NOTICE OF CEQA EXEMPTION

To: Shasta County Clerk
1643 Market St.
Redding, CA 96001

From: Western Shasta RCD
6270 Parallel Rd,
Anderson, CA 96007
(530) 365-7332

Date: September 29, 2021

Project Title: Whitmore Forest and Watershed Restoration Project

Project Location:

Township (T) 32 North (N), Range (R) 01 West (W), portions of Section 24; T 32N, R 01 East (E), portions of Sections 7-22, 27, & 28; T 32N, R 02E, portions of Sections 3-9 & 18; and T 33N, R 02E, portions of Sections 32 - 34 Mount Diablo Base & Meridian (MDBM)

Project Description:

The 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. The project will reduce fuel loads in Montane Hardwood Conifer (MHC) 4M, 4P, Montane Hardwood (MHW) 2M, PPN 4P, and Sierra Mixed Conifer (SMC) 4P, 4M within the Wildland Urban Interface (WUI) of the communities of Whitmore and Shingletown. The target fuels are brush, and small and suppressed trees that act as ladder fuels that allow widlfires to move from the forest floor to the tree canopy making the fire harder to control.

Much of the thinning activity and tree removal will be conducted under California Forest Practice Exemptions. The balance of the treatment activities, including the mastication of brush and small trees, hand treatments of brush and small trees, prescribed fire (broadcast and pile burning) and emergent brush follow-up treatments will be conducted under this Notice of Exemption (NOE).

Exempt Status (Guidelines Section and Class): Categorical Exemption:

15304, which exempts minor alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes.

Reasons Why Project is Exempt:

The Western Shasta Resource Conservation District (WSRCD) has reviewed the environmental/specialists' reports prepared by Registered Profesional Foresters and other specialists and has determined that the project's implementation will result in multiple benefits, including restoration of the forest, watershed, and wildlife habitat. There will be no significant adverse impacts on endangered, rare, or threatened species or their habitats. There are no hazardous materials at or around the project site. The project will avoid all archeological resource sites. The project will not result in cumulatively significant impacts. The Project will have no significant adverse effect on the environment.

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Public Agencies that will be involved with the project:

California Department of Forestry and Fire Protection
Western Shasta Resource Conservation District
Lassen Fire Safe Council, Inc.

Lead Agency Contact Person:

Ross Perry, Project Manager
Western Shasta Resource Conservation
District (530) 776-9420

Signature: _____ Date: 10/10/21
Dennis Heiman, President
Western Shasta Resource Conservation District

ATTEST:

I, Sharon McBroome, Clerk of the Board of Directors, Western Shasta Resource Conservation District, do hereby certify that the Western Shasta Resource Conservation District approved this Notice of Exemption on the __ day of October, 2021 by the following vote:

Ayes: 6 Abstentions: 0
Noes: 0 Absent: 0

_____
Sharon McBroome, Clerk of the Board of
Directors Western Shasta Resource Conservation
District

Environmental Review Report for an Exempt Project

Note: This report form is intended for use by Western Shasta Resource Conservation District (RCD) staff to document a limited environmental impact analysis supporting the filing of a Notice of Exemption (NOE) document for a proposed Shasta County Fire Safe Council project. Although the project appears to fit within the descriptions for allowable Categorical Exemptions, this report presents Western Shasta RCD's review for possible "Exceptions" that would preclude finding the project to be categorically exempt as discussed in CEQA Guidelines Section 15300.2. This report will be filed with the CEQA administrative record for this project to document the environmental impact analysis conducted by the District.

