within the project area for the next 25 years.

2.3 PROJECT LOCATION

The Wolf and Grizzly Creek Watershed is located in the Plumas National Forest, in Plumas County, a rural forested area of the Northern Sierra Nevada. The project would take place in two municipal watersheds in the upper Feather River Watershed. Three areas are included as part of this project: the Round Valley area, Jenkins, and Ingalls. See Exhibit 2-1 through 2-4 for the project site locations.

2.4 NEED FOR THE PROPOSED PROJECT

This project contributes to a large scale effort by the Plumas NF to create landscape level defensible fuel profile zones, which are areas of treated forest lands that have increased resiliency to high intensity wildfires. Several completed projects are in the nearby vicinity, and the implementation of this project would create increased resilience of the treated areas to catastrophic wildfire. The project area also provides wildlife habitat and extensive recreation opportunities for residents and visitors to the region, which would be enhanced and protected from the effects of catastrophic wildfire.

The project was designed to reduce fire hazard and restore forest health within watersheds that provide municipal water sources. These municipal water sources serve the disadvantaged communities of Greenville and Portola. Lake Davis, within the Grizzly Creek watershed, is the primary water source for the city of Portola. Water from Lake Davis also contributes to the State Water Project, providing water throughout California. Reducing the risk of destructive wildfires surrounding these water reservoirs is essential to providing clean and abundant water to California and maintaining healthy watershed ecosystems. In addition, project activities would contribute to the local economy through the sale of forest products from the Jenkins site, which could include chipped biomass that could be used for electricity generation in nearby power generation facilities, and merchantable sawlogs that could be sold to a nearby sawmill. Project activities on all of the treatment sites will create forest management jobs and provide opportunities for local forestry businesses.

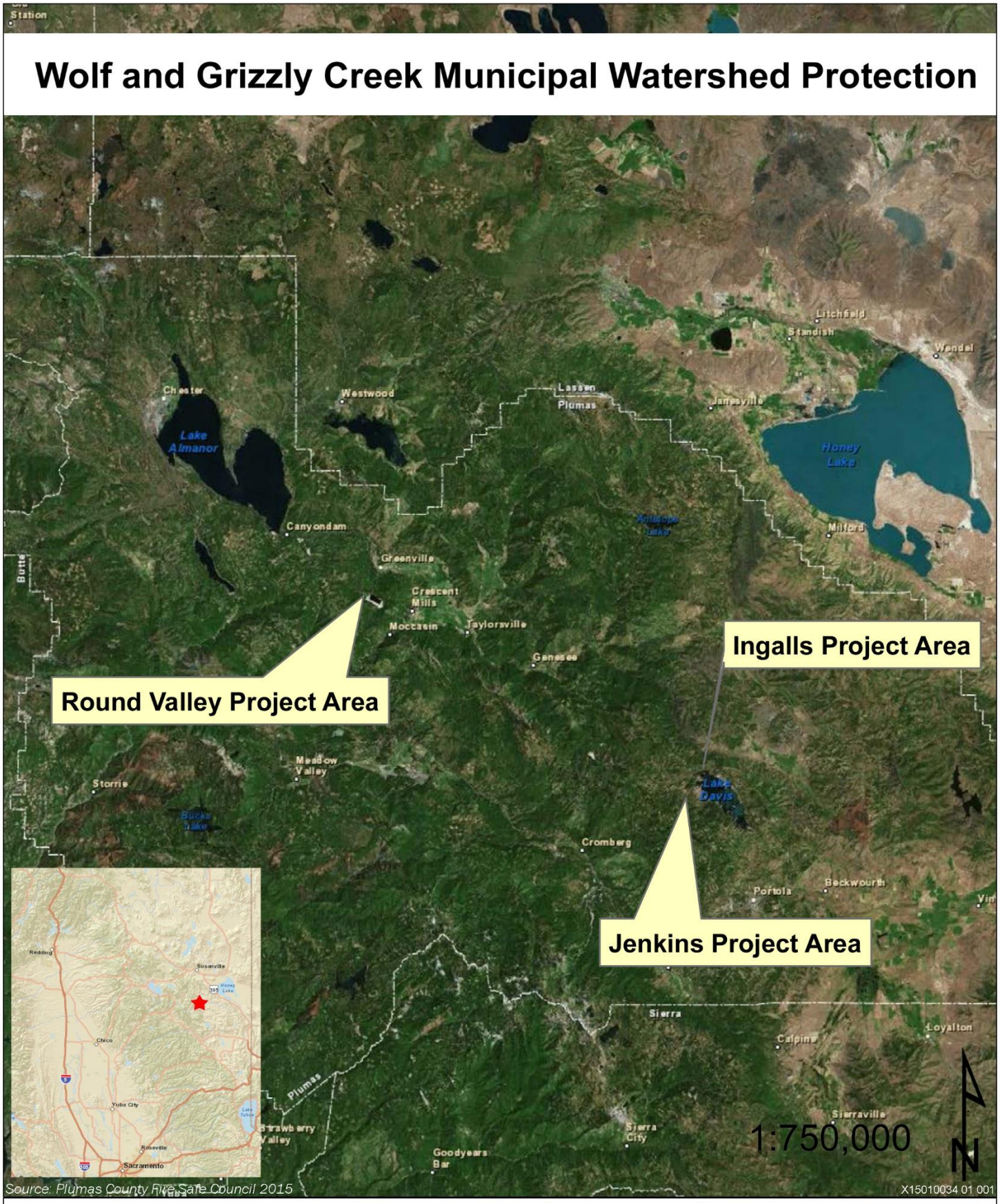
2.5 PROJECT OBJECTIVES

The proposed project would contribute to the purpose and need associated with the Freeman Project, Ingalls Project, and Keddie Ridge Project. These include the following:

Keddie Ridge Project Purpose and Need
- Reduce Hazardous Fuel Accumulation
- Improve Forest Health
- Protect and Enhance Habitat for Region 5 Forest Service Sensitive Plant and Wildlife Species
- Improve Watershed Health
- Reduce Noxious Weed Infestations

Freeman Project Purpose and Need
- Reduce Fuels
- Improve Forest Health
- Improve Bald Eagle Habitat
- Contribute to the Economic Stability of the Local Community
- Improve Aspen Stands
- Provide Access Needed to Meet Other Project Objectives and Reduce Transportation System Impacts

