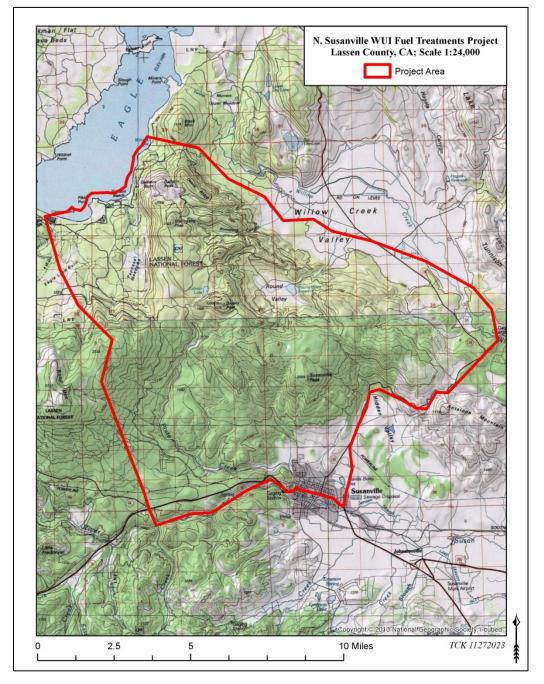
Initial Study-Mitigated Negative Declaration for the proposed North Susanville WUI Fuels Treatment Project Lassen County, California



Prepared by:

Honey Lake Valley Resource Conservation District Lassen County, CA

December 2023

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MITIGATED NEGATIVE DECLARATION

Introduction and Regulatory Context

STAGE OF CEQA DOCUMENT DEVELOPMENT

- Administrative Draft. This California Environmental Quality Act (CEQA) document is in preparation by Honey Lake Valley Resource Conservation District (HLVRCD) staff.
- Public Document. This completed CEQA document has been filed by the Honey Lake Valley Resource Conservation Distinct (HLV RCD) at the State Clearinghouse on December 8, 2023, and is being circulated for a 30-day state agency and public review period. The review period ends on January 7, 2024.
- **Final CEQA Document.** This final CEQA document contains the changes made by the RCD following consideration of comments received during the public and agency review period. The CEQA administrative record supporting this document is on file, and available for review, at Honey Lake Valley RCD, 170 Russell Ave., Susanville, CA 96130.

INTRODUCTION

This initial study-mitigated negative declaration (IS-MND) describes the environmental impact analysis conducted for the proposed project. This document was prepared by HLVRCD staff utilizing information gathered from a number of sources including research, field review of the proposed project area and consultation with environmental planners and other experts on staff at other public agencies. Pursuant to § 21082.1 of CEQA, the lead agency, HLVRCD, has prepared, reviewed, and analyzed the IS-MND and declares that the statements made in this document reflect HLVRCD's independent judgment as lead agency pursuant to CEQA. HLVRCD further finds that the proposed project, which includes revised activities and mitigation measures designed to minimize environmental impacts, will not result in a significant effect on the environment.

REGULATORY GUIDANCE

This IS-MND has been prepared by HLVRCD to evaluate potential environmental effects that could result following approval and implementation of the proposed project. This document has been prepared in accordance with current CEQA Statutes (Public Resources Code §21000 *et seq.*) and current CEQA Guidelines (California Code of Regulations [CCR] §15000 *et seq.*)

An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (14 CCR § 15063(a)), and thus, to determine the appropriate environmental document. In accordance with CEQA Guidelines §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 upon 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 will 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 will not have a significant effect on the environment and, therefore, does not require the preparation of an environmental impact report. This IS-MND conforms to these requirements and to the content requirements of CEQA Guidelines § 15071.

PURPOSE OF THE INITIAL STUDY

The purpose of this IS-MND is to present to the public and reviewing agencies the environmental consequences of implementing the proposed project and to describe the adjustments made to the project to avoid significant effects or reduce them to a less-than-significant level. This disclosure document is being made available to the public and reviewing agencies for review and comment. The IS-MND is being circulated for public and state agency review and comment for a review period of 30 days as indicated on the *Notice of Intent to Adopt a Mitigated Negative Declaration* (NOI). The 30-day public review period for this project begins on December 8, 2023 and ends on January 7, 2024.

The requirements for providing an NOI are found in CEQA Guidelines §15072. These guidelines require HLVRCD to notify the general public by providing the NOI to the county clerk for posting, sending the NOI to those who have requested it, and utilizing at least one of the following three procedures:

- Publication in a newspaper of general circulation in the area affected by the proposed project,
- Posting the NOI on and off site in the area where the project is to be located, or
- Direct mailing to the owners and occupants of property contiguous to the project.

HLVRCD has elected to utilize posting the NOI on and off site in the area where the project is to be located, the second of the three notification options. An electronic version of the NOI and the CEQA document will be made available for review for the entire 30-day review period through their posting at: <u>https://www.honeylakevalleyrcd.us/</u>, and the project will be posted on <u>https://ceqanet.opr.ca.gov/</u>.

If submitted prior to the close of public comment, views and comments are welcomed from reviewing agencies or any member of the public on how the proposed project may affect the environment. Written comments must be postmarked or submitted on or prior to the date the public review period will close (as indicated on the NOI) for HLVRCD's consideration. Written comments may also be submitted via email (using the email address that appears below), but comments sent via email must also be received on or prior to the close of the 30-day public comment period. Comments should be addressed to:

Kelsey Siemer, Distinct Manager Honey Lake Valley Resource Conservation District 170 Russell Ave., Suite C Susanville, CA 96130 (530) 257-7271 kmarks@honeylakevalleyrcd.us

After comments are received from the public and reviewing agencies, HLVRCD will consider those comments and may (1) adopt the mitigated negative declaration and approve the proposed project; (2) undertake additional environmental studies; or (3) abandon the project.

Project Description and Environmental Setting

PROJECT LOCATION

The project setting includes the north half of the City of Susanville in Lassen County, California, as well as forested and Great Basin scrub habitats with scattered residences north of Susanville within the Wildland Urban Interface (WUI), the zone of transition between unoccupied land and human development. The WUI is the zone where structures and other human development meet or intermingle with undeveloped wildland and vegetative fuels. remote and rural, with a few homes or very little public infrastructure visible from most of the project area. The +/- 67,500-acre project location includes portions of the Eagle Drainage, Snow Storm Mountain, and Susan River Hydrologic Areas within the Susanville Hydrologic Unit (MDBM, Township 29N, Range 11E, Sections 2-4; T30N, R11E, Sections 1-18, 20-29, 32-36; T30N, R12E, Sections 1-22, 28-33; T31N, R10E, Sections 13-14, 23-25, 36; T31N, R11E, Sections 1-5, 7-36; T31N, R12E, Sections 16-36). The project area includes suburbs of Susanville, scattered residential communities, non-industrial and industrial timberlands, Tribal lands held in Trust for the Susanville Indian Rancheria, and public lands managed by the Lassen National Forest, Bureau of Land Management - Eagle Lake Field Office, the County of Lassen, and the City of Susanville. Lands within the project area are used for full and part time residence, recreation, timber management, agriculture, wildlife habitat, and watershed protection.

BACKGROUND AND NEED FOR THE PROJECT

The project is a fuels reduction and ecological enhancement effort situated within the WUI north of the City. The majority of the project area consists of overstocked forest stands, or stands where brush has established, creating a wildfire risk. Of the +/-57,300 acres of the project area that are located within the State Response Area (SRA), 80% are classified as "Very High Fire Hazard Severity" (45,666 ac.), and an additional 8% are classified as "High Fire Hazard Severity" (4,330 ac.). This project will implement fuel reduction activities to improve the protection of homes, communities and public and private lands from fire while protecting environmental, natural and cultural resources. Dominant vegetation within the project area includes annual grasslands, black oak, mixed conifer-hardwood forest, Sierra mixed-conifer forest, eastside pine, and scrub communities dominated by sagebrush, bitterbrush, and mountain mahogany. The project will reduce fuel loads in Eastside Pine (EPN), Sierra Mixed Conifer (SMC), Montane Hardwood Conifer (MHC), and Sagebrush (SGB) habitats. Target fuels are brush, and small and suppressed trees. The project also includes the removal of dead, dying and/or hazard trees adjacent to homes that will reduce wildfire risk in the home ignition zone and to utility infrastructure. Portions of the project area, not including the City of Susanville, are relatively remote, and accessible only by private roads. Portions of the project area are fairly steep with the majority of the project area having mild slope. The project objectives are:

- 1. To enhance ecological health by re-establishing a fine-grain mosaic of habitats and successional stages, promoting the resiliency of oak woodlands, conifer stands, and shrub communities to fire and climate change, and encouraging native species diversity;
- 2. To implement fuel reduction that will improve public safety for local communities including Susanville, Lake Forest, and Willow Creek; and
- 3. To provide for the safe and permanent re-introduction of prescribed and cultural fire as a stewardship tool.

To accomplish these objectives, the applicant proposes to reduce scrub continuity and density of small diameter trees through a variety of management techniques to promote a diverse age-class mosaic and reduce wildfire related risks to oak woodlands, conifer forests, and shrub communities. The project applicant is the Lassen Fire Safe Council, Inc.(LFSC), a grass-roots, community-led non-profit organization that mobilizes residents to protect their homes, communities, and environments from catastrophic wildfire. The LFSC is working in partnership with Honey Lake Valley RCD, Susanville Indian Rancheria, Sierra Pacific Industries, W.M. Beaty, and residents living within the Susanville WUI.

PROJECT OBJECTIVES

The project objective is to remove enough encroaching brush and small diameter trees to achieve a healthy and resilient landscape reflected in a fine grain mosaic of shrubs interspersed with grasslands, oak woodlands, and conifer forests that is reflective of traditional knowledge and historic photographs of this area. It is intended that facilitating this vegetation composition and structure will achieve a dynamic ecological community that is fire resistant and adaptive to future environmental change (i.e., warmer and drier conditions or climate extremes). It is believed that this approach will provide improved water yield and quality, provide diverse habitat including at springs and seeps, reduce rates of spread for future wildfires, and provide fire protection for the communities of Susanville, Lake Forest, and Willow Creek. After the project, desired conditions will be maintained with ecologically and culturally appropriate management techniques, including the use of broadcast burning in such a way as to promote native species and achieve numerous ecocultural objectives.

PROJECT START DATE

Summer 2024

PROJECT DESCRIPTION

The +/- 67,505-acre fuel reduction and forest/woodland health improvement project would tie in to other LFSC an HLVRCD projects west and south of the City of Susanville, eventually creating a landscape-scale defensible zone around the City of Susanville. This project would create a defensible zone west and north of the City of Susanville and represents one of the only areas around the City of Susanville that has not been impacted by recent wildfires, including the Hog Fire (2020), Sheep Fire (2020), and the Dixie Fire (2021) (See Figure 3). This would create a defensible space that could be used to fight wildfire moving from the City of Susanville north toward wildlands, or wildfire moving toward communities from the north.

The goals of the project include reducing threats to communities from large, severe wildfires by clearing vegetation from critical locations to reduce wildfire intensity and rate of spread on the landscape. The project would reduce fuels, improve access and safety for firefighting personnel, and improve forest/woodland health using a variety of techniques, including: mechanical treatments, mastication, hand treatments, pile burning, broadcast burning, emergent brush treatments, and reforestation of areas within the project area impacted by past fires. Means of shrub and small tree removal -- would be selected based on careful analysis of current site conditions including weather, time of year, and the presence of sensitive cultural or biological resources, as described in this document. This includes hazard and overstocked tree removal within communities; implementation

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of landscape-scale fuel treatments around and near communities; the expansion of existing fuel breaks and establishment of new fuel break; protection of critical infrastructure; and improve ingress and egress along roads used by the public and used during fire suppression activities. Usually, more than one tool/technique would be present on site at a time so that operations can be carefully optimized for site conditions. Management prescriptions for these techniques are described below:

Mechanical Treatments

Mechanical treatments will be used to thin forest stands, reduce fuel loading, reduce ladder fuels and maintain roads. Mechanical treatments can be very efficient for covering the ground and manipulating large vegetation. Much of the mechanical thinning activity and removal of trees >11" dbh (biomass) will be conducted under California Forest Practice Rules Exemptions, including: 10% Dead and Dying exemptions (§1038.b); Structure Protection exemptions (§1038.c), Substantially damaged timberland exemptions (§1038.d); Oak Woodland Restoration exemptions (§1038.e), and Forest Fire Prevention exemptions (§1038.f).

Mastication

Mastication involves the pulverization of brush, slash, and small trees to improve forest health and redistribute understory fuels in order to maintain an average spacing of trees of 17' by 17' (150 trees per acre). Trees that are over 18" in height and less than 8" diameter at breast height (dbh) will be treated. Brush greater than 18" in height will be treated. Snags less than 12" dbh will be treated, unless they show signs of use by wildlife or are marked with an "L", "W", or tag identifying them as a "Wildlife Tree". Woody debris less than 12" diameter which extends greater than 12" from the ground will be treated. Areas with concentrations of activity fuels (i.e. logging slash) will be treated. Treated materials will not extend greater than 12" from the ground.

Good form should be considered when selecting leave trees in order to reduce the number of trees with crooks, doglegs, multiple tops, or other defects. Trees exhibiting poor vigor, mechanical damage, or disease and or insect infestation shall not be retained unless they are the best available tree. Trees that have a likelihood of creating a "ladder" for fire to move into the crowns of overstory trees have a lower priority as leave trees. Trees that do not exceed the maximum size and that are within 10' of roads that have the potential to affect vehicular traffic use or to allow a fire to spread across the road shall be treated. Leave trees will be prioritized in the following order: 1) Black oak; 2) incense cedar; 3) Douglas fir; 4)sugar pine; 5) ponderosa pine; and 6) white fir.

Hand Treatments

Hand treatment tools may include but are not limited to chainsaw, trimmer, pole saw, loppers, shovel and pick, etc. These may not be the most efficient tools for landscape scale modifications, but they are best for small-scale treatments in areas with sensitive resources.

Hand treatments will be allowed within the WLPZ and other sensitive areas as they cause the least amount of disturbance to the ground and as vegetation within this zone is also in need of management within the project area.

On steep slopes, or where machine access is impractical, fuels would be reduced by hand crews. Treated fuels will be chipped, hauled away and/or piled for later pile-burning when conditions are optimal.

Brush removal for prescribed burns would be primarily within a 50-100-foot buffer of private roads within the project area, and would taper off to a lighter prescription beyond the buffer. The lighter prescription would widen existing openings, interrupt fuels continuity to slow fire spread, and reduce ladder fuels to protect black oak and conifer crowns from ignition, yet still maintain a desirable spatial and biological diversity of shrub species.

Prescribed Fire (Pile burning and broadcast burning)

Prescribed fire is a very cost and time efficient management tool. The native species within the project boundary have all evolved with and are adapted to frequent fire intervals. Using low intensity, more frequent prescribed fires allows native species to thrive and can also reduce invasive species populations. Prescribed burning, in this project, will be used to reduce the fuel load of ground fuels, coarse woody debris, as well as a portion of the above ground biomass. The purpose of the fire is to reduce the risk of large damaging fires by creating conditions that increase effectiveness of fire suppression.

Pile burning may be used in conjunction with mechanical and hand treatments to reduce ground fuel loading. When vertical continuity is reduced by adding fuels to the horizontal fuel loads, only the crowning index is reduced but not the risk of high severity fire. Pile burning is used to eliminate overstocked vegetation from the natural system and thus increase fire resilience.