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Project Name:	Whitmore Forest and Watershed Restoration Project
Project Number:	**CALFIRE CCI Grant #8GG20611**
Program Type:	Fire Prevention
CAL FIRE Unit:	Shasta Unit
County:	Shasta
Acres:	7,820 ac.
Legal Location:	Township (T) 32 North (N), Range (R) 01 West (W), portions of Section 24; T 32N, R 01 East (E), portions of Sections 7-22, 27, & 28; T 32N, R 02E, portions of Sections 3-9 & 18; and T 33N, R 02E, portions of Sections 32 - 34 Mount Diablo Base & Meridian (MDBM)

Name of USGS 7.5'Quad Map(s): Whitmore, Miller Mountain, Jack's Backbone, Inwood, & Hagaman Gulch
☒Project Vicinity Map Attached ☒Project Location Map Attached

Other Public Agency Review/Permit Required:

Would the project result in:	YES	NO
Alterations to a watercourse (DFW - Lake and Stream Alteration Agreement)	☐	☒
Conversion of timberland (CAL FIRE - Conversion Permit or Exemption)	☐	☒
Demolition (Local Air District - Demolition Permit)	☐	☒
Soil disturbance over 1 acre (RWQCB - SWPPP)	☐	☒
Fill of possible wetlands (404 Permit - USACE)	☐	☒
Other:	☐	☒

Discuss any above-listed topic item checked Yes and consultation with agencies:
There is no planned work within watercourses, or alterations to watercourses within this project. There is no timberland conversion as part of this project. There will be no soil disturbance greater than 1 acre, nor major soil disturbance beyond minor alteration to the vegetation composition, and there is no disturbance or fill to wetlands as part of this project. The project is not located within any transportation right-of-way or scenic highway designation boundary.

Project Description and Environmental Setting (Describe the project activities, project site and its surroundings, its location, and the environmental setting):

Proposed Project Location

The project area is 7,820 acres located east of Whitmore in Shasta County, CA (*See* Project Vicinity Map). The project area is within the Coal Gulch (5507.320203), Mill Creek (5507.310102), Glendenning (5507.310102), Atkins Creek (5507.310101), and Beal (5507.310103) watersheds. The project area ranges in slope from fairly flat to very steep with elevation ranges from 2,200 – 5,480 feet, and average annual precipitation 0f 45 inches. The project area lies within a wildland urban interface zone (WUI), which is an area where human habitation is mixed with areas of flammable wildland vegetation.

Existing Condition/Need for Proposed Project

Wildland fire is a relatively common occurrence near the community of Whitmore. The topography, combined with naturally occurring fuels surrounding the community, lends itself to unexpected and sometimes extreme fire behavior. Daytime winds in the Whitmore area tend to consistently blow eastward, shifting in the afternoon to the west. When wildfires occur, the result of these winds are fires that repeatedly threaten the community. Sometimes this switch in wind-driven fire direction happens multiple times in a single event, creating a much more challenging firefighting situation. This phenomenon has been seen in several fires on lands managed by W.M. Beaty & Associates, including the 1968 Whitmore Fire, the 1987 Fern Fire, and the 2003 Whitmore Fire; all three fires began east and upslope of Whitmore, then were wind driven downhill towards the

community. These fires, as well as the Morelli Fire, have resulted in the Whitmore community being surrounded by large areas of plantation that have reached a stage where they are in need of the fuels reduction treatments which are proposed by the project.

These plantations have traditionally been left untreated for many years after the trees are above the brush and considered free to grow; this has left large amounts of understory vegetation and ladder fuels as brush and natural ingrowth regrow over time. Many of these young stands have high levels of Manzanita encroaching into the understory. This brush creates a contiguous fuel base from the ground to the canopy of the stand, and traps casting pine needles within the brush that could act as tinder for a fire and lead to extreme fire behavior and stand replacing events adjacent to residential and other private lands within the State Responsibility Area. In addition, trees were planted at a high per acre rate, which in addition to the regrowth of understory vegetation has led to young stands that are not resilient or resistant to fire. Many of these plantations have trees with little or no crown spacing, and this along with the understory ladder fuels would encourage a running crown fire that could threaten the community of Whitmore when fire weather conditions are extreme.

The project is needed to create fire resistant and resilient forest stands around the community of Whitmore. Whitmore lies entirely within a WUI area, much of which is managed by W.M. Beaty & Associates and is bordered by plantations on the south, east, and west. Coupled with the large, natural brush component of the area, the unique wind phenomenon, and current drought conditions, the community of Whitmore has great potential to be stricken by a major wildfire event. The proposed project would reduce fuel loading and crown continuity adjacent to the community and other private property, as well as establish areas that could be used as control points for suppression activity when wildfire occurs. A portion of the project area lies within the low-income census track that encompasses Whitmore and treatment areas were chosen to maximize benefits to the low income community of Whitmore.