Wolf and Grizzly Creek Municipal Watershed Protection



Source: Plumas County Fire Safe Council 2015

X15010034 01 001

Exhibit 2-1 **Vicinity of Round Valley, Ingalls, and Jenkins Projects Areas**

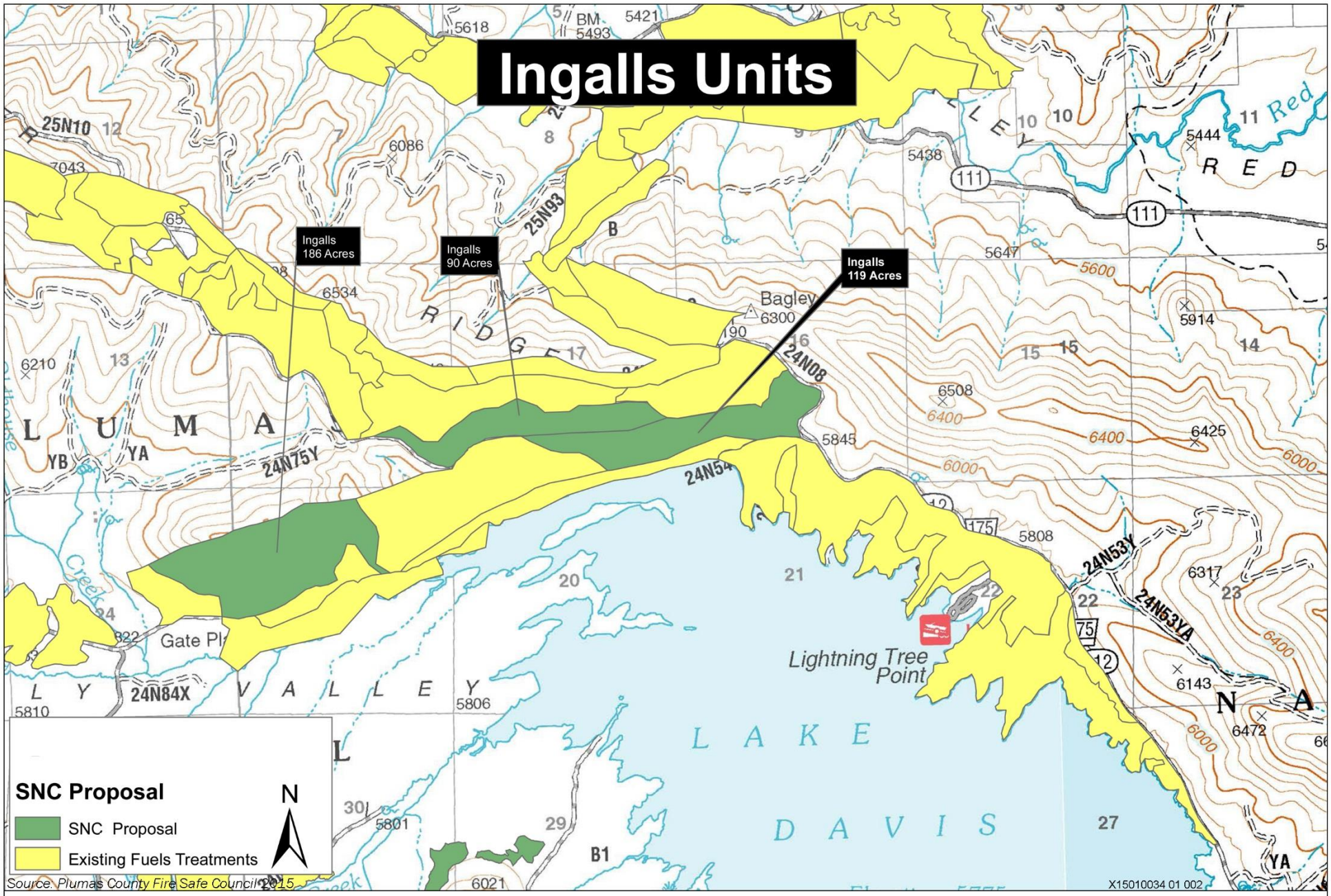


Exhibit 2-2

Ingalls Units

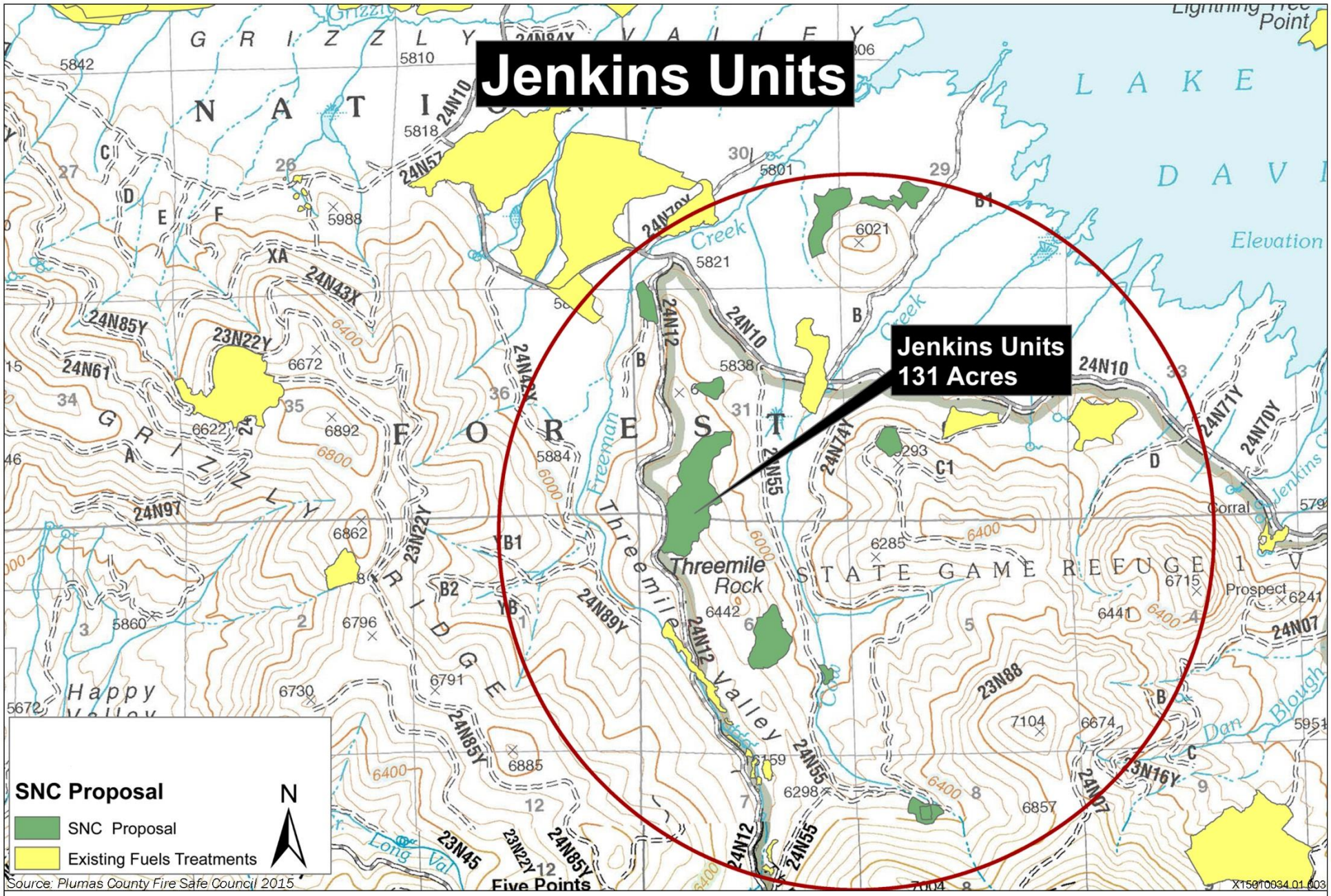


Exhibit 2-3

Jenkins Units

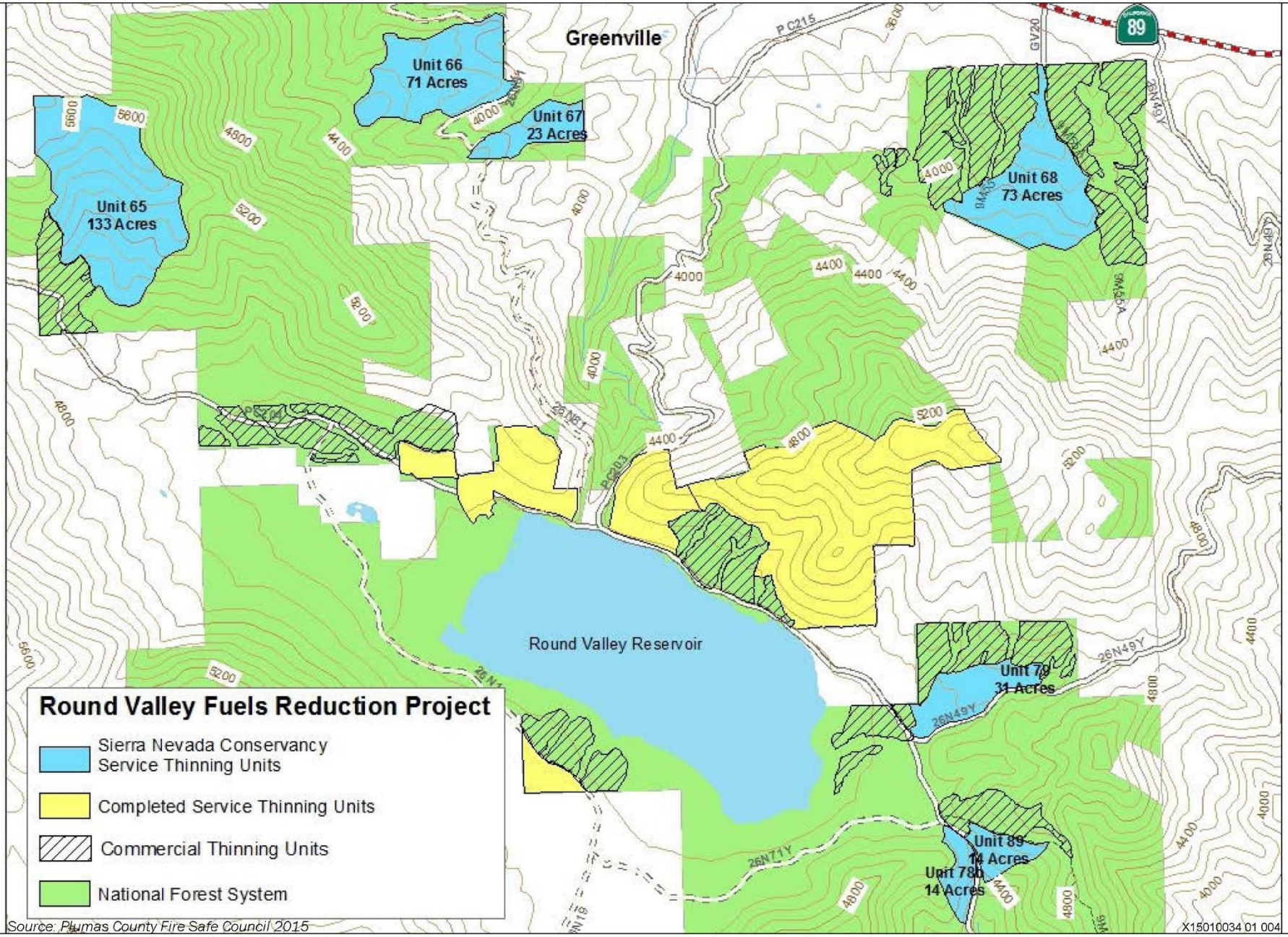


Exhibit 2-4

Round Valley Units

Ingalls Project Purpose and Need

- Strategically reduce fuel loads
- Improve forest health and fire resiliency
- Provide for old forest ecosystems and associated wildlife species
- Improve aspen and cottonwood growing conditions
- Contribute to the economic health and stability of local rural communities
- Provide the road access needed to meet project objectives while reducing transportation system effects.

2.6 DESCRIPTION OF PROPOSED PROJECT

The project would consist of the treatment of approximately 500 acres of fuels within the Wolf and Grizzly Creek Watersheds. Fuels reduction and forest restoration treatments would include:

- 131 acres of mechanical thinning of sawlogs and biomass, chipping and hauling of forest products on the Jenkins treatment site. Fuels would be reduced by generally thinning from below (removing trees starting with the smallest diameter), except for trees that are at high risk of mortality due to insects or diseases. Where mechanical, ground-based harvest equipment is used, trees would be removed using whole tree yarding, effectively removing most limbs and tree tops from the stand, thereby reducing the need for post-project slash pile fuels treatments. No trees over 29.9 inches diameter at breast height (dbh) would be removed, except for operability (e.g., new skid trails, landings, temporary roads). Mechanical felling would be restricted to slopes having a gradient of less than 35 percent. Exceptions may be made for short (less than 100-foot) pitches within the interior of units where slope exceeds this limit. Mastication, grapple pile and/or underburning may follow thinning, if needed to meet ladder and ground fuel-reduction objectives.

  Chipped biomass may be hauled to nearby biomass facilities for energy production. Three direct combustion biomass facilities are located in the general vicinity of the treatment site. The Collins Pine facility located in Chester generates roughly 13 megawatts (MW) of power, the Sierra Pacific Industries Quincy Power Plant, located in Quincy, generates roughly 20 MW of power, and the Honey Lake facility located approximately 20 miles east of Susanville generates roughly 30 MW of power. All three plants operate with a combination of mill residue and in-forest biomass feedstock. Some portion of biomass removed from Plumas County forests also feeds the Sierra Pacific Industries Loyalton Biomass facility, located in Sierra County, generating roughly 10 MW (Plumas County 2012). Marketable sawlogs may be removed from the site and hauled to a nearby sawmill.

  Additional detail on the mechanical treatments proposed at the Jenkins site is included in the Freeman Project EIS, beginning on page 46.

- 369 acres of hand thinning, hand or grapple piling, and burning at the Round Valley and Ingalls treatment sites. Live and dead conifer trees <11.9” dbh would be felled by a sawyer and piled. Grapple piling may be used in some locations, which generally involves use a tracked excavator that can physically move dead and downed fuels and live brush. Piled materials would be left to dry, then burned on site.