Through prescribed fire, land managers can have a say in the timing and intensity of the fire. Land managers can also lessen the impacts or provide benefits for other environmental resources. Fire hazard reduction may be an objective of prescribed fire; however, there are other objectives such as wildlife habitat improvement, range improvement, enhancement of the project areas appearance, and improved safety by reducing the amount of dead and dying vegetation. If a wildfire does happen to enter an area that was treated, the wildfire may be contained sooner with reduced area burned at high intensity. The reduced number of acres or fire intensity will have benefits to other resource, including environmental resources, public health, and public and firefighter safety.

All prescribed fires will be subject to local and state regulation to maintain air quality and reduce fire escape risk. Prescribed burning is regulated by the Lassen County Air Pollution Control District (LCAPCD) in compliance with the state smoke management plan, Title 17. Prescribed burn projects must submit a Smoke Management Plan to LCAPCD for review and approval. The plan is developed to minimize air quality impacts of the project. Burning is done on approved burn days as determined by LCAPCD. This process ensures that there are no significant smoke impacts to public health from the project.

The desired fire intensity is low to moderate. A prescribed burn plan will be developed for prescribed fires within the project area prior to implementation that outlines the parameters (timing, weather, fuel moisture, etc.) necessary to implement the project to ensure that the fire remains low to moderate intensity and does not escape the project perimeter. In addition the plan will identify protocols should the fire escape. All prescribed fire activities carry a risk of fire escape, but the project design has reduced this risk below a significant level. By conducting burns in the off-season and with highly trained fire professionals (CAL FIRE) on site, the project reduces the risk of wildfire below the level of risk associated with the no-project alternative. Spotting outside of fire lines should not be a problem with correct firing methods and weather patterns as prescribed in the

burn plan. By reducing fuels while leaving slope and other factors unchanged, the project will reduce, not exacerbate the effects of any future wildfire.

Emergent Brush Treatments

Emergent brush treatments using herbicides will follow all state rules and regulations and product labeling. Herbicides may be used to control species that are unresponsive to other treatments, to reduce secondary treatments, and/or for site preparation for tree establishment in areas impacted by wildfire. Herbicide treatments will not occur within the WLPZ. Herbicides that may be used include glyphosate, aminopyralid, and 2-4D.

After brushflelds and dense tree stands are cleared, native and non-native woody species aggressively reoccupy the site, regardless of the method of initial brush removal. The regrowth is typically from both old, vigorously sprouting plants and new dense stands of small seedlings, but in certain situations either seedlings or sprouts alone make up most of the regrowth. Control of this brush regrowth has been the most persistent and perplexing problem in converting dense stands of small diameter, unhealthy trees and shrubs that are subject to stand replacing and dangerous fire conditions to productive timber stands that can withstand a low to medium intensity fire and provide increased wildfire protection to communities. Sprouts from previously dormant buds on root crowns, stems, or roots left after initial brush removal have been most difficult to control. Herbicides have been shown to be an efficient cost-effective method of meeting this objective.

The following alternatives were considered, in addition to the one selected, and were disregarded for the following reasons:

- 1. Do Nothing. Loss of vegetation control investments, loss of property values due to associated fire hazard, and watershed impacts from anticipated wildfire.
- 2. Mechanical or Manual Treatment. Mechanical and manual treatments alone are not cost effective and would require multiple re-entries to re-treat the re-sprouting brush. This method would result in scarification of additional weed seeds that would result in ongoing germinate brush.
- 3. Biological Treatment. There is no known effective biological treatment. Cattle and sheep are grazers and not browsers and would not effectively forage on the target brush species. Goats are browsers and could be used to forage on the target brush species; however, the brush would re-sprout resulting in the need for ongoing treatments. There are very few goat herds available for brush control in the region. Goats can be very selective on which brush species they will browse.
- 4. Other Herbicides. Of the herbicides registered for this use, these were determined to be the most appropriate when considering cost-effectiveness and safety to desirable crop trees and the environment.

All vegetation control shall be with the use of herbicides. The landowner does not have any other cost-effective alternative to consider.

Erosion Control and Road Maintenance

Erosion control may include reseeding with native seed for stabilization of degraded areas and installation of brow logs to trap sediment from entering waterways. Erosion control will be installed on disturbed areas and all roads used for hauling and yarding per Forest Practice Rules (14 CCR §934 and §943).

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Road maintenance is necessary as management activities take place and equipment is moved around. Road maintenance will include maintaining current access roads and existing private seasonal roads for equipment and personnel access. These roads will likely need some work for hydrologic disconnect and surface grading following management activities and prior to the wet season. Existing private seasonal roads would not be used during saturated conditions and water barred prior to the winter season and/or after the use of these roads for this project. This road maintenance and improvement will assist wildfire fire fighting personnel with safe ingress and egress should a wildfire occur in the area. Temporary watercourse crossings may be required on some Class I and II watercourses within the project area. Should a temporary watercourse crossing be required, project proponents will consult with the Water Board and CDFW to obtain the necessary permits.

Tree Planting

Bare root/containerized seedlings from the appropriate seed zone (732, 760, and 771) will be hand planted when soils are moist, not saturated or dry in areas that require increased stocking due to past wildfires and/or disturbance. Variable density silviculture prescriptions will be used to promote a mixture of tree sizes and structural diversity throughout the project area.

ENVIRONMENTAL SETTING OF THE PROJECT REGION

The project area is located in a region where the Southern Cascades Mountain Range, Northern Sierra Nevada Mountain Range, Modoc Plateau, and Great Basin ecoregions merge. These regions are the ancestral home of the Maidu, Northern Paiute, Pit River, and Washoe Tribes and represented today by several bands within the county and surrounding areas. Members of those bands continue to maintain a relationship with this landscape as a place of residence, ceremony, harvesting, stewardship, and other traditional activities. The region has cold winters, and hot summers with variability in annual precipitation as you move from mountainous forested regions on the west toward the dry, high desert to the east. Within the project area average annual precipitation decreases from 25-30 inches on the west side of the project area, to 10-15 inches on the east side of the project area. The wet season produces vegetation growth that may be subject to seasonal drought, and prone to fire. California native plants have evolved with relatively frequent fires, and in many cases require fire or fire byproducts to remain healthy or to reproduce. This fire history includes lightning and anthropogenic sources, and it is certainly true for the project area. Frequent burning by local Indigenous peoples created a landscape that was fire-maintained by low to moderate intensity fires that self regulated. Forest/Woodland conditions were historically open with grass and herbaceous undergrowth and scattered shrubs, which resulted in a fire resistant and resilient landscape. While fire suppression policies have been in place for more than a century, there is a history of wildfires and prescribed burns within the project area. The most recent large fire adjacent to the project area include the Hog Fire (2020), the Sheep Fire (2020), both caused by lightning, and the Dixie Fire (2021), cause by faulty powerlines. These fires had variable effects on vegetation within the landscape, with the majority burning at high severity.

The goal of this project is to restore habitats within the project area to more historic conditions, through a variety of integrated management techniques. Current initiatives are focused on strategic fuels reduction areas that will slow or halt fire movement within the North Susanville WUI to minimize risk to the surrounding communities. The purpose of this CEQA evaluation is to analyze the potential environmental impacts of a proposed fuel reduction and forest/woodland health improvement project.

DESCRIPTION OF THE LOCAL ENVIRONMENT

The project area contains portions of the following watersheds: Cheney Creek; Mapes Spring; Piute Creek; South side of Antelope Mountain; Southwest side of Eagle Lake; Willow Creek Valley. Eagle Lake borders the northwest corner of the project area. The Susan River runs through the southern portion of the project area. Piute Creek and Willow Creek are within the project area and flow into the Susan River. Soils are primarily loams ranging from fine to cobbly with both shallow and deep soils, and a variety of properties and qualities. The primary habitats within the project area based on the California Fish and Wildlife Department (CDFW) California Wildlife Habitat Relationship System (CWHR): Eastside Pine (EPN), Sierra Mixed Conifer (SMC), Montane Hardwood Conifer (MHC), Montane Riparian, Sagebrush (SGB), and Annual Grasslands (ASG). Conifer tree species include Ponderosa/Jeffery pine, Sugar pine, Douglas fir, incense cedar, and white fir. Hardwoods include Black oak.. Understory vegetation is mostly scattered woody shrubs including manzanita, ceanothus, .bitterbrush, sagebrush, and mountain mahogany. The ground cover is a diverse mix of annual and perennial grasses and forbs. Elevations range from 4,250 feet on the south end of the project area around the City of Susanville, and 7,250 feet near Roop Mountain on the west side of the project.

CURRENT LAND USE AND PREVIOUS IMPACTS

Until the late nineteenth century, the site was primarily used by Indigenous peoples as part of their daily lives. They maintained open, sunny mixed conifer/oak woodland conditions with regular, low-intensity fire. Brush communities were maintained in a fine grain mosaic interspersed with grasses and forbs. Collectively, these fire maintained areas achieved numerous ecocultural objectives including high-quality food, medicine, and fiber. The tending to these places was disrupted by American settlement. In the late 1800s and 1900s, the site was considered valuable timberland, as well as cattle and sheep ranching land. The project area is now occupied by a variety of entities including private residences, non-industrial and industrial timberlands, Tribal lands held in Trust for the Susanville Indian Rancheria, and public lands managed by the Lassen National Forest, Bureau of Land Management – Eagle Lake Field Office, the County of Lassen, and the City of Susanville. Lands within the project area are used for full and part time residence, recreation, timber management, agriculture, wildlife habitat, and watershed protection.

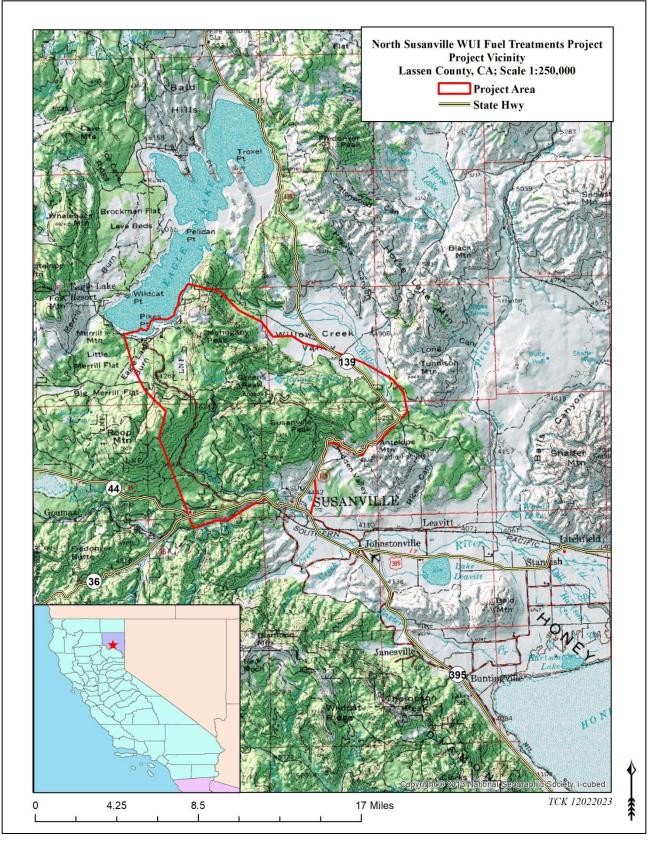


Figure 2: North Susanville WUI Fuel Treatments Project Vicinity

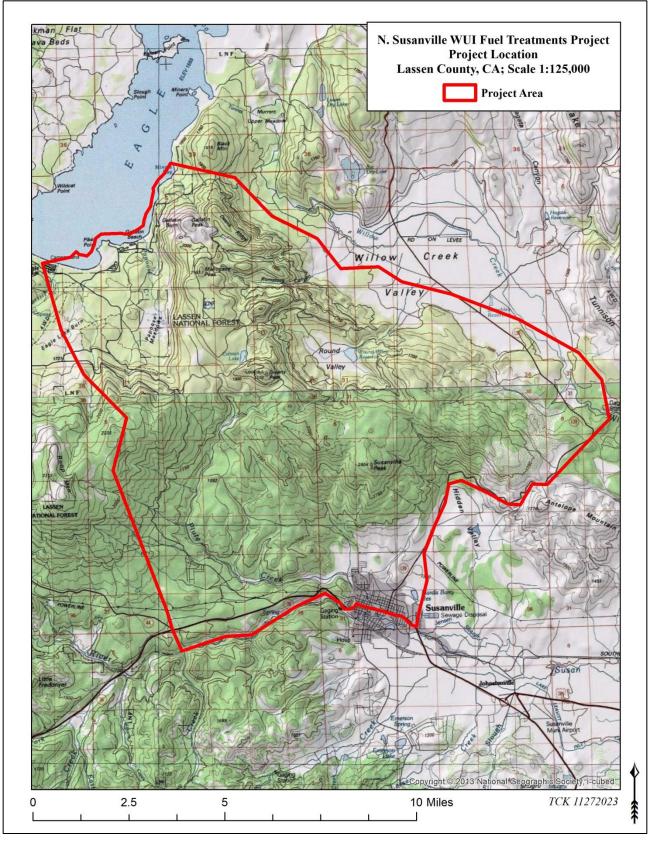


Figure 3: North Susanville WUI Fuel Treatments Project Location.

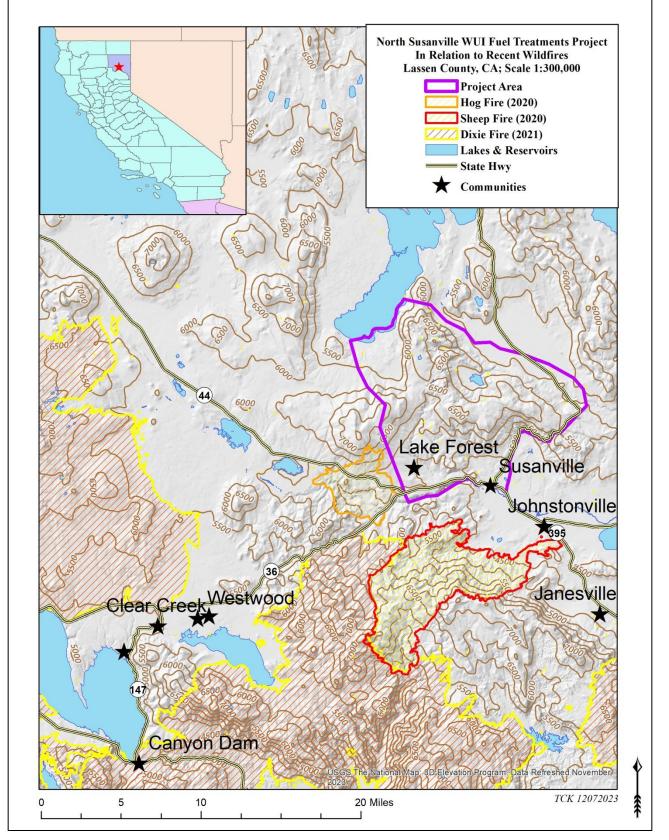


Figure 4: North Susanville WUI Fuel Treatments Project in relation to recent fires, Hog Fire (2020), Sheep Fire (2020), & Dixie Fire (2021).

ENVIRONMENTAL PERMITS

The proposed project will require the following environmental permits and will be required to comply with the following state regulations:

- Smoke Management Plan(s) approved by Lassen County Air Quality Management District
- Prescribed Burn Plan(s) approved by project proponents and landowners.
- Lake and Streambed Alteration Agreements approved by CA Dept. of Fish and Game

MITIGATION MEASURES

The following 16 mitigation measures will be implemented to avoid or minimize environmental impacts. Implementation of these mitigation measures will reduce the environmental impacts of the proposed project to a less than significant level.