This project proposes to biomass thin existing plantations to create greater crown separation and improve residual tree vigor and resilience to both fire and potential insect outbreaks. The project also proposes mastication of areas with dense Manzanita to reduce ladder fuels within established stands, improve and maintain existing fire breaks, and remove competition from trees to increase stand resilience and resistance to wildland fire and other forest health issues. Most of the area proposed for treatment are existing plantations that were created after past fire events. It is economically infeasible for the landowner to thin these areas to create better crown separation and better fire resistance due to the high cost of such treatment and lack of value in the material to be removed which could offset the cost.

Proposed Action

This project will achieve forest health goals at the landscape scale by thinning stands within the Whitmore Project Area (*See* Project Area Map) of California Wildlife Habitat Relationships (CWHR) types: Montane Hardwood Conifer (MHC) 4M, 4P, Montane Hardwood (MHW) 2M, PPN 4P, and Sierra Mixed Conifer (SMC) 4P, 4M. These types are comprised of ponderosa pine (*Pinus ponderosa*), sugar pine (*Pinus lambertiana*), incense-cedar (*Calocedrus decurrens*), Douglas-fir (*Pseudotsuga menziesii),* white fir (*Abies concolor*). In general, the timber stands are clumpy, with most trees in the size class 3 and 4 ranges. Understory hardwoods include black oak, white oak, and scrub oak (*Quercus spp.),* bigleaf maple (*Acer macrophyllum*), dogwood (*Cornus spp.*), and willow (*Salix spp.*). Alder (*Alnus spp*.) and pacific yew (*Taxus* brevifolia) are present along some of the perennial watercourses. In some of the timber stands there is a moderate to well-developed brush component including greenleaf manzanita (*Arctostaphylos patula*), blackberry (*Rubus spp*.), poison oak (*Toxicodendron diversilobum* and other *Ceanothus spp*. Treatments will increase the vigor of remaining trees, reducing standing fuel loading, and redistributing ladder fuels within treated areas to reduce fuel continuity and the likelihood of stand replacing fire events. This will include: thinning 4,399 acres of pine plantations through a biomass utilization process; mastication and emergent brush treatments on 2,411 acres of brush and small trees; thinning of a 106 acres of lodgepole pine through a biomass utilization; and use of prescribed fire (broadcast and pile burning) to treat slash generated during operations and emergent brush. Strategic areas with high fuel loads have been chosen for treatment. Proposed treatment areas are adjacent to appropriately stocked managed timberlands and will create a more contiguous and desirable fuel loading in young stands which could not otherwise be economically managed. Treatment areas will tie in with existing fuel breaks to create a landscape-scale approach to promoting forest health which will also be more effective at reducing the risk of wildfire.

Much of the thinning activity and tree removal will be conducted under California Forest Practice Rules (FPRs) exemptions. The balance of the treatment activities, including the mastication of brush and small trees, hand treatments of brush and small trees, emergent brush follow-up treatments, and prescribed burning will be conducted under this Notice of Exemption (NOE).

1.1. Mastication and Hand Treatment of Brush and Small Trees

Mastication involves the pulverization of brush, slash, and excessive natural tree regeneration 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 extend 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) incense cedar; 2) ponderosa pine; 3) white fir; and 4) sugar pine

1.2. Emergent Brush Follow-Up Treatments:

Emergent brush follow-up treatments involves the use of herbicides to treat emergent vegetation in order to maintain the fuel break and forest spacing established by the mastication and hand thinning.

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

1.3. Prescribed Fire

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.

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 Shasta County Air Quality Management District in compliance with the state smoke management plan, Title 17. Prescribed burn projects must submit a Smoke Management Plan to Shasta County Air Quality Management District 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 byShasta County Air Quality Management District. 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.