  Additional detail on the hand treatments proposed for the Round Valley treatment sites are included in the Keddie Ridge Project EIS, beginning on page 11. The Ingalls Project EA provides additional details on the hand treatments proposed at the Ingalls treatment sites, beginning on page 22.

The NEPA documents associated with the Freeman Project (Jenkins site), Ingalls Project (Ingalls site), and Keddie Ridge (Round Valley site) contained specific design features, standard operating procedures, and other best management practices intended to minimize the negative environmental effects of the project. Resources areas addressed, include:

- Air Quality
- Botany
- Range
- Cultural Resources
- Visual Resources
- Transportation
- Noxious Weeds
- Soils
- Hydrology
- Visual Quality
- Wildlife

These measures consist of environmentally protective actions, such as limits on the timing of fuel reductions activities, limitations on the locations from which trees can be removed, and avoidance of environmental resources. Project design features, standard operating procedures, and other methods to reduce potential environmental effects would be implemented as part of the project. The specific measures for each treatment site are provided in Appendices A, B, and C.

3 ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

- ☐ Aesthetics
- ☐ Agriculture and Forest Resources
- ☐ Air Quality
- ☐ Biological Resources
- ☐ Cultural Resources
- ☐ Geology / Soils
- ☐ Greenhouse Gas Emissions
- ☐ Hazards & Hazardous Materials
- ☐ Hydrology / Water Quality
- ☐ Land Use / Planning
- ☐ Mineral Resources
- ☐ Noise
- ☐ Population / Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation / Traffic
- ☐ Utilities / Service Systems
- ☐ Mandatory Findings of Significance
- ☐ None with Mitigation

☒ None

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☒ I find that the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☐ I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature Date 4/5/2016

Printed Name Title

ROBERT K KINGMAN ASSISTANT EXECUTIVE OFFICER

Sierra Nevada Conservancy

Agency

3.1 AESTHETICS

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

3.1.1 Discussion

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

Less than significant impact. A scenic vista is generally considered to be a location from which the public can experience unique and exemplary high-quality views—typically from elevated vantage points that offer panoramic views of great breadth and depth. The visual character of the site is that of undeveloped forested lands. The project proposes a series fuels reduction activities that would improve the health of the forest and reduce the potential for catastrophic fires. The project would thin smaller trees, but would not substantially change size class or density class of trees (Keddie Ridge EIS, pages 75-82; Freeman Project EIS, pages 112-121; Ingalls Project EIR, pages 74-84). The treated sites would maintain the existing undeveloped and forested visual character of the site and scenic vistas would not be adversely affected by these activities. Because the existing forested visual character of the site would remain, and the potential for visual impacts from catastrophic fire would decrease, this impact would be less than significant.