Mitigation Measure AGR – 1: *Tree protection – Pile burning and broadcast fire*: Pile burning and broadcast burning shall be conducted in a manner which will not damage residual trees and reproduction. Conifer and oak trees will be protected through use of a cool prescription and/or brush and duff will be cleared around trees for protection. Fire will be maintained at a low intensity that is not expected to harm mature and legacy trees.

Mitigation Measure AIR-1: *Permits:* The proposed treatments are not expected to adversely affect air quality standards, regional haze, and wilderness air quality related values, because of laws, rules, regulations and mitigation measures that would be implemented. Prescribed burning is regulated by the Lassen County Air Pollution Control District (LCAPCD) in compliance with the state smoke management plan, Title 17. Fire managers are required to meet all air district standards and therefore the prescribed burning operations are presumed to conform to the Clean Air Act.

Mitigation Measure *BIO-1: Botanical Resources:* Special status plants species including populations of *Alisma gramineum* (CNPS rank 2B.2); *Botrychium crenulatum* (CNPS Rank 2B.2); *Ranunculus macounii* (CNPS Rank 2B.2), and *Rhamnus alnifolia* (CNPS Rank 2B.2) identified during botanical surveys conducted for this project or during project layout will be avoided through mapping and/or flagged when appropriate, with the exception of broadcast fire.

Mitigation Measure BIO-2: *Riparian Area Protection*: Before any riparian vegetation removal or work within the bed bank or channel of a stream, creek, or river, project proponents will coordinate with the Department to ensure compliance with Section 1600 of the Fish and Game Code.

Mitigation Measure BIO-3: *Noxious Weeds:* Prevent spread of invasive species with equipment: Use contract clauses to require that the activities of contractors are conducted to prevent and control the introduction, establishment, and spread of aquatic and terrestrial invasive species. For example, where determined to be appropriate, use agreement clauses to require contractors to abide by vehicle and equipment cleaning requirements/standards prior to using the vehicle or equipment within project area.

Mitigation Measure BIO-4: Staging areas: Do not stage equipment, materials, or crews in

areas infested with invasive plant species where there is a risk of spread to areas of low infestation.

Mitigation Measure BIO-5: *Protection of Nest Sites*: Known nest sites and those discovered during project surveys and/or layout will be protected per California Forest Practice Rules §939.2 – *General Protection of Nest Sites*, and §932.3 – *Specific Requirements for Protection of Nest Sites*.

Mitigation Measure *BIO-6: Terrestrial and Aquatic Wildlife Resources*: Best Management Practices (BMPs) will be applied for protecting wildlife and wildlife habitat, including:

- **New wildlife findings:** In the event of a verified threatened, endangered or sensitive species occurrence prior to or during project implementation, the appropriate limited operating periods would apply based on consultation with CDFW. Other mitigations may take place as agreed upon in consultation with CDFW.
- Snags: Retain snags per CA Forest Practice Rule §939.1 for wildlife habitat.
- **Structure trees:** Retain and protect high value wildlife habitat trees (trees with multiple tops, broken tops, rot, cavities, and other formations) that create structure for nests and dens.

Mitigation Measure BIO-7: *Gray wolf:* To determine whether gray wolves have been documented in or in the vicinity of a treatment area, Project Proponents will contact CDFW before implementation of project activities to obtain general information about documented gray wolf activity within the vicinity and the need for protection measures.

- A limited operating period (LOP) restricting all noise or smoke generating activities would be instated from April 1 through July 15 within one mile of the den site. Further discussions and coordination with CDFW and the Service may result in a modified distances or more flexible dates for this specific conservation measure. In addition, if the den or rendezvous sites are clearly separated from project-generated disturbances by topographic features or terrain, seasonal restrictions may be adjusted or eliminated, as approved by the Service. These conservation measures would avoid or minimize disturbance at active den or rendezvous sites that could disrupt reproductive success or result in adverse effects. Dens that are known to be used in consecutive years but not used in the current year may require a LOP if CDFW or the Service determines it is necessary.
- Early rendezvous sites are typically close to dens: implementing a LOP within 1 mile of den sites will generally mitigate effects to early rendezvous sites when pups are still vulnerable. Coordination with CDFW and the Service prior to implementation would be done to ensure protection of all known and/or newly discovered den and rendezvous sites.
- If a den is discovered during implementation of the proposed project, the LOP shall be implemented and coordination with CDFW and the Service shall be pursued.

Mitigation Measure CUL-1: *Avoidance of Cultural Resources*: Cultural resources present within the project area have not been formally evaluated to determine eligibility for listing on the CRHR. For the purposes of this project these cultural resources will be assumed potentially eligible for state and federal registers and will be avoided. Project proponents will ensure that cultural resources are not adversely affected by ground disturbing activities. If cultural resources cannot be avoided and ground disturbance will occur within the recorded site limits than the site(s) will be formally evaluated to determine if they meet the regulatory criteria for eligibility to the CRHR.

Mitigation Measure CUL-2: *Unanticipated Discovery of Cultural Resources:* If a cultural resource is discovered within a project area after the project has been approved, the following procedures apply:

- 1. Project activities within 100 feet of the newly discovered cultural resource shall be immediately halted.
- 2. A qualified professional archaeologist or RPF with CALFIRE Archaeological Training Certification shall be immediately notified.
- 3. The archaeologist shall evaluate the new discovery and develop appropriate protection measures.
- 4. The archaeologist shall ensure that the newly discovered site is recorded and its discovery and protection measures are documented in the project files.
- 5. If the newly discovered site is a Native American Archaeological or Cultural Site, the Archaeologist shall notify the appropriate Native American tribal group and the NAHC, if appropriate.

Mitigation Measure CUL-3 *Encountering Native American Remains*: Although unlikely, if human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and the County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission must be contacted by the Coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains is provided.

Mitigation Measure GEO-1: *Prescribed fire control line construction:* Fire control lines are a concern for hydrology and soil quality risks, whether put in by hand or using mechanical means. They will be rehabilitated for drainage using best management practices (BMPs). Fire line construction should be in accordance with slope restrictions (Mitigation Measure GEO-2) and Water Protection BMPs (Mitigation Measure HYD-1).

Mitigation Measure GEO-2: *Slope restrictions:* Ground-based equipment would be restricted to slopes less than 50 percent. Flagging, mapping, and meeting with equipment operators would be used to keep operators out of areas over 40% slope. Exceptions may be made for short pitches of 100 feet slope distance, up to 75 percent slope. Exposed soils resulting from ground based equipment on slopes over 40% slope shall be 90% covered with operational slash or hay/straw to a minimum 2" depth prior to the winter period (Nov. 15 – April 1). This will occur after the conclusion of each individual operation and prior to each winter period for the life of the Project.

Mitigation Measure HYD-1: *Project Best Management Practices (BMPs):* Protect water quality through the use of best management practices (BMPs) to prevent water quality degradation and to meet state water quality objectives relating to non-point sources of pollution. Best management practices utilized for this project are procedures and techniques that are incorporated in project actions and have been determined by the State of California to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

Watercourse and Lake Protection Zones (WLPZ) will be classified based on the California Forest Practice Rules §936.5 – Procedures for Determining Watercourse and Lake Protection Zones Widths and Protective Measures. WLPZs shall be identified on the ground with flagging prior to implementation of treatments. These zones will be:

Watercourse Classification	Slope 0-30%	Slope 30-50%	Slope >50%
Class I	75'	100'	150'
Class II (including all springs with surface water)	50'	75'	100'
Class III	25'	50'	50'

The standard best management practices for protecting water quality include:

- Within the WLPZ, at least 50% of the total canopy covering the ground shall be left in a well-distributed multi-storied stand configuration composed of a diversity of species similar to that found before the start of operations. The residual overstory canopy shall be composed of at least 25% of the existing overstory conifers.
- No heavy equipment shall operate within the WLPZ except on existing roads and crossings. Light weight equipment, including a mini-excavator, mini-chipper, and/or skid steer, may operate within the WLPZ when conditions are dry within the WLPZ. Equipment within the WLPZ will not turn around within the WLPZ, but will make minimal tracks perpendicular to the watercourse. Any other types of light equipment that are used will not exceed the weights of those listed above. Exposed soils within WLPZ shall be 90% covered with operational slash or hay/straw to a minimum 2" depth prior to the winter period (Nov. 15 April 1). This will occur after the conclusion of each individual operation and prior to each winter period for the life of the Project.
- No equipment shall refuel, be cleaned, or lubricated within the WLPZ.
- Road based equipment being used for project implementation shall not be used during any time of the year when soils are saturated and excessive damage can occur as well as the potential discharge of sediment to watercourses.
- There will be no mechanical fireline construction within the WLPZ.
- No ignitions of broadcast (prescribed) burns would occur within the WLPZ. Broadcast burning would be allowed to back burn into the WLPZ, but in order to maintain stream temperatures and avoid sediment discharge to Class I and II streams piles and broadcast prescribed burns are restricted within the WLPZ to the following distances from the stream:

Watercourse Classification	Slope 0-30%	Slope 30-50%	Slope >50%
Class I	50-75'	66-100'	100-150'
Class II (including all springs with surface water)	33-50'	50-75'	66-100'

Mitigation Measure HYD-2 *Timber waiver*, Proposed activities will abide by the Lahontan Regional Water Quality Control Board (LRWQCB) Timber Waiver program, and project proponents will consult with the LRWQCB if there are proposed activities that could potentially impact water quality.

Mitigation Measure FIRE-1: *Prescribed (Rx) burn plan:* Mitigation measures will include and be dependent upon:

- Rx burns and pile burns can be scheduled for fall months into spring. Burn days will be dependent upon California Air Resources Board (CARB) forecasts, Cal Fire approval and will comply with all local and state regulations.
- Rx broadcast burns will coincide with ecological emergence to promote a heterogeneous forest structure, reduce the abundance of invasive and limit impact to desired native species.

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- To reduce impacts to surrounding community's Rx burn timing, planning and implementation will all be dictated by smoke management mitigations through CARB.
- Prescribed burns will be coordinated with other planned burns in the area to avoid cumulative impacts to air quality and wildfire safety.

SUMMARY OF FINDINGS

This IS-MND has been prepared to assess the project's potential effects on the environment and an appraisal of the significance of those effects. Based on this IS-MND, it has been determined that the proposed project will not have any significant effects on the environment after implementation of mitigation measures. This conclusion is supported by the following findings:

- 1. The proposed project will have no effect related to Aesthetics, Agriculture Resources, Energy, Geology and Soils, Land Use Planning, Mineral Resources, Noise, Population and Housing, Public Facilities, Recreation, Tribal Cultural Resources, and Utilities.
- 2. The proposed project will have a less than significant impact on Greenhouse Gas Emissions, Hazards and Hazardous Materials, Transportation, and Wildfire.
- 3. Mitigation is required to reduce potentially significant impacts related to Air Quality, Biological Resources, Cultural Resources, Hydrology and Water Quality, and Tribal Cultural Resources.

The Initial Study-Environmental Checklist included in this document discusses the results of resource-specific environmental impact analyses that were conducted by the District. This initial study revealed that potentially significant environmental effects could result from the proposed project. However, project proponents have revised project plans and have developed mitigation measures that will eliminate impact or reduce environmental impacts to a less than significant level. Honey Lake Valley RCD has found, in consideration of the entire record, that there is no substantial evidence that the proposed project as currently revised and mitigated would result in a significant effect upon the environment. The IS-MND is therefore the appropriate document for CEQA compliance.

INITIAL STUDY-ENVIRONMENTAL CHECKLIST

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	Greenhouse Gas Emissions	Public Services
Agriculture Resources	Hazards & Hazardous Materials	Recreation
Air Quality	Hydrology and Water Quality	Transportation
Biological Resources	Land Use and Planning	Tribal Cultural Resources
Cultural Resources	Mineral Resources	Utilities and Service Systems
Energy	Noise	Wildfire
Geology and Soils	Population and Housing	Mandatory Findings of Significance

Environmental Factors Potentially Affected

Determination

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 would be prepared.
- I find that although the proposed project COULD have a significant effect on the environment, there WOULD 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 would 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Name: Jesse Claypool Title: HLVRCD Chairman

<u>12/8/2023</u> Date

Environmental Checklist and Discussion

AESTHETICS

 a) Except as provided in Public Resources Code § 21099, would the project have a substantial adverse effect on a scenic vista? 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
adverse effect on a seeme vista:				\boxtimes

The combination of fuel and vegetation changes within and surrounding the project area during the past century has resulted in a landscape that is less resilient to wildland fire, drought, insects, and disease. The lack of management activities has contributed to the current condition. During treatment activities and immediately afterward, changes to the visual quality of the landscape may be observable. However, the area will not be 100% cleared through management operations and untreated areas will be left to provide textural variety.

 b) Except as provided in Public Resources Code § 21099, would the project substantially damage scenic resources, including, but not limited to, trace rock outeroppings, and historic buildings 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
trees, rock outcroppings, and historic buildings within a state scenic highway?				\boxtimes

Proposed treatments are intended to improve heterogeneity across the landscape with respect to density, species, and reduced fuels and will benefit the visual objectives in the project area. A variety of plant communities varying in size, age, and structure provide diversity in the visual character of the area. Reducing the possibility of stand replacing fires, disease or insect mortality, and improving the resiliency of the vegetation to climate change would improve and maintain the aesthetic integrity of the project area.

Reducing the competition between vegetation would enhance the long-term aesthetics by promoting healthy stands of conifers, hardwoods, brush, grasslands, and riparian areas. Effects from the proposed activities would only serve to enhance and benefit the resources in the area, including visual quality, and reduce the possibility of losing the entire area again to wildfire. The project area is not visible from any scenic highway or designated scenic vista point.

c)	Except as provided in Public Resources Code § 21099, <u>in non-urbanized areas</u> , would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	accessible vantage point.) If the project is <u>in</u> an urbanized area, would the project conflict				\boxtimes
	with applicable zoning and other regulations governing scenic quality?				

Portions of the project area could be visible to members of the public from Hwy 36, Hwy 139, and County Road A2, but the project will not substantially degrade the aesthetic quality of the view.

d)	Except as provided in Public Resources Code § 21099, would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	area?				\boxtimes
Pres	cribed fire activities associated with the project cou	Ild create a	faint temporar	y glow on so	ome
nigh	ts, but the glow will not be substantial and affect da	ay or nightt	ime views of t	he area.	
Agr	RICULTURAL RESOURCES				
a)	Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	and Monitoring Program of the California Resources Agency, to non-agricultural use?				\boxtimes
	project is not located on land identified as Prime F ewide Importance (Farmland).	farmland, U	nique Farmlaı	nd, or Farml	and of
b)	Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	contract:				\boxtimes
The	project is consistent with the existing zoning and V	Williamson	Act contracts.		
c)	for, or cause rezoning of forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?				\boxtimes
Muc zoni	h of the project area is zoned for timberland produng.	ction. The j	project is cons	istent with e	xisting
d)	Would the project result in the loss of forest land or conversion of forest land to non-forest use?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	ust :				\boxtimes

proposed action is intended to remove small diameter trees, and enough encroaching brush to achieve a healthy and resilient landscape reflected in a fine grain mosaic of conifer and oak woodland habitats that is reflective of traditional knowledge and historic photographs of this area. It is intended that by facilitating this vegetation composition and structure a dynamic ecological community will be achieved that is fire resistant and adaptive to future environmental change (i.e., warmer and drier conditions or climate extremes). This should result in healthier stands of conifer forests and oak woodlands due to reduced competition with brush that are less likely to succumb to a future wildfire due to reduced fuels and lower burn severity. These changes could result in more forestland (oak/pine woodland) in the project area, but not less.

e) Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
farmland to non-agricultural use?				\boxtimes

The project takes place entirely onsite and requires no improvement or expansion of auxiliary facilities; therefore, the project has no foreseeable indirect, offsite, or cumulative impacts that could degrade or convert forestlands or agricultural lands.