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

Less than significant impact. Portions of the project site would be located near to state scenic highways (i.e., State Route [SR] 70 and SR 89), however project activities would not be visible from travelers along these routes. The project would involve fuels reduction, which would involve tree removal with the purpose of improving the health of the forest. These activities would not result in substantial damage because the character of the land would remain intact and the potential for catastrophic fires, which would substantially damage scenic resources, would be reduced. Thus, this impact would be less than significant.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than significant impact. Short-term effects may result where burned areas, skid trails, and tree stumps would be visible from forest roads. Fuels treatments would likely have long-term beneficial effects on scenic resources by reducing the risk of a wildfire destroying the existing landscape; thus, ensuring that existing scenic landscapes are maintained or improved (Keddie Ridge Project EIS, pages 301-302). Visual quality management Standard Operating Procedures (SOPs) are included in the Freeman Project, Ingalls Project, and Keddie Ridge Project EISs to address potential impacts associated with the project. These SOPs would be implemented as part of the project, including measures that address stump heights, landing and skid trail

locations, and tree marking (see Appendices A, B, and C for detailed information). Because the treatments would have long-term beneficial effects on visual character, and negative impacts would be short-term in nature and minimized by the use of SOPs, this impact would be less than significant.

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

Less than significant impact. The project does not propose installation of new lighting fixtures or structures that could cause glare. Burn piles would be used in some cases to dispose of collected fuels, resulting in some new sources of light. However, because this would be short-term and largely screened from public views by the surrounding forest, this impact would be less than significant.

3.2 AGRICULTURE AND FOREST RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forest Resources.				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) 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.				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined 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))?	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 Discussion

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

No impact. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project area (FMMP 2012). There would be no impact.

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

No impact. There are no lands subject to Williamson Act contracts (Plumas County 2008) or zoned for agricultural use (Plumas County 2011) within the project area. There would be no impact.

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

Less than significant impact. The use of forest land and timberland after implementation of the project would remain the same as under the existing conditions. Treatments would reduce understory vegetation and would result in incidental mortality in the midstory, but would not be expected to substantially change size class or density class of trees (Keddie Ridge EIS, pages 75-82; Freeman Project EIS, pages 112-121; Ingalls Project EIR, pages 74-84). There would be no conflict with areas zoned as forest land or timberland. This impact would be less than significant.

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

Less than significant impact. See discussion c), above.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No impact. See discussion a) and b), above.

3.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. Air Quality.				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

3.3.1 Discussion

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

Less than significant impact. Plumas County has been designated as nonattainment with respect to California Ambient Air Quality Standards for particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) (ARB 2014). Burn piles, which could be implemented as part of the project, would emit PM_{10}. However, all burning would be completed under approved burn and smoke management plans, which are required by the Norther Sierra Air Quality Management District (NSAQMD). These plans would describe NSAQMD regulations for burning activities and associated smoke management, and would detail an implementation schedule, the responsible parties, and monitoring and reporting requirements. Piles would be constructed to minimize emissions, through considerations such as weather conditions, wind direction, and burn pile size. (Ingalls Project EA, page 59; Keddie Ridge Project EIS, pages 116-117; Freeman Project EIS, page 97-100; Appendix A; Appendix B). Because the project would be required to meet all NSAQMD air quality requirements, which include measures to reduce PM_{10} emissions to the degree feasible, this impact would be less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than significant impact. See discussion a), above.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than significant impact. Less than significant. See discussion a), above.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. Sensitive receptors near the project area include: recreational users, residents, and private land owners. However, as described above under a), b), and c), emissions would not be substantial. This impact would be less than significant.

e) Create objectionable odors affecting a substantial number of people?

No impact. The project does not include new odor sources (e.g., wastewater treatment plant, landfills). There would be not impact.

3.4 BIOLOGICAL RESOURCES

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

3.4.1 Discussion

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

Less than significant impact. Several special-status animal and plant species are known or have potential to occur in the project area. The NEPA documents approved for the Freeman Project, Ingalls Program, and Keddie Ridge Project include specific design features and SOPs to minimize, avoid, or mitigate potential effects of project implementation on special-status species (see Appendices A, B, and C). For example, limited operating periods would be implemented within buffer zones around territories/breeding sites of bald eagle, California spotted owl, great gray owl, northern goshawk, and willow flycatcher to avoid project-related disturbances to these species during sensitive breeding periods. Additionally, occurrences of sensitive plant species would be flagged and avoided through establishing a treatment control area in areas containing sensitive plants.

A search of the California Natural Diversity Database (CNDDB 2015) and the California Native Plants Society inventory of rare, threatened, and endangered plants (CNPS 2015) were performed to determine if special status species, in addition to those addressed in the NEPA documents, could be affected by the project. These database queries evaluated all documented occurrences of state or federally identified special status species within 1 mile of the project area. The database searches found that one animal (western bumble bee [*Bombus occidentalis*]; designated as Forest Service sensitive in USFS Region 5) and one special-status plant species (watershield [*Brasenia schreberi*]; California Rare Plant Rank 2B.3) that were not specifically addressed in the NEPA documents are reported to be historically or recently present in the vicinity of the project area. Watershield is an aquatic plant; the nearest known occurrence is within Round Valley Reservoir, which would not be affected by the proposed vegetation/fuels treatments. Additionally, as described in the NEPA documents, riparian habitat conservation areas would be subject to specific prescriptions that would maintain suitable habitat values for aquatic species and meet riparian management objectives. Therefore, the proposed project would not substantially affect watershield if the species is present in aquatic habitats within or adjacent to treatment units.

The reported CNDDB occurrence of western bumble bee within 1 mile of the Round Valley treatment sites within the project area is from 1953 and was not precisely mapped. Bumble bees require plants that bloom and provide adequate nectar and pollen throughout the colony's life cycle; queens overwinter in the ground in abandoned rodent nests at depths from 6 to 18 inches, and typically emerge around mid-March. Western bumble bees have a short proboscis or tongue length relative to other co-occurring bumble bee species, which restricts nectar gathering to flowers with short corolla lengths and limits the variety of flower species that bees are able to exploit. Although the potential for western bumble bee to occur in the project area and be affected by project implementation is considered low, based on the lack of recent records of the species in the project vicinity, potential habitat is present and surveys have not been conducted to determine presence or absence of western bumble bee. Therefore, this analysis assumes that western bumble bee could use habitats in the project area, and potential effects of project implementation on this species are discussed below.

Areas with the highest likelihood of supporting western bumble bee include meadows, forest gaps, and other open areas that support flowering plants for foraging, and areas with underground cavities for nesting. Vegetation removal associated with the fuels treatments could temporarily disturb western bumble bees, or result in injury or mortality, if they are present in the treatment units. For example, ground disturbances could collapse or otherwise damage underground colony/nest sites if they are present. However, because no recent records of western bumble bee are known from the project area, project-related effects on individuals or colonies/nests are not expected.

Implementing the proposed fuels treatments could result in removal of vegetation and disturbance of microhabitat types that could support western bumble bee. Specific areas and microhabitats with the highest likelihood of supporting western bumble bee (meadows, forest gaps, and other open areas that support flowering plants for foraging) are not expected to substantially lose their forage value. Following vegetation treatments, native vegetation would be allowed to regenerate within the treatment units. Therefore, the availability of forage plants and potential nest sites is not expected to decrease over the long term, despite changes to overstory vegetation cover in forest habitats. Additionally, the creation of gaps and openings within existing forest habitat as a result of project implementation could enhance bumble bee foraging habitat in some areas, by potentially increasing the abundance of flowering herbaceous and shrub species and reducing dense tree cover. Overall, project implementation is not expected to substantially reduce the quantity or quality of bumble bee forage plants and nest sites in the project area. Any disturbances to western bumble bee and suitable habitat would be temporary and relatively minor if they occur, and would not substantially affect this species.