AIR QUALITY

a)	Would the project conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
	pian.		\boxtimes			
Proje	ct prescribed burning would produce PM10. Presc	ribed burni	ng is regulated	d by the Las	sen	
Coun	ty Air Pollution Control District (LCAPCD 2023)	in complia	nce with the s	tate smoke		
mana	management plan, Title 17. Prescribed burn projects must submit a Smoke Management Plan to					
LCA	LCAPCD for review and approval. The plan is developed to minimize air quality impacts of the					
project. Burning is done on approved burn days as determined by LCAPCD. This process ensures						
that t	that there are not any significant smoke impacts to public health from the project.					

 b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ambient air quality standard?				\boxtimes

Lassen County is currently in attainment for all federal and state ambient air quality standards.

There are no class I airsheds within the project area.

Effects to air quality and visibility could result from prescribed burning; and a very small increase in air pollutants could result from equipment use under the proposed action.

Effects to air quality could result from fugitive dust caused by project implementation. Best management practices (BMPs) will be implemented in order to minimize impacts. Fugitive dust generally quickly settles back down to the ground and typically does not spread far downwind.

Potential adverse effects from equipment used in project implementation would be very small as the equipment would mostly operate in remote areas that are not occupied. Limited amounts of equipment would be used over a broad area and equipment emissions would disperse quickly.

Effects to visibility from project prescribed burning would be temporary and minimized by burning only during designated burn days when adequate weather conditions would disperse smoke quickly. Most prescribed burning would occur on a single day or over several days. Fire managers are required by the air district to plan for controlling smoke emissions through contingency planning as part of the smoke management plans.

Project emissions would temporarily increase air pollutants in the airshed and Lassen County. However, their direct, indirect and cumulative effects would be regulated by the LCAPCD in order to prevent adverse impacts and exceedances of health standards. The proposed prescribed fire treatments would reduce future potential wildfire smoke.

c)	Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes
	to the above factors and the remoteness of the loca ptors to substantial pollutant concentrations.	ation, the pr	oject will not	expose sens	itive
d)	Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	ancering a substantial number of people.				\boxtimes
I ne '			1 1		
	project will not result in emissions other than those	e mentioned	l above.		
		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

The project area was the traditional homeland of Maidu, Paiute, Pit River, and Washoe people who lived within and around the project area. Their traditional cultural practices included burning, coppicing, and digging; all of which are an integral process within this landscape, but perhaps most important was burning. Due to selective pressures of this activity, the ecosystems within this landscape were largely shaped by the patterning of fire spatially and temporally across the seasons and years, thereby selecting species that are resilient to fire (Hankins 2013; Hankins 2015). Beginning in the 1840's cattle ranches and homesteads were established within the area, and their land use practices also shaped the ecosystems. Fire continued to be utilized by these settlers, but for

Wildlife or the U.S. Fish and Wildlife Service?

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more limited reasons (e.g., rangeland maintenance and forage production). This different application of fire coupled with more intensive use has altered the native vegetation and ecosystem dynamics. For instance, the change in fire regime and practice has led to habitat conversion (e.g., expansion of juniper into brush dominated ecosystems). Some of these changes can be observed through comparison of historic vegetation surveys and photographs. The concomitant effects of grazing and fire has also enabled the establishment, and in some cases dominance, of non-native vegetation (e.g., cheat grass (*Bromus tectorum*) and medusahead (*Taeniatherum caput-medusae*) Shifts in policy ultimately led to the curtailment of prescribed fire within this landscape. With the absence of prescribed fire, wildfire (both natural and human caused) has had varying footprints within the project area and surrounding environs. Specifically, the Hog Fire (2020), Sheep Fire (2020), and Dixie Fire (2021) burned extensively through the adjacent properties with variable intensity and severity, but primarily high and very high severity.

Botanical Resources: The vegetation communities of the proposed project area are diverse. Dominant vegetation within the project area includes annual grasslands, black oak woodlands, mixed conifer-hardwood forest, eastside pine, Sierra mixed-conifer forest, and scrub communities dominated by sagebrush, bitterbrush, mountain mahogany, and manzanita.

While most of the species found in the tree and shrub layers are native species, the herbaceous layer is generally dominated by non-native species. Some of the common non-native species include cheatgrass (*Bromus tectorum*) and medusahead (*Taeniatherum caput-medusae*). Meanwhile, common native species include: Great Basin wild rye(*Leymus cinereus*), squirrel tail grass (*Elymus elymoides*), Indian rice grass (*Stipa hymenoides*), Idaho fescue (*Festuca idahoensis*), and bluebunch wheatgrass (*Elymus spicatus*).

<u>Wildlife Resources:</u> Many common species have been observed within the project area including: Mule deer (*Odocoileus hemionus*) American black bear (*Ursus americanus*), mountain lion (*Felis concolor*), gray fox (*Urocyon cinereoargenteus*), jackrabbit (*Lepus californicus*), wild turkey (*Meleagris gallopavo*), California quail (*Callipepla californica*), bobcat (*Lynx rufus*), and a variety of bird species.

<u>Sensitive Biological Resources:</u> An assessment of potential threatened, endangered, and rare (California Native Plant Society Rank 1 and 2) vascular plants, bryophytes, lichens, and fungi. (*See* Attachment A – Biological Assessment – Wildlife and Botany). This assessment included a CNDDB 1-mile search around the project area, and a nine-quad search for rare plants using the California Department of Fish and Wildlife (CDFW) BIOS system (<u>https://wildlife.ca.gov/Data/BIOS</u>). This includes searching for rare plants identified within the area of the 7.5' quadrangles where the project is primarily located (Susanville) along with the eight surrounding quads. The Califora (<u>https://www.califlora.org/</u>), and California Native Plant Society inventory of rare plants (<u>http://www.rareplants.cnps.org/</u>) were also used, as well as consideration to past experience in the area.

The purpose of this assessment is to analyze the effects of the project on several categories of sensitive species. This includes federally threatened, endangered, proposed, and candidate species, as well as California threatened, endangered, species of special concern, and rare plant species. Species listed as endangered by the U.S. Fish and Wildlife Service (Federal) and California Department of Fish and Wildlife (State) are species currently in danger of extinction throughout all

or a significant portion of their range. Species listed as threatened are likely to become endangered within the foreseeable future throughout all or a significant portion of their range. A proposed species is any species that is proposed in the Federal Register to be listed as a threatened or endangered species under the Endangered Species Act (50 CFR 402.03). A candidate species is a species for which the U.S. Fish and Wildlife Service has on file enough information to warrant or propose listing as endangered or threatened. California species of special concern are wildlife species at risk of becoming threatened or endangered. The California Native Plant Society (CNPS) has developed an inventory of rare plants that is widely accepted as the standard for information on the rarity and endangerment status of California flora.

All federal and state threatened endangered, proposed, candidate or sensitive species that could potentially occur within the project area were considered. After reviewing the CNDDB and available endangered species data from the USFWS and CDFW, 24 plant species have potential to occur within the project area (See Table 1 – Biological Assessment – Botany). The project is not likely to impact any of these species as proposed project activities will not occur within their habitats or mitigation measures have been designed to protect these habitats (wetlands, watercourses, lake margins). Twenty-six (26) wildlife species have potential to occur within the project area (See Table 2 – Biological Assessment – Wildlife). The project is not likely to impact any of these species as proposed project activities or mitigation measures have been designed to protect the project is not likely to impact any of these species as proposed project is not likely to impact any of these species as proposed project activities or mitigation measures have been designed to protect is not likely to impact any of these species as proposed project activities or mitigation measures have been designed to protect is not likely to impact any of these species as proposed project activities will not occur within their habitats or mitigation measures have been designed to protect nest sites and other sensitive resources.

Scientific Name	Common Name	Federal Status	State Status	Flowering Period	Elevation (m)	Habitat/Ecology	Impact	Rationale
Alisma gramineum	Grass alisma	None	2B.2	June-Aug	1200-1800	Occurs in wetlands; wetland- riparian; Ponds	No	Protected by WLPZ
Lomatium roseanum	Adobe lomatium	None	1B.2	June-July	1460-2250	Openings, gravelly or rocky; Great Basin scrub; Lower montane coniferous forest	No	Habitat not likely to occur in treatment areas.
Artemisia tripartita ssp. tripartita	Threetip sagebrush	None	2B.3	Aug	2200-2600	Rocky, volcanic; Upper montane coniferous forest (openings)	No	Open areas at higher elevations not affected by proposed project.
Pyrrocoma lucida	Sticky pyrrocoma	None	1B.2	July-Oct	700-2050	Alkaline clay flats; sagebrush scrub; openings in lower montane coniferous forest; meadows and seeps	No	No known occurrences within the project area; habitat not likely to occur in treatment area.
Mertensia longiflora	Long bluebells	None	2B.2	Apr-June	1500-2200	Open, generally spring-moist, drying places of plains, foothills, especially sagebrush or sparse ponderosa pine forest	No	Protected within WLPZ
Brasenia schreberi	Watershield	None	2B.3	June-Sept	<2200	Wetlands; Wetland-riparian; Ponds; slow streams; marshes; swamps	No	Protected within WLPZ
Carex davyi	Davy's sedge	None	1B.3	May-Aug	1400-3300	Usually in wetlands; sub-alpine and red fir forests	No	Protected within WLPZ; usually found higher than project area.
Carex sheldonii	Sheldon's sedge	None	2B.2	May-Aug	1200-2000	Wetlands; riparian; Lower montane coniferous forest (mesic); marshes and swamps	No	Protected within WLPZ
Astragalus pulsiferae var. pulsiferae	Pulsifer's milk-vetch	None	1B.2	May-June	1300-1900	Sandy or rocky soil, often with pines, sagebrush	No	Not observed within the project area.

Table 1: Biological Assessment – Botany

Scientific Name	Common Name	Federal Status	State Status	Flowering Period	Elevation (m)	Habitat/Ecology	Impact	Rationale
								Found east of the project area in Great Basin scrub.
Phacelia inundata	Playa phacelia	None	1B.3	May – Aug	1300-2000	Alkaline flats, dry lake margins in Great Basin scrub, lower montane coniferous forests, and playas.	No	Protected within WLPZ, habitat not within treatment areas.
Juncus dudleyi	Dudley's rush	None	2B.3	July-Aug	<2000	Wet areas in montane coniferous forest	No	Protected within WLPZ
Juncus luciensis	Santa Lucia dwarf rush	None	1B.2	Apr-July	300-2040	Wet, sandy soils of seeps, meadows, vernal pools, streams, roadsides, chaparral, lower montane coniferous forest	No	Protected within WLPZ
Botrychium ascendens	Upswept moonwort	None	2B.3	July-Aug	1500-3200	Moist meadows, open woodlands near streams and seeps	No	Protected within WLPZ
Botrychium crenulatum	Scalloped moonwort	None	2B.2	June-Sept	1500-3600	Saturated hard water seeps and stream margins, moist meadow, seeps, bogs, fens	No	Protected within WLPZ
Botrychium montanum	Western goblin	None	2B.1	July-Sept	1500-2100	Shady conifer woodland, especially under <i>Calocedrus</i> along streams	No	Protected within WPLZ
Penstemon janishiae	Janish's beardtongue	None	2B.2	May-July	1065-2350	Generally igneous-clay soils in sagebrush scrub, juniper/shrub savanna, ponderosa pine forests	No	Closest observation on Diamond Mountains 8 miles south of the project area.
Phlox muscoides	Squarestem phlox	None	2B.3	Jun-Aug	1400-2700	Open rocky area; alpine rock	No	Habitat within project area will not be disturbed by project activities.
Eriogonum ochrocephalu m var.	Ochre- flowered buckwheat	None	2B.2	May – June	1300-1700	Volcanic or clay; Great Basin scrub, pinyon and juniper woodland	No	No observations within the

Scientific Name	Common Name	Federal Status	State Status	Flowering Period	Elevation (m)	Habitat/Ecology	Impact	Rationale
ochrocephalu m	TValle	Status	Status	Teriou	(11)			project area. Nearest occurrence in Herlong 30 miles SE of the project area.
Rumex venosus	Winged dock	None	2B.3	May-June	1200-1800	Dry, sandy places; Great Basin scrub	No	Lack of suitable habitat in project area.
Stuckenia filiformis ssp. alpine	Northern slender pondweed	None	2B.2	May-July	300-2150	Shallow clear water of lakes, drainage channels, marshes and swamps.	No	Aquatic, protected by WLPZ
Ranunculus macounii	Macoun's buttercup	None	2B.2	June-July	1200-1500	Wet meadows, shallow water	No	Protected within WLPZ
Rhamnus alnifolia	Alder buckthorn	None	2B.2	May – July	1370-2130	Wetlands, red fir, lodgepole pine, wetland-riparian	No	Protected within WLPZ
Geum aleppicum	Aleppo avens	None	2B.2	June-Aug	1000-1600	Meadows in sagebrush scrub and ponderosa pine forest	No	Habitat not impacted by proposed project activities.
Ivesia sericoleuca	Plumas ivesia	None	1B.2	May – Oct	1300-2320	Vernally mesic, generally volcanic meadows, vernal pools, Great Basin scrub, lower montane coniferous forest, freshwater wetlands, wetland-riparian	No	Protected by WLPZ

State Status

CNPS Rare Plant Rank

1B - Plant rare, threatened, or endangered in CA and elsewhere 2B - Plant rare, threatened, or endangered in CA, but common elsewhere

.1 - Seriously threatened in CA

.2 – moderately threatened in CA

.3 – not very threatened in CA

Name	Common Name	Federal Status	State Status	Habitat	Habitat in the Project Area	Potential Impact					
Insects											
Bombus occidentalis	Western bumblebee	None	Candidate Endangered	Three basic habitat requirements: suitable nesting sites for the colonies, nectar and pollen from floral resources available throughout the duration of the colony period (spring, summer and fall), and suitable overwintering sites for the queens. Nests occur primarily in underground cavities such as old squirrel or other animal nests and in open west-southwest slopes bordered by trees.	Yes	Habitat will benefit from project by increasing foraging habitat through clearing and plantings.					
				Fish							
Catostomus lahontan	Lahontan mountain sucker	None	Species of Special Concern (SSC)	Mountain suckers are characteristically found in shallow water and have a high tolerance for organic pollution and warm temperatures. Mountain suckers, unlike most stream-dwelling fishes in western North America, spawn in summer (June to early August) rather than spring In California, adults have been observed moving into small streams during later July to feed on algae and to spawn Spawning probably occurs at night in riffles located immediately below pools, Mountain suckers feed primarily on algae and diatoms but will feed on aquatic invertebrates as well	Yes	Habitat within Watercourse Lake Protection Zone (WLPZ)-will be protected					
Siphateles bicolor ssp. 12	Eagle Lake tui chub	None	SSC	Endemic to Eagle Lake, a highly alkaline, terminal lake. Typically spawn in shallow water areas with adequate gravel substrate and aquatic vegetation.	No	Project activities will not impact Eagle Lake					
Oncorhynchus mykiss aquilarum	Eagle Lake rainbow trout	None	SSC	Endemic to Eagle Lake, a highly alkaline, terminal lake, and the main tributary, Pine Creek. Amphibians	No	Project activities will not impact Eagle Lake.					

Table 2 – Biological Assessment – Wildlife

Scientific Name	Common Name	Federal Status	State Status	Habitat	Habitat in the Project Area	Potential Impact
Rana sierrae	Sierra Nevada yellow- legged frog	Endangered	Threatened	Associated with streams, lakes and ponds in montane riparian, lodgepole pine, subalpine conifer, and wet meadow habitats at elevations from 4,500 - 11,980 ft. Aquatic species usually found within a few feet of water. Eggs are usually laid in shallow water attached to gravel or rocks. Tadpoles may require up to two over- wintering periods to complete their aquatic development.	Yes	No known occupied habitat within the project area. Outside of known current range. Habitat within Watercourse Lake Protection Zone (WLPZ)-will be protected
Ambystoma macrodactylum sigillatum	Southern Long-Toed Salamander	None	SSC	Adults spend much of their lives underground, often utilizing the tunnels of burrowing mammals such as moles and ground squirrels. Transformed adults are rarely found outside of the breeding season. They are mostly found under wood, logs, rocks, bark and other objects near breeding sites which can include ponds, lakes, and streams, or when they are breeding in the water.	Yes	Habitat within Watercourse Lake Protection Zone (WLPZ)-will be protected.
				Birds		
Haliaeetus leucocephalus	Bald Eagle	Delisted	Endangered	Occupy various woodland, forest, grassland, and wetland habitats. Large nests are normally built in the upper canopy of large trees, and snags typically conifers near water sources with fish.	Yes	Known nest sites within the project area will be monitored and protected per Forest Practice Rules.
Strix occidentalis occidentalis	California Spotted Owl	None	SSC	This species is closely related to the Northern spotted owl and has a similar life history utilizing mature forests for habitat.	Yes	No known nest sites within or adjacent to project area. Project area is just east of documented occurrences.

Scientific Name	Common Name	Federal Status	State Status	Habitat	Habitat in the Project Area	Potential Impact
Accipiter gentilis	Northern Goshawk	None	SSC	Generally, prefer dense forests with large trees and relatively high canopy closures like late successional forest stands.	Yes	Known nest sites within the project area will be monitored and protected per Forest Practice Rules.
Accipiter cooperii	Cooper's hawk	None	WL	Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently.	Yes	Known nest sites within the project area will be monitored and protected per Forest Practice rules.
Aquila chrysaetos	Golden Eagle	None	Fully Protected (FP), Watch List (WL)	Live in open and semi open country; avoid developed areas and uninterrupted stretches of forest. Canyonlands, rimrock terrain, and riverside cliffs and bluffs. Nest on cliffs and steep escarpments in grasslands, chaparral, scrublands, forest, and other vegetated areas.	Marginal	No known nest sites within the project area; may forage or fly over.
Falco mexicanus	Prairie Falcon	None	WL	Distributed from annual grasslands to alpine meadows, but associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas. Usually nests in a scrape on a sheltered ledge of a cliff overlooking a large, open area.	Marginal	No known nest sites within the project area; may forage or fly over,
Antigone canadensis tabida	Greater Sandhill Crane	None	Threatened, FP	Winter in the Central Valley and nest in six northeastern CA counties. Nest in healthy undisturbed wetland ecosystems.	No	Areas with known occurrences are not within areas within or adjacent to project activities. Potential habitat within WLPZ will be protected.

Scientific Name	Common Name	Federal Status	State Status	Habitat	Habitat in the Project Area	Potential Impact
Riparia riparia	Bank Swallow	None	Threatened	A neotropical migrant found primarily in riparian and other lowland habitats in California west of the deserts during the spring-fall period. In summer, restricted to riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine-textured or sandy soils, into which it digs nesting holes. Predominantly a colonial breeder.	No	No known nesting colonies within the project area. Potential habitat within WLPZ will be protected.
Agelaius tricolor	Tricolored Blackbird	None	Threatened	Forms the largest breeding colonies of any North American landbird. Breeding sites are open accessible water; a protected nesting substrate, including either flooded or thorny or spiny vegetation; and a suitable foraging space providing adequate insect prey within a few kilometers of the nesting colony.	No	No known nesting areas within the project area. Potential habitat within WLPZ will be protected.
Pandion haliaetus	Osprey	None	WL	Nests on platform of sticks at the top of large snags, dead-topped trees, on cliffs, or on human made structures. Nest usually within 400 m of fish-producing water.	Yes	No known nest sites within or adjacent to the project area; may forage or fly over. Occurrences will be protected per Forest Practice rules.
Empidonax traillii	Willow Flycatcher	None	Endangered	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats at 600-2500 m (2000-8000 ft) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows. Nesting site usually near languid stream, standing water, or seep.	No	No known nesting areas within the project area. Potential habitat within WLPZ will be protected.
Circus	Northern	None	SSC	Frequents meadows, grasslands, open	Ν	Habitat will not be

Scientific Name	Common Name	Federal Status	State Status	Habitat	Habitat in the Project Area	Potential Impact
hudsonius	harrier			rangelands, desert sinks, fresh and saltwater emergent wetlands, seldom found in wooded areas. Nests on ground in shrubby vegetation at marsh edges.		impacted by proposed project activities. Nests protected by WLPZ
Setophaga petechia	Yellow warbler	None	SSC	Breeds in riparian woodlands, montane chaparral, and in open ponderosa pine and mixed conifer habitats with substantial amounts of brush	Yes	No known observations within the project area. Habitat protected within the WLPZ.
Coturnicops noveboracensis	Yellow rail	None	SSC	Require densely vegetated sedge marshes/meadows with moist soil or shallow standing water.	Yes	Known occurrences in project area in habitat that will not be impacted by proposed project activities and protected by WLPZ.
Xanthocephalus xanthocephalus	Yellow- headed blackbird	None	SSC	Breed almost exclusively in marshes with tall emergent vegetation, such as tules (<i>Scirpus sp.</i>) or cattails (<i>Typha sp.</i>), generally in open areas and edges over relatively deep water	Yes	Known occurrences in project area in habitat that will not be impacted by proposed project activities and protected by WLPZ.
			• •	Mammals		••••
Pekania pennanti	Fisher	None	SSC	High cover and structural complexity in large tracts of mature and old growth forests	No	Project outside current range. No recent detections within or adjacent to the project area.
Vulpes vulpes necator	Sierra Nevada Red Fox	None	Threatened	High mountains of the Sierra Nevada in open conifer woodlands and mountain meadows near treeline.	No	Project area outside of current range and elevation. No recent

Scientific Name	Common Name	Federal Status	State Status	Habitat	Habitat in the Project Area	Potential Impact
						detections within or adjacent to the project area.
Canis lupus	Gray Wolf	Endangered	Endangered	Wolves have historically occupied diverse habitats in North America, including tundra, forests, grasslands, and deserts. As a consequence, and because they travel long distances and require large home ranges, wolves are considered habitat generalists.	Yes	Project not currently within know resident wolf territories; but will be monitored during project implementation. Proposed treatments are not expected to affect the suitability of habitat for wolves, as they are somewhat generalist and use a variety of conditions.
Antrozous pallidus	pallid bat	None	SSC	Wide variety of habitats is occupied, including grasslands, shrublands, woodlands, and forests from sea level up through low elevation mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings.	Yes	No known roosting sites in the project area and no activity detected.
Aplodontia rufa californica	Sierra Nevada Mountain Beaver	None	SSC	Not related to true beavers, this nocturnal rodent prefers moist cool deciduous and coniferous forests. Burrows usually consist of a network of tunnels built in deep soil. Burrow entrances often contain clumps of wilted vegetation which the animal likely uses as a kind of food cache as well as a source of nesting material.	Yes	Based on the species preferred habitat, not likely to be impacted by the current project
Taxidea taxus	American	None	SSC	Most abundant in drier open stages of most	Yes	Based on the species

Scientific Name	Common Name	Federal Status	State Status	Habitat	Habitat in the Project Area	Potential Impact
	badger			shrub, forest, and herbaceous habitats, with friable soils		preferred habitat, not likely to be impacted by the current project.
Gulo gulo	Wolverine	Proposed Threatened	Threatened	In Northern Sierra Nevada, have been found in mixed conifer, red fir, and lodgepole habitats, and probably use subalpine conifer, wet meadow, and montane riparian habitats at elevations from 4,300 – 7,300 ft. Prefers areas of low human disturbance	Yes	The nearest wolverine sighting is 17.5 miles southwest of the project area. Proposed treatments are not expected to affect the suitability of habitat for wolverine, as they are somewhat generalist and use a variety of conditions.

FE – Federally endangered **FT** – Federally threatened

FC – Federal candidate FS – Federally sensitive

ST – State threatened

SE – State endangered

CSC - CA species of special concern

Botanical Resources

Direct and Indirect Effects: Direct effects occur when plants are physically impacted by management activities. Proposed activities may affect rare plants by physical damage. Indirect effects are those that are separated from an action in either time or space. Habitat components including soils, shading, and species composition of the plant and pollinator community may directly and indirectly be altered by the proposed actions. These effects can be beneficial or detrimental to rare plants, and may include increased soil erosion, increased light reaching the ground, introduction or promotion of conditions favorable for non-native invasive plants, effects to pollinator species, or other changes to rare plant habitats. The project carries a risk of spreading or introducing noxious weeds; however, the risk is significantly reduced by implementing the project mitigation measures for preventing and controlling these invasive species. Noxious weeds are not expected to increase in areas from disturbed treatment areas or roads and trails due to this project.

<u>Species Specific Determinations – Botany:</u> Known occurrences of four species on the target list above have been observed in the project area. These include: *Alisma gramineum* (CNPS rank 2B.2); *Botrychium crenulatum* (CNPS Rank 2B.2); *Ranunculus macounii* (CNPS Rank 2B.2), and *Rhamnus alnifolia* (CNPS Rank 2B.2). **Mitigation Measure BIO-1**: *Botanical Resources* detailed on page 12, **Mitigation Measure BIO-2**: *Riparian Area Protection*, and **Mitigation Measure HYD-1**: *Best Management Practices (BMPs) to Protect Water Resources* have been developed to protect these and other sensitive botanical resources. **Mitigation Measure BIO-3**: *Noxious Weeds* and **Mitigation Measure BIO-4**: *Staging Area* have been designed to avoid the spread of noxious weeds within the project area.

Cumulative effects – Botanical Resources: The additive effects of past actions (wildfires, wildfire suppression, timber harvest, nonnative plant introductions and livestock grazing) have shaped the present landscape and corresponding populations of rare plants. However, data describing the past distribution and abundance of rare plant species is extremely limited, making it impossible to quantify the effects of historic activities on the resources and conditions that are present today.

Undoubtedly, some plant species have always been rare due to particular ecological requirements or geographic isolation. It is also likely that past actions have caused some species to become rarer and encouraged others to become more common. Therefore, in order to incorporate the contribution of past activities into the cumulative effects, this analysis uses the current abundance and distribution of rare plant species as a baseline for the existing condition shaped by the impacts of past actions.

Past, present and future activities have and will continue to alter rare plant populations and their habitats to various degrees. Within the project boundary, these management activities include grazing, wildfire, fire suppression, prescribed fire, and road maintenance. However, the approach taken in this analysis is that, if direct and indirect adverse effects on rare plant species in the analysis area are minimal or would not occur, then they would not contribute substantially to cumulative effects on the species. In addition, the effects of future projects would likely be minimal or similar to those described in this analysis if existing management objectives and policies (such as field surveys, protection of known rare species locations and noxious weed mitigations) remain in place.

For sensitive plant species, when the effects of these past, present and reasonably foreseeable future actions are combined with the effects predicted for the current proposed action, the total would still be minor and insignificant, with the possibility of some individuals being impacted, but no downward trends expected for any occurrences.

Wildlife Resources

Direct and Indirect Effects Common to All Wildlife Species: All proposed treatments could result in disturbance from human presence, habitat alteration, prescribed fire and noise. The duration of disturbance, caused by the presence of people and machinery, may cause disturbance to wildlife accustomed to lower levels of activity. Mechanized equipment may generate noise sufficient to disturb nesting wildlife and could cause nest site abandonment if conducted without restrictions. Therefore, standard management requirements include limited operating periods when disturbance to wildlife is identified as a concern. Direct disturbance, including mortality to individual animals addressed in this report is unlikely, due to survey efforts for selected species and incorporation of limited operating periods where appropriate. If presently unknown wildlife are discovered prior to or during implementation and species identified warrants a limited operating period, protections would be implemented.

Cumulative Effects Common to All Wildlife Species: The existing condition reflects the changes of all activities that have occurred in the past. The analysis of cumulative effects evaluates the impact on sensitive species from the existing condition within the analysis area. Overall, for all species, cumulative effects could occur with the incremental loss of the quantity and/or quality of habitat.

A near absence of landscape level, low- intensity surface fires contributed to increased stand densities of small diameter trees and brush making these areas more susceptible to high intensity wildfire and subsequent conversion to a habitat less suitable for wildlife. These habitat shifts affect species abundance and diversity of the landscape. The proposed project will produce a mosaic of habitats suitable for a higher diversity of species

Species Specific Determinations – Wildlife: There are known occurrences of northern goshawk, bald eagle, and gray wolf within the project area. Under Mitigation measure BIO-5: Protection of Nest Sites, nest sites will be protected per California Forest Practice Rules §939.2 – General Protection of Nest Sites, and §939.3 Specific Requirements for Protection of Nest Sites. Mitigation Measure BIO-6: Terrestrial and Aquatic Resources has been designed to protect new wildlife findings, snags, and structure trees, Mitigation Measure BIO-7: Gray wolf regarding consultation with CDFW prior to project implementation.

Cumulative effects to Wildlife Resources: The primary activity that may affect wildlife species within the project boundary involve the manipulation of habitat conditions through thinning, emergent brush treatments, and prescribed fire to improve native species habitat, reduce the risk of high intensity catastrophic wildfire, and ensure fire resilience to the surrounding community.

Small-magnitude short-term contributions from the project contribute to potential long-term benefits. It is assumed that present and future actions on all lands can, at times, produce negative impacts to aquatic biological resources. There is no expectation that any known thresholds for analysis species would be exceeded by the cumulative effects from all actions. A long-term benefit to aquatic habitat is anticipated as the area trends toward pre-fire conditions.

b)	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?		\boxtimes		

Mitigation Measure BIO-2: *Riparian Area Protection* and **Mitigation Measure HYD-1:** *Project Best Management Practices* have been incorporated to protect watercourses and the species that inhabit these zones through consultation with CDFW when necessary to obtain a Streambed Alteration Permit when necessary and the use of Watercourse and Lake Protection Zones (WLPZs).

c)	Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal,	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	filling, hydrological interruption, or other means?		\boxtimes		

The project area does encompass some seasonal wetlands, such as meadows and springs. However, **Mitigation Measure #13: HYD-1:** *Project Best Management Practices (BMPs)* involving the protection of water resources will eliminate any potentially significant effects to wetlands, seeps and watercourses in the project area.

 d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
wildlife corridors, or impede the use of native wildlife nursery sites?			\boxtimes	

The proposed project area does not 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. There may be short-term impacts to mule deer migration, but will not impede the overall migration of the herd.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ordinance?				\boxtimes

The proposed project does not conflict with any local policies or ordinances protecting biological resources.

 f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
conservation plan?				\boxtimes

The project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

CULTURAL RESOURCES

,	Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	resource pursuant to § 15004.51		\boxtimes		

The project is located in the ancestral home of Maidu, Northern Paiute, Pit River, and Washoe Tribes represented today by several bands within the county and surrounding areas. Local Indigenous peoples frequently burned creating a fire resistant and resilient landscape that was fire-maintained by low to moderate intensity fires that self regulated. These Native Americans are known to have utilized the acorns of California black oak trees along the base of the Sierra Nevada while also subsisting from fishing and hunting for deer, jack rabbits, waterfowl, elk, antelope, mountain sheep and buffalo, as well as smaller animals and birds. Gathering crops of roots and seeds was also undertaken.

Early settlers in the 19th century transmitted diseases that had a catastrophic effect on native peoples. The mass insurgence of Euroamericans during the Gold Rush in 1848-9 led to additional waves of disease spread, violence, and environmental destruction. By the mid19th century, Native Americans were forced to move on reservations.