Because project implementation would not substantially affect watershield or western bumble bee, and implementation of the specific design features and SOPs for biological resource protection included in the approved NEPA documents would prevent substantial effects on other special-status species known or with potential to occur in the project area, potential effects on special-status species would be less than significant.

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

Less than significant impact. The project area contains special habitats, including aspen communities, seeps, springs, and willow/alder communities. The NEPA documents approved for the Freeman Project, Ingalls Program, and Keddie Ridge Project contain specific design features and SOPs to address sensitive communities (see Appendices A, B, and C). For example, at the Jenkins treatment sites buffer zones would be established and maintained around seeps, springs, and associated meadows, according to standard operating procedures (Freeman Project EIS, page 135-136; 156-170). At the Round Valley treatment sites, riparian habitat conservation areas would be subject to specific prescriptions that would maintain suitable habitat values for aquatic species and meet riparian management objectives, while creating riparian conditions that would be less susceptible to high-severity fires (Keddie Ridge EIS, page 142).In some areas of the Round Valley treatment sites, short-term decreases in channel shading and ground cover could occur, which would be minimized through implementation of design criteria and best management practices [BMPs]) (Keddie Ridge EIS, pages 163-174). No substantial impacts on riparian habitat or other sensitive natural communities are anticipated at the Ingalls treatment sites (Ingalls Project EA, pages 141 – 148). This impact would be less than significant.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than significant impact. As described above, under b), seeps and springs occur within the project area. However, specific design features and SOPs are included in the Freeman Project, Ingalls Project, and Keddie Ridge Project NEPA documents, which would be implemented as part of the project (see Appendices A, B, and C). Implementation of these SOPs would avoid effects to areas that may be federally protected wetlands. This impact would be less than significant.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than significant impact. The project would reduce understory vegetation and would result in incidental mortality in the midstory, but would not be expected to substantially change size class or density class of

trees (Keddie Ridge EIS, pages 75-82; Freeman Project EIS, pages 112-121; Ingalls Project EIR, pages 74-84). Thinning of the forest stands could be beneficial for some migratory species (e.g., warbling, vireo, chipping, sparrow, lazuli bunting, white-crowned sparrow, western bluebird, common nighthawk, and common poorwill), and less advantageous for other (Swainson's thrush, olive-side flycatcher and evening grosbeak (Freeman Project EIS, page 156-170). However, because the project would not result in a conversion of forested land to non-forester, or substantially change size class or density class of trees, it would not substantially interfere with the movement of migratory birds or other wildlife species. Waterways that contain migratory fish would not be affected. This impact would be less than significant.

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

Less than significant impact. The 1984 Plumas County General Plan contains directives to identify important wildlife habitats, important wildlife migration routes, and significant wetlands. No actions associated with the project would conflict with policies associated with Plumas County. This impact would be less than significant.

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

No impact. There are no Habitat Conservation Plans or Natural Community Conservation Plans associated with the project area; there would be no impact.

3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

3.5.1 Discussion

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Less than significant impact. The project area may contain historical resources. However, protection measures to avoid cultural resources would be implemented through actions including clearly delineating and avoiding areas that have the potential to contain such resources (see Ingalls EA, page 193; Keddie Ridge EIS, page 280; Freeman Project EIS, page 470). These measures are detailed within project design

criteria and SOPs associated with the Freeman Project EIS, Ingalls Project EA, and Keddie Ridge EIS, and provided in Appendices A, B, and C of this Initial Study. This impact would be less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than significant impact. Protection measures to avoid cultural resources would be implemented as part of the project, including clearly delineating and avoiding areas that have the potential to contain such resources (see Ingalls EA, page 193; Keddie Ridge EIS, page 280; Freeman Project EIS, page470). In addition, tribal outreach and consultation has occurred by both the U.S. Forest Service and SNC. During the NEPA evaluation, the U.S. Forest Service, Plumas National Forest engaged with local tribal groups including the Maidu Summit Consortium & Conservancy, and Greenville, Washoe, Mooretown, and Susanville Rancherias. In addition, SNC consulted with tribal groups to identify the presence of tribal resources consistent with AB 52. SNC identified tribal groups that could have information on resources in the project area by 1) consulting tribal contact lists provided by the California Native American Heritage Commission, and 2) reviewing a map of tribal ancestral territories prepared for the California Water Plan. The SNC identified the Maidu Summit Consortium & Conservancy and the Greenville Rancheria as tribal groups with potential interest in the site. On October 7, 2015, the SNC provided these groups with information regarding the project and provided an opportunity for consultation. Because the project includes protection measures to avoid impacts to cultural resources, and tribal consultations did not identify additional tribal resources, the impact would be less than significant.

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

Less than significant impact. The project would not include substantial ground-disturbing activities that could encounter paleontological resources or unique geologic features. This impact would be less than significant.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant impact. The project would not include substantial ground-disturbing activities that could encounter human remains, including those interred outside of formal cemeteries. This impact would be less than significant.

3.6 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Geology and Soils. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒

b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on 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?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

3.6.1 Discussion

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

No impact. There are no delineated Alquist-Priolo Earthquake Fault Zones in the project area (Plumas County 2012). There would be no impact.

ii) Strong seismic ground shaking?

No impact. While the project area is not located within an Alquist-Priolo Earthquake Fault Zone, several potentially active faults pass through Plumas County, including the Almanor Fault, Butt Creek Fault Zone, Indian Valley Fault, and the Mohawk Valley Fault. Additionally, the Honey Lake and Fort Sage Faults are active faults located east of the County. While these faults are near the project area and could result in seismic-related effects (i.e., groundshaking, etc.) to residents and property, seismic hazard mapping indicates that overall Plumas County has low seismic hazard potential (Plumas County 2012). The project would not result in the construction of buildings near faults or otherwise increase the risk of exposure of people to strong seismic shaking. Thus, there would be no impact.

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact. See discussion ii), above.

iv) Landslides?

No impact. The project would consist of fuels management activities, which would not include construction of new structures or substantial ground disturbance that could substantially increase exposure of people or structures to landslides. Thus, there would be no impact.

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

Less than significant impact. The project would not include substantial ground disturbance that could result in soil erosion or the loss of topsoil (see Ingalls Project EA, pages 170 – 177; Keddie Ridge Project EIS, pages 202-205; Freeman Project, pages 369-379). The project would include temporary erosion control

Best Management Practices to minimize erosion potential during treatment operations, as described in appendixes A, B, and C. The project would maintain existing drainage patterns and would include spreading slash and/or chipped materials to meet minimum ground cover requirements for each site, which would reduce long-term erosion potential. Treatments on the Jenkins site could include the construction of temporary roads and the use of skid trails. However, skid trails and temporary roads would not be constructed on steep slopes (greater than 35% slope) or with stream or drainage buffers, except at designated crossings as described in appendix A. Skidder trails and temporary roads would be de-compacted, as needed, to meet U.S. Forest Service, Region 5 soil compaction standards. After forest treatments are complete, temporary roads would be re-contoured to restore natural topography, blocked from vehicular access, and waterbars would be installed to minimize erosion potential. All skid trails and temporary roads would achieve 40 – 70% ground cover after treatment, as described in Appendix A. Most project activities would not result in ground disturbance; and activities that could result in ground disturbance, such as the creation of temporary roads, would employ temporary erosion control measures during treatments, and would be restored after treatments. Thus, this impact would be less than significant.

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

Less than significant impact. See discussion b), above.

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

Less than significant impact. The project would not result in the construction of new buildings or otherwise increase the exposure of people or structures to expansive soils. See also discussion b), above.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No impact. The project would not involve the use or installation of septic tanks or alternative waste water disposal systems where sewer is not available for the disposal of wastewater. Thus, there would be no impact.