Three historic themes relevant to the history of the project area include: lumber and logging, homesteading, and livestock ranching. The Gold Rush (1848-9) brought a wave of immigrants to California. The Homestead Act of 1862 accelerated the settlement of the western territory by granting family s 160 acres of surveyed public lands for settlement. Claimants were required to "improve" the plot by building a dwelling and cultivating the land and after 5 years the original filer was entitled to the property, free and clear, except for a small registration fee. Many of these homesteaders conducted livestock ranching

Direct and Indirect Effects: Direct effects to cultural resources are those that physically alter, damage, or destroy all or part of a resource; alter characteristics of the surrounding environment that contribute to the resource's significance; introduce visual or audible elements out of character with the property or that alters its setting; or neglect a resource to the extent that it deteriorates or is destroyed. An archaeological records search was conducted at the Northeast Information Center (NEIC) of the California Historic Resources Inventory System (CHRIS). A total of 281 cultural resources (235 archaeological; 46 built environment) were identified within the project area as a result of a records search. Archaeological surveys conducted by a Professional Registered Archaeologist (PRA) or a Registered Professional Forester (RPF) with CALFIRE Archaeological Training Certification will be required prior to all mechanical thinning operations that are subject to California Forest Practices Rules. An Archaeological Addendum or Archaeological Letter will be submitted to the CALFIRE Cultural Resource Management Program for review and approval prior to implementation, if required.

Mitigation Measures have been incorporated into project design to protect identified sites and potential inadvertent discoveries. These include: **Mitigation Measure CUL-1**: *Avoidance of Cultural Resources*; **Mitigation Measure CUL-2**: *Unanticipated Discovery of Cultural Resources*; and **Mitigation Measure CUL-3**: *Encountering Native American Remains* all detailed on page 13. The project as presently designed is not expected to have an adverse effect on archaeological or cultural resources.

Cumulative Effects: Successful utilization of standard protection measures will result in no significant cumulative impacts to heritage resources within the project area.

b)	Would the project cause a substantial adverse change in the significance of an archaeological	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	resource pursuant to § 15064.5?		\boxtimes		\boxtimes
See a	nswer above to question (a).				
c)	Would the project disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	conciences:		\boxtimes		

Mitigation Measures have been incorporated into project design to protect identified sites and potential inadvertent discoveries. These include: **Mitigation Measure #8: CUL-1:** *Avoidance of Cultural Resources*; **Mitigation Measure #9: CUL-2:** *Unanticipated Discovery of Cultural Resources; and* **Mitigation Measure #10: CUL-3**: *Encountering Native American Remains* all detailed on page 13.

ENERGY

s v	Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	project construction or operation?				\boxtimes

The project is in a remote location and will require transport of personnel and equipment to the project site. The project will not result in wasteful or inefficient energy use because equipment can be securely left on site overnight and between project phases, saving on travel fuel. The project is likely to result in slowing the rate of wildfire spread and providing a defensible space where crews can stop fire before it spreads to Lake Forest, Susanville, and the Willow Creek Valley; therefore, the project could reduce the overall amount of energy and fuel spent combating wildfires. The project will not violate or obstruct any State or local renewable energy or energy efficiency plan; all operations will comply with law.

There will be minimal impact to energy resources from this project and potentially energy savings resulting from a reduction in wildfire fighting energy needs due to the resulting fuel break.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
energy enficiency?				\boxtimes

The project will not violate or obstruct any State or local renewable energy or energy efficiency plan; all operations will comply with law. The project will result in renewable energy as biomass from thinning operations will be chipped and delivered to local cogeneration facilities.

Initial Study-Mitigated Negative Declaration for the Proposed North Susanville WUI Fuel Treatments Project

GEOLOGY AND SOILS

	Would the project directly on indirectly				
a)	Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Publication 42.)				
No ac	ctivities associated with this project are substantia	l enough to	rupture a kno	wn earthqua	ke fault.
b)	Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	strong seismic ground shaking?				\boxtimes
not in c)	Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	eismic activity. No Impact
	liquefaction?				\boxtimes
	bugh the project is in a seismically active area (as aclude any blasting, new construction, or any othe				
,	Would the project directly or indirectly cause potential substantial adverse effects, including	Potentially Significant Impact	Less Than Significant	Less Than Significant	No Impact
	the risk of loss, injury, or death involving	inpact	with Mitigation Incorporated	Impact	
				Impact	
Land area.	the risk of loss, injury, or death involving	ct are unlik	Incorporated	the risk of	
Land area.	the risk of loss, injury, or death involving landslides? management operations associated with the proje Small landslides and slumps are a normal part of	ct are unlik	Incorporated	the risk of	

Erosion is sometimes increased after a fire, including after prescribed fire. However, because prescribed fires on the project are likely to be relatively small and patchy, erosion impacts should be less than significant.

Furthermore, any post-fire erosion impacts from the project are expected to be less significant than impacts from the no-project alternative, i.e., catastrophic wildfire consuming close to 100% of the accumulated fuels on the project site.

f)	Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide,	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	lateral spreading, subsidence, liquefaction, or collapse?				\boxtimes

Land management operations associated with this project are unlikely to increase the risk of landslide in the area. Small landslides and slumps are a normal part of the local landscape. The remote location further decreases the impact of any possible landslide. **Mitigation measure GEO-1**: *Fire line construction* and **GEO-2**: *Slope restrictions*, are designed to reduce erosion potential and the possibility of possible landslides.

g)	Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
	substantial direct or indirect risks to life or property?				\boxtimes	
Ther	e is no building construction involved with this pr	oject.				
h)	Would the project 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
	of waste water?				\boxtimes	
The	The project does not involve the installation of septic tanks or alternative waste water disposal systems.					
i)	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	

There are no known unique paleontological resources/sites or unique geologic features within the project area.

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GREENHOUSE GAS EMISSIONS

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
environment?			\boxtimes	

Three of the most important greenhouse gases (GHG) resulting from human activity are carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O). They are produced by both natural processes and human

activity. Greenhouse gases play a role in the natural environment by absorbing the sun's heat. As the suns energy radiates back from the Earth's surface toward space, these gases trap the heat in the atmosphere keeping the planet's surface warmer than it would otherwise be. Increases of atmospheric greenhouse gases result in additional warming of the Earth's atmosphere.

Burning of vegetation as proposed in this project will result in greenhouse gas emissions, as well as a very small increase could result from equipment use. The annual averaged emissions of CO2 from wildfires in California are significant (24 million metric tons CO2 per year; equivalent to 6% of the fossil fuel burning (FFB) emissions annually). This ratio is subject to substantial variation. Whereas FFB emissions are fairly constant throughout the year, one bad wildfire month during the year can result in the majority of the CO2 emission resulting from wildfires for the year. For example, major wildfires in September 2006, including the Day Fire in Southern California, produced an estimated 16 million metric tonnes CO2 for that month, equivalent to approximately 50% of estimated total monthly FFB emissions for the entire state (Wiedinmyer and Neff 2007). Far more acres are burned each year in wildfires than are burned in prescribed fires. To the extent that prescribed fire can lessen the intensity or reduce the acres burned in wildfires, prescribed fire can temporarily reduce the carbon emissions from the wildland.

Historic pictures and accounts indicate that the project area at the time of European settlement in the 19th and early 20th century was more of an open conifer and oak woodland where periodic wildfire (and fires started by indigenous peoples) could creep through the understory at low intensity with a Fire Return Interval (FRI) of 5-40 years (Van de Water & Safford 2011). The project area today is characterized by a decrease in average tree size, increase in the number of trees per acre, and a dense understory of evergreen schlerophyll shrubs in genera such as Adenostoma, Ceanothus, and Arctostaphylos. The FRI has increased to +40 years and has more intense fire behavior, typically resulting in stand-replacing crown fires (Steel et al. 2015).

Plants in this ecosystem are adapted to this fire regime. Fire adaptations include vigorous stump sprouting and dormant seeds that build up during non-fire years and require fire for scarification. Many of the shrubs promote fire through production of dead highly flammable branches and production of resins on their leaves.

Fires occurring at intervals greater than 20 years are often high intensity because of the large amount of fuel existing in shrub tops. Many nutrients are locked in the foliage. Through burning, these nutrients are recycled back in to the soil. After fires, forbs are usually profuse on the newly opened floor. After a year, the plant community is dominated by annual grasses. Five years after a fire, shrubs once again dominate the ecosystem. Fertilization increases leaf area production and capacity to sequester carbon (Mader 2007). Prescribed fire returns a portion of the nutrients stored in the biomass and litter to the soil, thereby fertilizing the remaining vegetation and increasing the capacity to sequester carbon.

On average, the biomass accumulation of habitats like those in the project area is about 15 to 20 tons per acre (Bolsinger 1989). The carbon component of the biomass accounts for about 50% of the mass. Therefore, the biomass contains 7.5 to 10 tons per acre of carbon (27.5 to 36.7 tons per acre CO2 equivalent) in biomass. At some point the carbon stored in the biomass will be released through respiration, decay, or combustion. Although some of the carbon will be added to the soil, most will be released to the atmosphere.

Over time the carbon that is stored in vegetation will be released as part of the normal carbon cycle. Carbon will also be sequestered over time as new vegetation grows as long as the land remains productive. Prescribed fire and forest/woodland fuel reduction treatments are ways to help maintain those carbon stocks over time. By reducing the probability of catastrophic wildfire, management operations can increase the probability of survival for some of the vegetation within the project area, as well as, vegetation adjacent to

the project, allowing the remaining vegetation to continue to sequester carbon. The carbon released by the management treatments will be resequestered by the remaining vegetation and new vegetation following the treatment. This has the potential to reuse the massive increase in short term emissions from wildfire and spread emissions over a longer time period while allowing sequestration to occur in the remaining vegetation.

Forest management activities are generally used to reduce the fuel load of the forest floor and coarse woody debris, as well as a portion of the above ground biomass. The purpose of the fire/thinning is to reduce the risk of large damaging fires by creating conditions that increase effectiveness of fire suppression. Prescribed fire typically does not affect soil carbon due to lower burn temperatures than wildfire. Prescribed burning returns some carbon dioxide, methane, nitrous oxide, and particulate matter to the atmosphere. Combustion generally is more complete than wildfire, which releases higher concentrations of the other greenhouse gases and particulate matter (Mader 2007).

California's wildlands are going to burn and the carbon is going to be released. Through prescribed fire and forest management land managers can have a say in the timing and quantity of some of those releases. Land managers can also lessen the impacts or provide benefits for other environmental resources. Fire hazard reduction may be an objective of prescribed fire and forest thinning; however, other objectives are met as well, such as wildlife habitat improvement or range improvement. If a wildfire does happen to enter an area that was treated, the wildfire may be contained sooner with reduced area burned and consequently reduced carbon emissions. The reduced number of acres or fire intensity will have benefits to other resource, including environmental resources, public health, and public and firefighter safety.

Less than significant effects to greenhouse gases and carbon sequestration could result from prescribed burning; and a very small increase could result from equipment use under the proposed action when compared to the CA Air Resources Board approved 2020 emissions limit of 427 million metric tonnes of CO2. Prescribed burning in the project area would reduce the potential of high-intensity wildfires for several years and correspondingly reduce potential adverse smoke events. After project treatments are completed a substantial amount of carbon would remain sequestered below and above ground in the project area. In addition, project treatments would accelerate carbon sequestration within the project over the long term.

Cumulative effects: Cumulative effects include a discussion of the combined, incremental effects of human activities. For green house gas emissions and carbon sequestration, the area for consideration is the airshed and at the county level. Past and present emission producing activities and carbon sequestration are considered as the current condition of the air and carbon resource. Project emissions would temporarily increase greenhouse gas emissions in the airshed and Lassen County. However, their direct, indirect and cumulative effects would be regulated by the Lassen County Air Pollution Control District in order to prevent adverse impacts and exceedances of health standards. The proposed treatments would reduce future potential wildfire smoke and greenhouse gas emissions, and reduce potential loss of sequestered carbon.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
greenhouse gases?				\boxtimes

The project does not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

HAZARDS AND HAZARDOUS MATERIALS

a)	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	materials?			\boxtimes	

Project operations would involve the routine transportation, use, or disposal of gasoline, oil and diesel used in the power equipment and as a fuel for torches, and herbicides for noxious weed treatments. Operations will follow all applicable state and federal laws.

 b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
materials into the environment?			\boxtimes	

Equipment used to implement the project will be fueled with diesel fuel. A spill of this fuel could be hazardous to the environment. Mitigation Measure HYD-1: Project Best Management Practices (BMPs) on page 14 is designed to ensure that an accidental spill will not harm the environment.

All personnel will wear the appropriate personal protection equipment. Equipment used on this project will not be serviced in locations where grease, oil, or fuel could pass into a watercourse. The project does not present any unusual risks because all fuels will be handled safely and in accordance with standard best practices. Furthermore, even in a worst-case spill scenario, the impacts of a spill of 10-100 gallons of diesel or gasoline, the maximum likely to be present on site at any time, in a remote area far from human habitation are not likely to be significant.

The proposed project includes the use of herbicides to control emergent brush. The proposed applications would comply with all applicable state and federal regulations for the safe use of pesticides (including label requirements), and will be kept out of the WLPZ per Mitigation Measure HYD-1.

c)	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	quarter mile of an existing or proposed school?				\boxtimes
No p	roject activities are planned within 1/4 miles of an ex	xisting or p	proposed scho	ol.	
d)	Would the project 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	significant hazard to the public or the environment?				\boxtimes
Tho 1	project is not located on a hazardous materials site				

The project is not located on a nazardous materials site.

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	safety hazard or excessive noise for people residing or working in the project area?				\boxtimes

The project is not inside the Airport Overlay for any airport under the Lassen County General Plan, and it is not within 2 miles of any airport.

 f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
evacuation plan?				\boxtimes

The project does not interfere with an evacuation plan because the project will never block or close any public road, and because, in the case of an emergency requiring evacuation, only a few people would be on the project site, so their evacuation would only add one or two vehicles to the remote rural roads that service the area. This increase in evacuation traffic would be insignificant. The project is intended to slow future wildfire rate of spread, giving Lake Forest, Susanville, and Willow Creek Valley residents *more* time to evacuate during any future wildfire event.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
fires?			\boxtimes	

The project involves some prescribed fire, i.e., intentional fire ignition. However, the ignitions will take place under such controlled conditions and with such advanced levels of professional supervision that the risk of wildfire escape is not significant. While about 1-1.5% of prescribed fires do escape control, the vast majority of human-caused wildfires do not start as prescribed fires. Furthermore, the project will decrease future wildfire hazards. This is because the thinner, patchier fuel profile post-project is expected to slow future wildfire rate of spread, *decreasing* the exposure of people and structures to risks from wildfire.