3.7 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.7.1 Discussion

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

Less than significant impact. The project would consist of mechanical and hand treatment activities, and pile burning of excess forest fuels, which would result in the release of greenhouse gases (GHGs). However, the project would result in fewer, less frequent, smaller, and shorter duration wildfires than would otherwise occur, which would reduce GHG emissions over time. The Northern Sierra Air Quality Management District (NSAQMD) currently has no guidance concerning CEQA evaluation of GHG emissions. To evaluate whether the project would result in significant GHG emissions, this analysis uses an approach that is very similar to the approach recently used by the California Board of Forestry and Fire Protection to evaluate a statewide vegetation treatment program (Board of Forestry 2015 pages 4-417 to 4-426). To evaluate the significance of the project's GHG emissions, the expected avoided GHG emissions from a catastrophic wildfire were compared to the GHG emissions expected from implementation of the project.

The GHG emissions from forest treatment activities vary depending on site conditions, timing and duration of treatments, treatment approach and equipment, and other factors. The Draft Environmental Impact Report recently prepared by the California Board of Forestry and Fire Protection for a statewide vegetation treatment program provides typical GHG emission estimates for fuels reductions treatments (Board of Forestry 2015). While these do not reflect exact emissions from the proposed project, these GHG estimates can be scaled-down to provide a reasonable estimate of GHG emissions from treatment activities associated with the project.

Manual treatment activities are proposed on 369 acres at the Round Valley and Ingalls treatment sites. These treatments require large crew sizes and the use of handheld tools. The Board of Forestry estimated equipment emissions from power tools like chainsaws and power brush saws, as well as emissions from typical worker trips to and from a treatment site. This analysis found that a 6,000-acre manual treatment project would result in 4 metric tons of a carbon dioxide equivalent (MT CO_2e) emissions (Board of Forestry 2015, page 4-409). Based on the estimated emissions per acre in the Board of Forestry analysis, the 369 acres of manual treatments in the proposed project would result in less than 0.01 MT CO_2e emissions.

Mechanical treatment activities are proposed on 131 acres of the Jenkins treatment site. The Board of Forestry estimated equipment emissions, as well as emissions from typical worker trips to and from a site. This analysis found that a 12,000-acre mechanical treatment project would result in 109 MT CO_2e emissions (Board of Forestry 2015, page 4-409). Based on the emissions per acre in this analysis, the proposed project would result in 0.01 MT of GHG emissions for the 131 acres of mechanical treatments at the Jenkins site.

Forest fuels from all 500 acres of the project would be burned; either as on-site pile burns or hauled to a biomass energy facility where they would be burned to produce energy. To be conservative, the GHG emission estimates here reflect on-site burning of all materials, which tends to produce more GHG emissions than biomass energy generation, even when typical hauling emissions are included (Springsteen et al. 2011). The Board of Forestry modeled emissions from typical burning scenarios in a Sierra Nevada Mixed Conifer forest, which considered emissions from combustion of vegetation, associated equipment, and worker trips. This analysis provided estimated emissions of approximately 20.22 MT CO_2e per acre (Board of Forestry 2015, Appendix H). For the 500-acre project site, this would result in emissions of 10,108.92 MT CO_2e.

The proposed project is intended to reduce the risk for wildfire, but it is still possible that wildfires would occur on the site after treatment. Wildfires that occur after treatment would likely be smaller and less intense than under existing conditions. The Board of Forestry EIR does not provide treated and untreated CO_2e emission estimates from wildfires in Sierra Nevada forests, but these emission estimates are available from a U.S. Forest Service Region 5 modeling effort that evaluated a similar forest treatment project in the

northern Sierra, just north of Lake Tahoe (USFS 2015). This modeling effort used the Forest Vegetation Simulator (FVS) model to produce emission estimates from wildfires occurring on a northern Sierra forest before and after a similar fuel reduction treatment. While emissions would vary based on stand characteristics and treatment type, this modeling effort provides a reasonable approximation of wildfire emissions at the project site both before and after treatment. The FVS modeling found that an untreated northern Sierra mixed conifer stand would emit 79 MT CO_2e per acre from a wildfire, and a treated stand would emit 17.6 MT CO_2e per acre (USFS 2015). For the 500-acre project site, this would result in 39,500 MT CO_2e from a wildfire under existing conditions. After project implementation, the site could be expected to produce approximately 8,800 MT CO_2e from a smaller and reduced-intensity wildfire.

In total, project activities could be expected to produce approximately 10,109 MT CO_2e. In addition, a wildfire occurring after treatment could produce about 8,800 MT CO_2e, resulting in total emissions of 18,908.94 under the project scenario. In contrast, a wildfire occurring without implementation of the project could result in substantially greater emissions at approximately 39,500 MT CO_2e. Because the project is expected to result in less GHG emissions than would likely occur without the project, the impact is less than significant.

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

Less than significant impact. In December 2008, the California Air Resources Board (ARB) adopted its Climate Change Scoping Plan, which contains the main strategies California will use to reduce GHGs. The First Update to the Climate Change Scoping Plan was approved by the ARB Board on May 22, 2014. This update builds upon the initial Scoping Plan with new strategies and recommendations. It defines ARB's climate change priorities for the next 5 years, and also sets the groundwork to reach long-term goals. The Scoping Plan and First Update both recognize the role of California's Natural and Working Lands (previously the Forest Sector) in meeting California's GHG reduction goals. These lands include both forests and rangelands and can act as both source and sink. The First Update recognizes that some actions taken to address ecosystem health may result in temporary, short-term reductions in sequestration, but are necessary to maintain forest health and reduce losses due to wildfire. The goals set forward for these landscapes include reducing vegetative fuels.

California's overall plan for climate adaptation is expressed in Safeguarding California (California Natural Resources Agency [CNRA] 2014). The plan provides policy guidance for state decision-makers, and is part of continuing efforts to reduce impacts and prepare for climate risks. This plan, which updates the 2009 California Climate Adaptation Strategy (CNRA 2009), highlights climate risks in nine sectors in California, discusses progress to date, and makes realistic sector-specific recommendations. One of the key sectors is forestry, where the emphasis is on preparing for increased wildfire hazards, including treatment of hazardous fuels, and improving forest management approaches in a changing climate (CNRA 2014).

Plumas County and the NSAQMD currently do not have local plans, policies or regulations adopted to reduce GHG emissions. Since the project would reduce vegetative fuels, and implement forest management treatments consistent with the First Update of the Climate Change Scoping Plan and Safeguarding California, the impact would be less than significant.

3.8 HAZARDS AND HAZARDOUS MATERIALS

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

3.8.1 Discussion

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

Less than significant impact. Project implementation activities would involve the use of hazardous materials, such as lubricants, gasoline, and oil. The use and storage of these materials could potentially expose and adversely affect workers, the public, or the environment as a result of improper handling or use; accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies, resulting in adverse health effects. All activities would be subject to compliance with Federal, State, and local hazardous

materials regulations, and would be monitored by the Plumas NF and State (e.g., California Department of Occupational Safety and Health Administration and California Department of Toxic Substances Control). Therefore, it is anticipated that the routine use of these materials handled in accordance with these laws and regulations would not create any impacts to the public or the environment. This impact would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less than significant impact. As described above under a), project activities would involve the use of hazardous materials. However, it is anticipated that the routine use of these materials handled in accordance with laws and regulations would not create any reasonably foreseeable upset and/or accident conditions on the public or the environment. This impact would be less than significant.

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

No impact. No schools are located within one quarter mile of the project area. There would be no impact.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No impact. There are no hazardous materials sites compiled pursuant to Government Code Section 65962.5 within the project area. There would be no impact.