HYDROLOGY AND WATER QUALITY

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ground water quality?		\boxtimes		

The +/- 67,500-acre project location includes portions of the Eagle Drainage, Snow Storm Mountain, and Susan River Hydrologic Areas within the Susanville Hydrologic Unit. The project watershed is functioning properly and exhibits high geomorphic, hydrologic and biotic integrity relative to its natural potential condition. The drainage network is generally stable. Physical, chemical, and biologic conditions suggest that soil, aquatic, and riparian systems are predominantly functional in terms of supporting beneficial uses. The beneficial

uses for the watershed identified within the Lahontan Regional Water Quality Control's Basin Plan (LRWQCB 1995) for the Basins within the Lahontan Region, include:

- MUN Municipal
- AGR Irrigation and Stock Watering
- IND Industrial Service Supply
- GWR Ground Water Recharge
- FISH Fish Habitat
- NAV Waters used for shipping, travel, or other transportation
- REC 1 Water Contact Recreation, Canoeing and Rafting
- REC 2 Other Non-contact Water Recreation
- COMM Commercial and Sport fishing
- WARM Warm Freshwater Habitat
- COLD Cold Freshwater Habitat
- MIGR Habitat suitable for salmon and steelhead Migration
- SPWN Habitats suitable for spawning, reproduction, and development
- WILD Support terrestrial or wetland ecosystems

The Susan River is listed on the 303(d) list of California impaired waters for indicator bacteria, unknown toxicity, nitrogen, turbidity, and total dissolved solids. Eagle Lake is on the 303(d) list for Nitrogen and Phosphorus. **Mitigation measure HYD-1**: *Project BMPs* will result in the project being hydrologically disconnected from these and other watercourses and lakes within the project area

There are several Class I watercourses within the project area, including the Susan River, Eagle Lake, Piute Creek, Willow Creek, Round Valley Reservoir, and Mahogany Lake are Class 1 watercourses and waterbodies, as defined by the California Forest Practice Act. There are several Class 2 and Class 3 watercourses that are tributaries to these resources within the project area. Watercourse and Lake Protection Zones (WLPZ's) will be flagged along watercourses, and project activities within these zones will be limited to those that do not have the potential to impact water quality (*See* **Mitigation Measure HYD-1:** *Project Best Management Practices* on page 14). Proposed hand-based activities such as hand-thinning, hand-piling and hand-grubbing have a negligible footprint and therefore are not included in this analysis.

Prescribed fire projects have been designed with a 100'+ buffer to any perennial stream, and backing fire will be used into ephemeral drainages to reduce the intensity of fire, and thus of siltation, in drainages. No discernible direct or indirect effects to water quality would be expected as live vegetation within the buffer would be left to function as a sediment filter strip.

Excessively disturbed areas within a WLPZ would be rehabilitated after conclusion of operations with compacted straw mulch, and/or slash over 90% of the area at a 2 inch depth (*See* Mitigation Measure HYD-1: *Project Best Management Practices* on page 14).

Mitigation Measure HYD-2 *Timber waiver*, stipulates that proposed activities will abide by the Lahontan RWCQB Timber Waiver program, and project proponents will consult with the Lahontan WQCB if there are proposed activities that could potentially impact water quality.

Cumulative effects: Direct and indirect effects from proposed vegetation treatments are minimal and short in duration, and therefore long term cumulative effects are not expected.

Implementing best management practices and project mitigation measures such as streamside equipment exclusion zones would effectively protect streams from excessive project generated sediment, assuring that cumulative effects of the project do not adversely affect beneficial uses of water.

The design of this project is such that minimal effects to hydrology resources would be expected from the proposed action as discussed above. Possible effects to water quality and riparian areas depend upon the extent and intensity of the treatments particularly those involving ground disturbances. Potential effects on water quality and cumulative watershed effects may include increases in sediment delivered to streams. Some of the riparian areas may be lightly burned, but the effect should not be significant. Although a short-term degradation could occur, reintroduction of fire into this landscape and movement toward a more natural fire regime would have a long-term benefit. Mitigation measures and best management practices all contribute to the prevention of sediment delivery to streams and impacts to riparian areas. The amount of actual sediment delivery is expected to be negligible. Therefore streams, water bodies and riparian area are expected to experience minimal, short-term and negligible effects.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
management of the basin?				\boxtimes

The project involves no on-site water pumping and the off-site water pumping to fill water tender trucks will not be significant.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
impervious surfaces, in a manner which would result in substantial on- or off-site erosion or siltation?				\boxtimes
The project will not alter drainage patterns or streamco	ourses or ins	stall any new i	mpervious s	urfaces.
d) Would the project substantially alter the existing drainage pattern of the site or area,	Potentially	Less Than	Less Than	No Impact

existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, or substantially increase	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?				\boxtimes

The project will not alter drainage patterns or streamcourses or install any new impervious surfaces.

Initial Study-Mitigated Negative Declaration for the Proposed North Susanville WUI Fuel Treatments Project

e)	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course				
	of a stream or river or through the addition of impervious surfaces, or substantially increase the rate or amount of surface runoff in a manner which would create or contribute	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	runoff water which would create of contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				\boxtimes
The p	project will not alter drainage patterns or streamco	urses or ins	stall any new i	mpervious s	urfaces.
f)	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, or substantially increase	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	the rate or amount of surface runoff in a manner which would impede or redirect flows				\boxtimes
The p	project will not alter drainage patterns or streamco	urses or ins	tall any new i	mpervious s	urfaces.
g)	In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	due to project inundation?				\boxtimes
The p	project is not in a flood hazard, tsunami, or seiche	zone.			
h)	Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
					\boxtimes
-	project does not obstruct implementation of a wate agement plan.	er quality co	ontrol plan or s	sustainable g	roundwater
Lan	D USE AND PLANNING				

a) Would the project physically divide an established community?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes

The project would not physically divide an established community.

b)	Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	mitigating an environmental effect?				\boxtimes

Project activities will not alter any existing land use. The project complies with zoning and plan designations as documented in the Lassen County General Plan (2010).

MINERAL RESOURCES

a)	Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	residents of the state?				\boxtimes
The	project site does not contain any known mineral re	esources of	value or of loc	al importance	ce.
b)	Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	general plan, specific plan, or other land use plan?				\boxtimes
The Noi	project does not change the future availability of a	ny mineral	resources.		
	5C				
a)	substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	the local general plan or noise ordinance, or in other applicable local, state, or federal standards?			\boxtimes	

Project implementation will require equipment use. Once the work is complete, the project site will return to its natural state with no new sources of noise other than those already existing. There will be temporary noise during project implementation.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
				\boxtimes

The land management activities contemplated in the project description will not generate groundborne noise or vibrations.

c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	use airport, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes

The project is not within an airport land use plan overlay or within 2 miles of any airport.

POPULATION AND HOUSING

other performance objectives for fire

protection?

a)	Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example,	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	through extension of roads or other infrastructure)?				\boxtimes
Ther	e are no proposed activities that would directly or	indirectly p	promote popula	ation growth	in the area.
b)	Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	elsewhere?				\boxtimes
The	proposed project activities will not result in the dis	splacement	of people or h	ousing	
Pue	BLIC SERVICES				
a)	Would the project 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	environmental impacts, in order to maintain acceptable service ratios, response times, or				\boxtimes

The project will not impact the provision, or the need for governmental facilities. The project will not impact existing fire protection services.

Initial Study-Mitigated Negative Declaration for the Proposed North Susanville WUI Fuel Treatments Project

b) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental Potentially Less Than No Impact Less Than facilities, or the need for new or physically Significant Significant Significant altered governmental facilities, the with Mitigation Impact Impact Incorporated construction of which could cause significant environmental impacts, in order to maintain \boxtimes acceptable service ratios, response times, or other performance objectives for police protection?

The project will not impact the provision, or the need for governmental facilities. The project will not impact existing police protection services.

c)	Would the project 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools?				\boxtimes

The project will not impact the provision, or the need for governmental facilities. The project will not impact existing school services.

d)	Would the project 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for				\boxtimes
	parks?				

The project will not impact the provision, or the need for governmental facilities. The project will not impact existing park services.

e)	Would the project 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or				\boxtimes

other performance objectives for other public facilities?

The project will not impact the provision, or the need for governmental facilities. The project will not impact existing public facilities.

RECREATION

a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	occur or be accelerated?				\boxtimes

The project will not increase the use of existing neighborhood and regional parks or other recreation facilities.

 b) Would the project include recreational facilities or require the construction or expansion of recreational facilities that might 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
have an adverse physical effect on the environment?				\boxtimes

The project does not include, construct, or expand any recreational facilities.

TRANSPORTATION

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway,	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
bicycle and pedestrian facilities?				\boxtimes

There are seasonal private roads within the project area that are accessed through locked property gates and are used only by those with permission to access the properties. The project does not alter any existing roadways. Because of locked gates, these internal roads have no users other than those with permission. Therefore, this project will have no impact on traffic circulation patterns.

 b) Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3(b)? 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes	

While this project will require some vehicle miles traveled, the increase will be temporary and projectfocused and will not exceed a threshold of significance. The project will not result in any sustained change in vehicle miles traveled in the region.

c)	Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	incompatible uses (e.g., farm equipment)?				\boxtimes
The	project does not include any alteration in the desig	gn or use of	existing transp	portation sys	tems.
d)	Would the project result in inadequate emergency access?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

No road, including internal roads, will be altered in such a way as to decrease emergency access. A goal of the project is to improve ingress and egress within the project area for wildfire protection.

TRIBAL CULTURAL RESOURCES

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1(k)?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
			\boxtimes

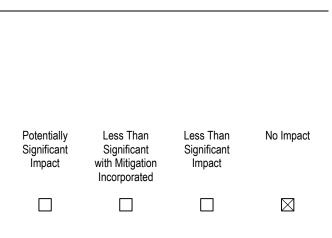
The Cal FIRE Native American contact list (Cal FIRE 2023) and CA Native American Heritage Commission contact list (NAHC 2023) identifies the following Tribes and tribal groups as having aboriginal ties to, and interest in, projects that occur in Lassen County:

- Greenville Rancheria of Maidu Indians;
- Honey Lake Maidu
- Maidu Cultural and Development Group;
- Mooretown Rancheria;
- Pit River Tribe of California
- Susanville Indian Rancheria
- Tsi Akim Maidu;
- Wadatakuta Band of Northern Paiute of the Honey Lake Valley
- Washoe Tribe of California and Nevada

These Tribes and groups have sacred sites that are not always identified through archaeological surveys, including cemeteries, places of prayer, and unique geologic features that are important to their creation stories and history. Scoping letters, including a description of the proposed action, request for confidential information, and an invitation to consult on the project was mailed or emailed to the Tribes and groups listed above, as well as the Native American Heritage Commission (NAHC) on November 29, 2023. No comments have been received to date. Susanville Indian Rancheria (SIR) lands held in Trust are within the project area, and SIR is interested in participating in the project to develop a fuel break around the Upper Rancheria, north of the City of Susanville as well as restore black oak stands, bitterbrush and sagebrush habitat through removal of encroaching western juniper and reduction of brush density. SIR is also interested in reintroducing cultural burns and supportive of efforts to restore habitats within the region to pre-contact conditions. One of projects main goals is to provide for the safe and permanent re-introduction of prescribed and cultural fire as a stewardship tool.

The project will enhance living cultural resources (e.g. plants and animals). **Mitigation Measure CUL-1:** *Avoidance of Cultural Resources*; **Mitigation Measure CUL-2:** *Unanticipated Discovery of Cultural Resources; and* **Mitigation Measure CUL-3**: *Encountering Native American Remains* all detailed on page 13. would be employed and applied to all cultural resources within the project area, including those identified by Tribes as significant. The project would have a positive indirect effect on cultural resources because of reduced potential for high intensity wildfire.

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.



The project will enhance living cultural resources (e.g. plants and animals). **Mitigation Measure CUL-1:** *Avoidance of Cultural Resources*; **Mitigation Measure CUL-2:** *Unanticipated Discovery of Cultural Resources; and* **Mitigation Measure CUL-3**: *Encountering Native American Remains* all detailed on page 13 will be employed and applied to all cultural resources within the project area, including those identified by Tribes as significant. The project would have a positive indirect effect on cultural resources because of reduced potential for high intensity wildfire.

UTILITIES AND SERVICE SYSTEMS

a)	Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	construction or relocation of which could cause significant environmental effects?				
The p	project will not result in the relocation or construct	ction of new	utilities.		
b)	supplies available to serve the project and reasonably foreseeable future development	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	during normal, dry and multiple dry years?				\boxtimes
The p	project is a restoration project that will not affect	utilities.			
c)	Would the project 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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	demand, in addition to the provider's existing commitments?				\boxtimes
The p	project does not involve the use of utilities or pub	lic service s	ystems.		
d)	Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	reduction goals?				\boxtimes
	project will not generate solid waste in excess of s infrastructure	State or loca	l standards, or	in excess o	f the capacity
e)	Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	and regulations related to solid waste:				\boxtimes

The project will comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

WILDFIRE

a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
or emergency evacuation plan?			\boxtimes	

Historic pictures and accounts indicate that the project area at the time of European settlement in the 19th and early 20th century was more of an open conifer/oak woodland where periodic wildfire (and fires started by indigenous peoples) could creep through the understory at low intensity. Based on pre-settlement tree ring data the Fire Return Interval (FRI) was 5-40 years for most of the conifer habitat types within the project area (Taylor 2000; Van de Water & Safford 2011). Post-settlement the FRI averages +40 years. This decrease in fire frequency, along with logging and grazing practices of the last century have resulted in a project area today characterized by a higher density of smaller diameter trees, with an understory of evergreen schlerophyll shrubs in genera such as Artemesia, Purshia, Ericameria, Ceanothus, and Arctostaphylos, that now dominate many sites at low to middle elevations throughout California.

Plants in this ecosystem are adapted to this fire regime. Fire adaptations include vigorous stump sprouting and dormant seeds that build up during non-fire years and require fire for scarification. Many of the shrubs promote fire through production of dead highly flammable branches and production of resins on their leaves.

A variety of forest management and fuel reduction techniques will be used to reduce the fuel load of ground fuels, coarse woody debris, as well as a portion of the above ground biomass. The purpose of these proposed treatments is to reduce the risk of large damaging fires by creating conditions that increase effectiveness of fire suppression.

Through forest management, land managers can have a say in the timing and intensity of the fire. Land managers can also lessen the impacts or provide benefits for other environmental resources. Fire hazard reduction may be an objective of this project; however, there are other objectives such as wildlife habitat improvement, range improvement, enhancement of the aesthetic appearance, and improved safety by reducing the amount of dead and dying vegetation. If a wildfire does happen to enter an area that was treated, the wildfire may be contained sooner with reduced area burned at high intensity. The reduced number of acres or fire intensity will have benefits to other resource, including environmental resources, public health, and public and firefighter safety.

The project places such small and incidental demands on local roads and fire protection services that it will not substantially impair an adopted emergency response plan or emergency evacuation plan.

b)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				

The desired fire intensity is low to moderate for proposed prescribed fires. A prescribed burn plan will be developed for each proposed prescribed fire prior to implementation that outlines the parameters (timing, weather, fuel moisture, etc...) necessary to implement the project to ensure that the fire remains low to moderate intensity and does not escape the project perimeter as well as identify protocols should the fire escape (*See* **Mitigation Measure FIRE-1**: *Burn Plan*). All prescribed fire activities carry a risk of fire escape, but the project design has reduced this risk below a significant level. By conducting burns in the off-season and with highly trained fire professionals on site, the project reduces the risk of wildfire below the level of risk associated with the no-project alternative. Spotting outside of fire lines should not be a problem with correct firing methods and weather patterns as prescribed in the burn plan. Tree ringing (clearing fuel away from the base of trees) in advance of burning will reduce tree mortality and spotting potential. Perimeter fire lines (roads and existing trails) will be in place and black line will be added to strengthen control lines as needed. Furthermore, by reducing fuels while leaving slope and other factors unchanged, the project will reduce, not exacerbate the effects of any future wildfire.

c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks,	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				

The project will require some road maintenance, which comes with an extremely small incidental fire risk. Most project personnel will be trained fire professionals, which reduces the risk that the project will start an uncontrolled wildfire.

 d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, 	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			\boxtimes	

All prescribed fire carries some risk of increased runoff and siltation during subsequent storms, but the project's remote location and buffers to perennial streams reduce the hazard of runoff/flooding and landslides resulting from the prescribed fire component of the project. Furthermore, by reducing the likely severity of future fires, the project reduces the future flooding/landslide hazard to people and structures downstream, compared to the no-project alternative.