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

No impact. There are no airports within 2 miles of the project area. Thus, there would be no impact.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No impact. There are no private airstrips within 2 miles of the project area. Thus, there would be no impact.

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

Less than significant impact. Transport of mechanical equipment along roadways to the project area could occur along evacuation routes. However, the Plumas County Office of Emergency Services (OES) coordinates information, plans for resources, and supports priorities among County agencies, local governments, and special districts. OES serves as a link between the Federal Emergency Management Agency (FEMA), California Emergency Management Agency (CalEMA) and the County's cities, towns, villages and special districts. In the event of an emergency, OES would notify the public of a possible hazardous condition and provide broadcasts of ongoing information and actions the public should take to protect its health and safety. Transport of equipment along possible evacuation routes would be minimal and would comply with direction provided by OES. This impact would be less than significant.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No impact. Potential impacts related to exposure of people or structures to a substantial risk of loss, injury, or death involving wildland fire would be beneficial due to reductions of existing fuel accumulations in the

treatment areas (see Ingalls Project EA, page 46 – 52; Keddie Ridge EIS, pages 99-100; Freeman Project EIS, page 97-98). Thus, there would be no impact.

3.9 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or offsite erosion or siltation?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or offsite flooding?	☐	☐	☒	☐
e) 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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

3.9.1 Discussion

a) Violate any water quality standards or waste discharge requirements?

No impact. The project consists of fuel management strategies and would not involve discharge into waterways. The project would qualify for Category 5 of the Central Valley Regional Water Quality Control Board's (CVRWQCB) Conditional Waiver of Waste Discharge Requirements for Discharges Related to Timber Harvesting Activities (Timber Waiver). The project would comply with all conditions of the Timber Waiver. Thus, there would be no impact.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

No impact. The project consists of fuel management strategies and would not involve the use of groundwater or otherwise affect recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level discharging into waterways. Thus, there would be no impact.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or offsite erosion or siltation?

Less than significant impact. The project consists of fuel management strategies and may require some level of ground-disturbing activities and loss of ground cover, which could alter drainage patterns. However, the project would not include any grading or paving that would alter the course of a stream of river. The potential for erosions from project activities would be minimized though implementation of best management practices, SOPs, and design features. These include provisions such as an erosion control plan, road maintenance, restoration of temporary roads, and skid trail spacing (see Ingalls Project EA, pages 165 – 170; Keddie Ridge EIS, pages 202-204; Freeman Project EIS, pages 369-379; Appendix A; Appendix B; Appendix C, and impact 3.6.1.b, above). Thus, any alteration to drainage patterns would not be substantial. This impact would be less than significant.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or offsite flooding?

Less than significant impact. See discussion c), above.

e) 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?

Less than significant impact. Implementation of the project would not substantially alter runoff volumes, but it could create soil disturbance that has the potential to result in polluted runoff water. However, water quality impacts, such as dissolved oxygen, water temperature, and turbidity would be minimized though implementation of best management practices, SOPs, and design features. These include provisions such as an erosion control plan, road maintenance, and skid trail spacing (see Ingalls Project EA, pages 165 – 170; Keddie Ridge EIS, pages 202-204; Freeman Project EIS, pages 369-379; Appendix A; Appendix B; Appendix C). Through implementation of the project requirements, this impact would be less than significant.

f) Otherwise substantially degrade water quality?

Less than significant impact. The project consists of fuel management strategies and may require some level of ground-disturbing activities and loss of ground cover, which could alter drainage patterns and contribute sediment into waterways. As described under impacts c and e, above, implementation of project

requirements would prevent the substantial degradation of water quality. This impact would be less than significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No impact. No housing is proposed as part of the project. Thus, there would be no impact.

h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

No impact. The project consists of fuel management strategies and would not include placement of structure within 100-year flood hazard areas. Thus, there would be no impact.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

No impact. The project consists of fuel management strategies and would not include structures or alterations to levees or dams. Thus, there would be no impact.

j) Result in inundation by seiche, tsunami, or mudflow?

No impact. The project would consist of fuels reduction treatments and would not affect the potential for seiche, tsunamic, or mudflow. Thus, there would be no impact.

3.10 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Land Use and Planning. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

3.10.1 Discussion

a) Physically divide an established community?

No impact. The project would not be located within an established community. Thus, there would be no impact.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No impact. The project consists of fuels management practices and would not affect land uses in the project area. Thus, there would be no impact.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No impact. There are no proposed or approved habitat conservation plans or natural community conservation plans in Plumas County. Thus, there would be no impact.

3.11 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Mineral Resources. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☒	☐

3.11.1 Discussion

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

Less than significant impact. Mining claims are located within Plumas County within the vicinity of the project. However, project activities would not result in the loss of availability of a known mineral resource (Keddie Ridge EIS, page 297). Thus, this impact would be less than significant.

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?

Less than significant impact. See discussion a), above.

3.12 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Noise. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

3.12.1 Discussion

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less than significant impact. Equipment associated with mechanical and manual treatments could generate varying levels of noise, depending upon the equipment being used. Treatment activities are carried out in stages, during which the character and magnitude of noise levels surrounding the treatment area changes as different equipment is used and the location of the noise-generating work moves throughout the treatment area. However, these activities would be located in rural areas, and sensitive receptors would not be affected. Noise would be short-term, during daytime hours, and would not be considered substantial or in exceeded of noise ordinances. This impact would be less than significant.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. As describe under a), above, the project would require the use of some heavy equipment. This equipment could generate groundborne vibration or groundborne noise. However, activities would be located in rural areas for a short duration during daytime hours. Thus, they would not be considered excessive. This impact would be less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No impact. The project consists of temporary forest treatments. It would result in no permanent changes in ambient noise levels. There would be no impact.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than significant. See response a), above.

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

No impact. The project is not located within an airport land use plan, thus there would be no impact.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No impact. Airstrips are not located within the vicinity of the project area. The nearest airstrips are located approximately 10 miles from where treatments would occur. There would be no impact.

3.13 POPULATION AND HOUSING

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

3.13.1 Discussion

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No impact. The project does not include construction of new homes, businesses, road extensions, or other infrastructure. There would be no impact.

b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?

No impact. The project consists of fuel reduction treatments and would not affect existing homes. There would be no impact.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No impact. See discussion b), above.

3.14 PUBLIC SERVICES

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

3.14.1 Discussion

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

Fire protection?

No impact. Implementation of the project would not include new residences or otherwise create a situation in which fire protection service ratios, response times, or other performance objectives could not be met. The project does not include provisions of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities. Thus, there would be no impact.

Police protection?

No impact. Implementation of the project would not include new residences or otherwise create a situation in which police protection service ratios, response times, or other performance objectives could not be met. The project does not include provisions of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities. Thus, there would be no impact.

Schools?

No impact. The proposed project does not include development of new residences and therefore would not result in a substantial effect on the permanent population in the area that would increase the demand for educational services. Implementation of the project would have no impact on schools.

Parks?

No impact. Implementation of the project would not include new residences or otherwise create a situation in which there would be an increased need for parks. Thus, there would be no impact.

Other public facilities?

No impact. As discussed above, implementation of the project would not include new residences or otherwise create a situation that would require provisions of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities. Thus, there would be no impact.

3.15 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Recreation. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.15.1 Discussion

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

Less than significant impact. The proposed treatments would reduce hazardous fuels and create a more diverse and fire-resilient forest, which would have an overall beneficial effect on recreation opportunities by helping to maintain and preserve the landscape of existing recreation sites and areas. Reducing the risk of wildfire would help ensure that recreation opportunities for developed and dispersed recreation would be maintained at existing conditions (Keddie Ridge EIS, page 287; Freeman Project EIS, page 451-454). The project could displace dispersed recreation activities, such as trail use, that would have otherwise occurred within the project site. However, any displacement of recreational use would be temporary and would only occur during active forest management treatments. In addition, as shown in figures 2-2 through 2-4, the treatments sites are surrounded by National Forest Lands, which would provide adequate capacity for

dispersed recreational uses that are temporarily displaced during treatment activities. This impact would be less than significant.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No impact. No new recreational facilities would be constructed as a part of the project. There would be no impact.