MANDATORY FINDINGS OF SIGNIFICANCE

a) Would the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below selfsustaining levels, threaten to eliminate a plant or animal community, substantially 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?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

The project is an ecological enhancement project intended to increase habitat suitability for a wide range of native species while reducing invasive species. The project restores regular, low-intensity fire to a landscape that has been fire-excluded since the 19th century in some areas of the project; the implementation of forest management techniques and intentional reintroduction of patchy fire is expected to promote biodiversity as it has done on countless other sites across California. The project will result in some species being less abundant and some being more abundant, but these shifts in abundance will be within the natural range of variation and will not lead to listing of any species. Careful study has resulted in a project design extremely unlikely, in the opinion of wildlife and botany specialists, 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 to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal.

According to the opinions of numerous tribal cultural resources experts, the project, with mitigations incorporated, will reintroduce a Native American land management tool to the landscape and not eliminate any important examples of the major periods of California history or prehistory.

As stated above, all prescribed fire carries some risk of (1) wildfire escape, and (2) increased runoff and siltation during subsequent storms. Design features incorporated into this project reduce these risks below a level of significance. For example, the project's remote location and buffers to perennial streams reduce the hazard of runoff/flooding and landslides resulting from prescribed fires. Furthermore, by reducing the likely severity of future fires, the project reduces the future flooding/landslide hazard to people and structures downstream, compared to the no-project alternative. As another example, by conducting burns in the off-season and with highly trained fire professionals on site, the project reduces the risk of wildfire below the level of risk associated with the no-project alternative.

With the implementation of mitigation measures included in the Initial Study, the proposed project would not degrade the quality of the environment; result in an adverse impact on fish, wildlife, or plant species including special status species, or prehistoric or historic cultural resources.

b) Would the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable"	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
means that the incremental effects of a proje are considerable when viewed in connection		\boxtimes	

with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

The project is part of a wider program of improved forest/woodland/shrub health, improved resilience to wildfire, and fire reintroduction across the Region. Wide-scale reintroduction of prescribed fire is a stated goal of the State of California, as expressed in mandates of the California Board of Forestry/CAL FIRE, the Sierra Nevada Conservancy, the Department of Conservation, and numerous other agencies. The cumulative effects of this wide-scale effort will be, overall, ecologically positive. Cumulative negative impacts could include that some species will be less abundant, some drainages could experience transient peaks in siltation, and some air quality impacts could be felt by sensitive populations. However, these impacts will be less than significant when compared to the likely catastrophic wildfire impacts of *not* improving ecosystem health and reintroducing prescribed fire.

Individual impacts are limited with this project and cumulatively are not considerable when viewed in connection to past or future projects.

c) Would the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
numun beings, enner uneeny or maneeny.			\boxtimes	

This project does not have environmental effects which will cause substantial adverse effects on human beings.

APPENDIX A

Mitigation Monitoring and Reporting Plan

In accordance with CEQA Guidelines § 15074(d), when adopting a mitigated negative declaration, the lead agency will adopt a mitigation monitoring and reporting plan (MMRP) that ensures compliance with mitigation measures required for project approval. Honey Lake Valley RCD is the lead agency for the abovelisted project and has developed this MMRP as a part of the final IS-MND supporting the project. This MMRP lists the mitigation measures developed in the IS-MND that were designed to reduce environmental impacts to a less-than-significant level. This MMRP also identifies the party responsible for implementing the measure, defines when the mitigation measure must be implemented, and which party or public agency is responsible for ensuring compliance with the measure.

POTENTIALLY SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The following is a list of the resources that will be potentially affected by the project and the mitigation measures made part of the Initial Study-Mitigated Negative Declaration.

Mitigation Measure *AGR-1* **Tree protection – Pile burning and broadcast fire:** Pile burning and broadcast burning shall be conducted in a manner which will not damage residual trees and reproduction. Conifer and oak trees will be protected through use of a cool prescription and/or chaparral understory will be cleared around trees for protection. Fire will be maintained at a low intensity that is not expected to harm trees.

Schedule: During project implementation

Responsible Party: Project partners implementing the project and project contractors

Verification of Compliance:

Monitoring Party: Project partner implementing the project.

Initials: _____ Date: _____

Mitigation Measure *AIR-1 Permits:* Mitigation measures include complying with air quality permits issued by LCAPCD for all prescribed burning. A Smoke Management Plan would be required prior to any prescribed fire. The smoke management plan is reviewed and approved by LCAPCD. **Schedule**: Prior to project implementation

Responsible Party: Project partner implementing the project and the LCAPCD

Verification of Compliance:

Monitoring Party: Project partner implementing the project. Initials: _____

Date: _____

Mitigation Measure *BIO-1: Botanical Resources:* Special status plants species including populations of *Alisma gramineum* (CNPS rank 2B.2); *Botrychium crenulatum* (CNPS Rank 2B.2); *Ranunculus macounii* (CNPS Rank 2B.2), and *Rhamnus alnifolia* (CNPS Rank 2B.2) identified during botanical surveys conducted for this project or during project layout will be avoided through mapping and/or flagged when appropriate, with the exception of broadcast fire.

Schedule: Prior and during project implementation

Responsible Party: Project partners implementing the project and project contractors

Verification of Compliance:

Monitoring Party: Project partner implementing the project. Initials: _____ Date: _____

Mitigation Measure BIO-2: Riparian Area Protection: Before any riparian vegetation removal or work within the bed bank or channel of a stream, creek, or river, project proponents will coordinate with the Department to ensure compliance with Section 1600 of the Fish and Game Code.

Schedule: Prior to project implementation

Responsible Party: Project partners implementing the project and project contractors

Verification of Compliance:

Monitoring Party: Project partner implementing the project.

Initials:	
Date:	

Mitigation Measure BIO-3: Noxious Weeds: Prevent spread of invasive species with equipment: Use contract clauses to require that the activities of contractors are conducted to prevent and control the introduction, establishment, and spread of aquatic and terrestrial invasive species. For example, where determined to be appropriate, use agreement clauses to require contractors to abide by vehicle and equipment cleaning requirements/standards prior to using the vehicle or equipment within project area.

Schedule: Prior to, during, and after project implementation

Responsible Party: Project partners implementing the project and project contractors

Verification of Compliance:

Monitoring Party: Project partner implementing the project.

Initials:	
Date:	

Mitigation Measure BIO-4: Staging areas: Do not stage equipment, materials, or crews in areas infested with invasive plant species where there is a risk of spread to areas of low infestation.

Schedule: Prior to and during project implementation

Responsible Party: Project partners implementing the project and project contractors

Verification of Compliance:

Monitoring Party: Project partner implementing the project.

Initials: _____

Date: _____

Mitigation Measure BIO-5: Terrestrial wildlife BMPs: Best Management Practices will be applied for protecting wildlife and wildlife habitat, including:

- New wildlife findings: In the event of a verified threatened, endangered or sensitive species • occurrence prior to or during project implementation, the appropriate limited operating periods would apply. Other mitigations may take place as agreed upon in consultation with CDFW.
- **Snags:** Retain snags when possible for wildlife habitat.
- Structure trees: Retain and protect high value wildlife habitat trees (trees with multiple tops, broken tops, rot, cavities, and other formations) that create structure for nests and dens.

Schedule: During project implementation

Responsible Party: Project partners implementing the project and project contractors

Verification of Compliance:

Monitoring Party: Project partner implementing the project. Initials: ______ Date:

Mitigation Measure BIO-7: *Gray wolf:* To determine whether gray wolves have been documented in or in the vicinity of a treatment area, Project Proponents will contact CDFW before implementation of project activities to obtain general information about documented gray wolf activity within the vicinity and the need for protection measures.

- A limited operating period (LOP) restricting all noise or smoke generating activities would be instated from April 1 through July 15 within one mile of the den site. Further discussions and coordination with CDFW and the Service may result in a modified distances or more flexible dates for this specific conservation measure. In addition, if the den or rendezvous sites are clearly separated from project-generated disturbances by topographic features or terrain, seasonal restrictions may be adjusted or eliminated, as approved by the Service. These conservation measures would avoid or minimize disturbance at active den or rendezvous sites that could disrupt reproductive success or result in adverse effects. Dens that are known to be used in consecutive years but not used in the current year may require a LOP if CDFW or the Service determines it is necessary.
- Early rendezvous sites are typically close to dens: implementing a LOP within 1 mile of den sites will generally mitigate effects to early rendezvous sites when pups are still vulnerable. Coordination with CDFW and the Service prior to implementation would be done to ensure protection of all known and/or newly discovered den and rendezvous sites.
- If a den is discovered during implementation of the proposed project, the LOP shall be implemented and coordination with CDFW and the Service shall be pursued.

Schedule: Prior to project implementation

Responsible Party: Project partners implementing the project and project contractors **Verification of Compliance**:

Monitoring Party: Project partner implementing the project.

Initials:	
Date:	

Mitigation Measure CUL-1: *Avoidance of Cultural Resources*: Cultural resources present within the project area have not been formally evaluated to determine eligibility for listing on the CRHR. For the purposes of this project these cultural resources will be assumed potentially eligibility of state and federal registers and be avoided. Project proponents will ensure that cultural resources are not adversely affected by ground disturbing activities. If cultural resources cannot be avoided and ground disturbance will occur within the recorded site limits than the site(s) will be formally evaluated to determine if they meet the regulatory criteria for eligibility to the CRHR.

Schedule: Prior to and during project implementation

Responsible Party: Project partners implementing the project and project contractors

Verification of Compliance:

Monitoring Party: Project partner implementing the project.

Initials: _____

Date: _____

Mitigation Measure CUL-2: *Unanticipated Discovery of Cultural Resources:* If a cultural resource is discovered within a project area after the project has been approved, the following procedures apply:

1. Project activities within 100 feet of the newly discovered cultural resource shall be immediately

halted.

- 2. A qualified professional archaeologist or RPF with CALFIRE Archaeological Training Certification shall be immediately notified.
- 3. The archaeologist shall evaluate the new discovery and develop appropriate protection measures.
- 4. The archaeologist shall ensure that the newly discovered site is recorded and its discovery and protection measures are documented in the project files.
- 5. If the newly discovered site is a Native American Archaeological or Cultural Site, the Archaeologist shall notify the appropriate Native American tribal group and the NAHC, if appropriate.

Schedule: During project implementation

Responsible Party: Project partners implementing the project and project contractors

Verification of Compliance:

Monitoring Party: Project partner implementing the project.

Initials:	
Data	

Date:	

Mitigation Measure CUL-3: *Encountering Native American Remains*: Although unlikely, if human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and the County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission must be contacted by the Coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains is provided.

Schedule: During project implementation

Responsible Party: Project partners implementing the project and project contractors

Verification of Compliance:

Monitoring Party: Project partner implementing the project.

Initials: _____

Date:		
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Mitigation Measure *GEO-1* **Prescribed fire control line construction:** Fire control lines are a concern for hydrology and soil quality risks, whether put in by hand or using mechanical means. They need to be rehabilitated for drainage using best management practices (BMPs). Fireline construction should be in accordance with all equipment restrictions.

Schedule: Following project implementation

Responsible Party: Project partners implementing the project and project contractors **Verification of Compliance**:

Verification of Compliance:

Monitoring Party: Project partner implementing the project.

Initials:	
Date:	

Mitigation Measure GEO-2: *Slope restrictions:* Ground-based equipment would be restricted to slopes less than 50 percent. Flagging, mapping, and meeting with equipment operators would be used to keep operators out of areas over 50% slope. Exceptions may be made for short pitches of 100 feet slope distance, up to 75 percent slope. Exposed soils resulting from ground based equipment on slopes over 50% slope shall be 90% covered with operational slash or hay/straw to a minimum 2" depth prior to the winter period (Nov. 15 – April 1). This will occur after the conclusion of each individual operation and prior to each winter period for the life of the Project.

Schedule: During project implementation

Responsible Party: Project partners implementing the project and project contractors **Verification of Compliance**:

Monitoring Party: Project partner implementing the project. Initials: _____

Date: _____

Mitigation Measure HYD-1: *Project Best Management Practices (BMPs):* Protect water quality through the use of best management practices (BMPs) to prevent water quality degradation and to meet state water quality objectives relating to non-point sources of pollution. Best management practices utilized for this project are procedures and techniques that are incorporated in project actions and have been determined by the State of California to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

Watercourse and Lake Protection Zones (WLPZ) will be classified based on the California Forest Practice Rules §936.5 – Procedures for Determining Watercourse and Lake Protection Zones Widths and Protective Measures. WLPZs shall be identified on the ground with flagging prior to implementation of treatments. These zones will be:

Watercourse Classification	Slope 0-30%	Slope 30-50%	Slope >50%
Class I	75'	100'	150'
Class II (including all springs with surface water)	50'	75'	100'
Class III	25'	50'	50'

The standard best management practices for protecting water quality include:

- Within the WLPZ, at least 50% of the total canopy covering the ground shall be left in a welldistributed multi-storied stand configuration composed of a diversity of species similar to that found before the start of operations. The residual overstory canopy shall be composed of at least 25% of the existing overstory conifers.
- No heavy equipment shall operate within the WLPZ except on existing roads and crossings. Light weight equipment, including a mini-excavator, mini-chipper, and/or skid steer, may operate within the WLPZ when conditions are dry within the WLPZ. Equipment within the WLPZ will not turn around within the WLPZ, but will make minimal tracks perpendicular to the watercourse. Any other types of light equipment that are used will not exceed the weights of those listed above. Exposed soils within WLPZ shall be 90% covered with operational slash or hay/straw to a minimum 2" depth prior to the winter period (Nov. 15 April 1). This will occur after the conclusion of each individual operation and prior to each winter period for the life of the Project.
- No equipment shall refuel, be cleaned, or lubricated within the WLPZ.
- Road based equipment being used for project implementation shall not be used during any time of the year when soils are saturated and excessive damage can occur as well as the potential discharge of sediment to watercourses.
- There will be no mechanical fireline construction within the WLPZ.
- No ignitions of broadcast (prescribed) burns would occur within the WLPZ. Broadcast burning would be allowed to back burn into the WLPZ, but in order to maintain stream temperatures and avoid sediment discharge to Class I and II streams piles and broadcast prescribed burns are restricted within the WLPZ to the following distances from the stream:

Watercourse Classification	Slope 0-30%	Slope 30-50%	Slope >50%	
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Class I	50-75'	66-100'	100-150'
Class II (including all springs with surface water)	33-50'	50-75'	66-100'

Schedule: Prior and during project implementation

Responsible Party: Project partners implementing the project and project contractors

Verification of Compliance:

Monitoring Party: Project partner implementing the project.

Date:	
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Mitigation Measure #15: FIRE-1: *Prescribed (Rx) burn plan:* Mitigation measures will include and be dependent upon:

- Rx burns and pile burns can be scheduled for fall months into spring. Burn days will be dependent upon California Air Resources Board (CARB) forecasts, Cal Fire approval and will comply with all local and state regulations.
- Rx broadcast burns will coincide with ecological emergence to promote a heterogeneous forest structure, reduce the abundance of invasive and limit impact to desired native species.
- To reduce impacts to surrounding community's Rx burn timing, planning and implementation will all be dictated by smoke management mitigations through CARB.
- Prescribed burns will be coordinated with other planned burns to avoid cumulative impacts to air quality and wildfire safety.

Schedule: Prior to project implementation

Responsible Party: Project partners implementing the project in coordination with CAL FIRE

Verification of Compliance:

Monitoring Party: Project partner implementing the project.

Initials: _____

Date: _____

A copy of the completed MMRP will be forwarded to: Honey Lake Valley Resource Conservation District (HLVRCD), 170 Russell Ave., Susanville, CA 96130.

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