3.16 TRANSPORTATION/TRAFFIC

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Transportation/Traffic. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

3.16.1 Discussion

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

Less than significant impact. Implementation of project activities would be expected to occurring in short durations (less than two weeks) and limited to the time periods during which work is occurring. Project activities would occur in remote areas where background traffic levels are not substantial. Thus, project traffic would not be substantial enough to affect an applicable plan, ordinance or policy related to transportation system performance. This impact would be less than significant.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less than significant impact. See discussion a), above.

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

No impact. The project does not include construction of buildings or other structures that could affect air traffic patterns. There would be no impact.

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

No impact. The project would not alter existing roadway design features or result in the use of incompatible uses. There would be no impact.

e) Result in inadequate emergency access?

Less than significant impact. During construction, presence of slow-moving construction equipment and vehicles on local roads could have a limited, temporary impact on access for emergency vehicles. However, equipment transportation would occur during a brief period of time and would not substantially affect access to roadways surrounding the project area. Thus, this impact would be less than significant.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No impact. The project is located in rural portions of Plumas County where public transit, bicycle, and pedestrian facilities are not available. There would be no impact.

3.17 UTILITIES AND SERVICE SYSTEMS

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

3.17.1 Discussion

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No impact. The project would not result in any changes to existing wastewater treatment facilities. There would be no impact.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No impact. The project would not result in any changes to existing water or wastewater treatment facilities. There would be no impact.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No impact. The project would not result in any changes to existing water or wastewater treatment facilities. There would be no impact.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No impact. No water supply is required to implement the project. There would be no impact.

e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

No impact. No wastewater treatment capacity is required to implement the project. There would be no impact.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

No impact. Vegetation removed as part of the project would either be burned or hauled to a biomass facility. No solid waste would be hauled to a landfill. There would be no impact.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No impact. See discussion f), above.

3.18 MANDATORY FINDINGS OF SIGNIFICANCE – INCLUDING CUMULATIVE IMPACTS

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

Authority: Public Resources Code Sections 21083, 21083.5.

Reference: Government Code Sections 65088.4.
Public Resources Code Sections 21080, 21083.5, 21095; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

3.18.1 Discussion

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

Less than significant impact. As described above in Section 3.4, Biological Resources, the proposed project would not substantially degrade the quality of the environment, substantially reduce the habitat or 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, or reduce the number or restrict the range of an endangered, rare, or threatened species.

The project consists of vegetation management in areas of Plumas County, to reduce the intensity and longevity of fires. As described in section 3.5, Cultural Resources, the project would not affect important examples of major periods of California history or prehistory.

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

Less than significant impact. Section 15130(a) of the State CEQA Guidelines requires a discussion of the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. Where a project's incremental effect is not cumulatively considerable, the effect need not be considered significant, but the basis for concluding the incremental effect is not cumulatively considerable must be briefly described. Cumulatively considerable, as defined in State CEQA Guidelines Section 15065(a)(3), means that the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." State CEQA Guidelines Section 15355 defines a cumulative impact as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Probable existing and future projects considered in the cumulative analysis are in the project vicinity and have the possibility of interacting with the project to generate a cumulative impact. The Plumas NF evaluated the cumulative impacts of past and reasonably foreseeable projects in the Keddie Ridge EIS, Freeman EIS, and Ingalls EA. Projects considered in combination with the Jenkins site are outlined on pages 547 – 552 of the Freemen EIS, projects considered in combination with the Ingalls project are described on pages 221 – 224 of the Ingalls EA, and projects considered in combination with the Round Valley site are included as Appendix F of the Keddie Ridge EIS. These projects primarily consist of other similar forest health and fuels management projects that are anticipated to occur within or near the project area. The majority of these projects would be implemented by the Plumas NF, and would not occur concurrently with the proposed project. Thus the short-term effects of project implementation would not combine in a manner that would result in cumulatively significant impacts.

The proposed project is designed to protect and enhance existing natural resources. The project includes standard operating procedures to minimize potential cumulative environmental impacts (Appendices A, B, and C). As indicated throughout this IS/Proposed MND, implementation of the proposed project would not result in any individually significant impacts, and in many cases the project would have beneficial effects on natural resources. The effects of the proposed project would not combine with the effects of other past,

present, or future projects in a cumulatively considerable fashion. The cumulative impacts associated with the proposed project are less than significant.

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

Less than significant impact. The project consists of mechanical and manual fuels management treatments. Activities would be short-term and limited by project areas boundaries, which are located in rural areas. No substantial adverse effects on human beings would occur. The impact would be less than significant.

This page intentionally left blank.

4 REFERENCES

Air Resources Board. 2014. Area Designations Maps/State and National. Available: http://www.arb.ca.gov/desig/adm/adm.htm. Accessed:

Board of Forestry. *See* California Board of Forestry and Fire Protection.

California Board of Forestry and Fire Protection. 2015. Draft Program Environmental Impact Report, Vegetation Treatment Program of the California State Board of Forestry and Fire Protection. Available: http://bofdata.fire.ca.gov/board_committees/resource_protection_committee/current_projects/vegetation_treatment_program_environmental_impact_report_(vtpeir)/2015_pdfs

California Native Plant Society. 2015. Inventory of rare, threatened, and endangered plants of California (accessed December 2015). Available at: http://www.rareplants.cnps.org/

California Natural Resources Agency. 2009. 2009 California Climate Adaptation Strategy. Available: http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf

_____. 2014. Safeguarding California: Reducing Climate Risk. Available: http://resources.ca.gov/docs/climate/Final_Safeguarding_CA_Plan_July_31_2014.pdf

CNDDB. 2015. California Natural Diversity Database (accessed December 2015). Available at: http://www.dfg.ca.gov/biogeodata/cnddb/

CNPS. See California Native Plant Society.

CNRA. *See* California Natural Resources Agency.

Farmland Mapping and Monitoring Program. 2012. 2012 Statewide Important Farmland Map. Available: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/statewide/2012/fmmp2012_08_11.pdf. Accessed: December 2015.

FMMP. *See* Farmland Mapping and Monitoring Program.

Plumas County. 2008. Plumas County Williamson Act Lands 2008. Available: http://www.countyofplumas.com/DocumentCenter/View/8529. Accessed: December 2015.

_____. 2011. Plumas County General Plan Designations. Available: http://www.countyofplumas.com/DocumentCenter/View/8525. Accessed: December 2015.

_____. 2012. Plumas County 2035 General Plan Environmental Impact Report. Available: http://www.countyofplumas.com/index.aspx?NID=2248. Accessed: December 2015.

Springsteen, B., T. Christofk, S. Eubanks, T. Mason, C. Clavin, and B. Storey. 2011. Emission reductions from woody biomass waste for energy as an alternate to open burning. Journal of Air and Waste Management Association. 61:63-68. Available: http://www.spi-ind.com/document_library/SNC_Phase_I_report.pdf

U.S. Forest Service. 2006. Freeman Project Final Environmental Impact Statement.

_____. 2011. Ingalls Project Environmental Assessment.

_____. 2011. Keddie Ridge Project Final Environmental Impact Statement.

_____. 2015. Unpublished data. United States Forest Service, Region 5. Forest Vegetation Simulator modeling prepared by Nadia Tase, Acting Region 5 Co-Climate Change Coordinator, to evaluate the North Tahoe Interagency Forest Health and Bioenergy Project.

_____. 1988. Plumas National Forest, Land and Resource Management Plan.

_____. 2004. Sierra Nevada Forest Plan Amendment.