Environmental Impact Analysis

Aesthetics

☐ This topic does not apply to a project of this type and was not evaluated further.
☒ This topic could apply to a project of this type, and results of the assessment are provided below:

The existing visual character of the site and its surroundings is expected to improve as thinning creates longer vistas and better opportunities to view wildlife and native wildflowers. The proposed project does not contain any scenic vistas, nor is the project area visible from an established scenic vista.

Agriculture and Forest Resources

☐ This topic does not apply to a project of this type and was not evaluated further.
☒ This topic could apply to a project of this type, and results of the assessment are provided below:

☒ Yes ☐ No Would any trees be felled? If yes, discuss protection of nesting birds and compliance with FPRs.
☐ Yes ☒ No Would the project convert any prime or unique farmland?
☐ Yes ☒ No Would the project result in the conversion of forest land or timberland to non-forest use?

Tree felling will be conducted under a FPR exemption, and will abide by FPR's regarding the protection of nesting birds. The majority of the trees will be <11" dbh and are unlikely to provide nesting habitat. Proposed activities, as designed under this exemption, will not affect nesting birds. If nesting birds are identified adjacent to the project area during implementation, all identified nests will be protected with buffers and Limited Operating Periods (LOP's), similar to those within the FPRs.

Air Quality

☐ This topic does not apply to a project of this type and was not evaluated further.
☒ This topic could apply to a project of this type, and results of the assessment are provided below:

☒ Yes ☐ No

The local Air Quality Management District, Shasta County Air Quality Management District (SCAQMD), guidelines for dust abatement and other air quality concerns were reviewed for this project. The project proposes underburning and pile burning to treat slash and emergent brush. Creation of smoke will occur as a result of this project. All burn operations will occur in compliance with all standards set forth by SCAQMD Smoke Management Plans and Air Pollution Permits to mitigate air quality impacts to a level of less than significant.

Biological Resources

☐ This topic does not apply to a project of this type and was not evaluated further.
☒ This topic could apply to a project of this type, and results of the assessment are provided below:

☐ Yes ☒ No Will the project potentially effect biological resources?
☒ Yes ☐ No Was a current CNDDB review completed? Results discussed below.
☒ Yes ☐ No Was a biological survey of the project area completed? Results discussed below.

An assessment of potential threatened, endangered, and rare (California Native Plant Society Rank 1 and 2) vascular plants, bryophytes, lichens, and fungi, was conducted, and surveys for species with potential habitat in the project area was conducted. (*See* Attachment A – Biological Assessment – Wildlife and Botany). This assessment included a CNDDB 3-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 (https://wildlife.ca.gov/Data/BIOS). This includes searching for rare plants identified within the area of the 7.5' quadrangles where the project is primarily located (Miller Mountain) along with the eight surrounding quads. The Calflora (https://www.calflora.org/), and California Native Plant Society inventory of rare plants (http://www.rareplants.cnps.org/) were also used, as well as consideration to past experience in the area. No endangered, threatened, candidate, rare, or species of special concern were identified within the project area. Habitat that supports these species within the project area will be protected with Water course Lake Protection Zones (WLPZs). It has been determined that the proposed project as designed will have no impact on threatened, endangered, candidate, rare, or watch list botanical species.

An assessment of potential threatened, endangered, and wildlife species of special concern was conducted, and a survey was conducted of the project area (*See* Attachment A: Biological Assessment – Wildlife). This assessment included a 3-mile CNDDB search (*See* Attachment A), a search of the CDFW BIOS system for sensitive wildlife species identified within the Miller Mountain and adjacent 7.5' quadrangles, and consideration of past experience in the area.

Several species and the habitats that support them have been detected on or adjacent to the project area. These species and the operational measures that will protect them from significant impacts are discussed below.

Chinook Salmon and Steelhead

The Central Valley Spring-Run ESU of Chinook salmon (*Oncorhyncus tshawytscha pop.11*) is listed as federally threatened under the Endangered Species Acts (ESA) and state threatened. The Central Valley DPS of steelhead (*Oncorhynchus mykiss irideus pop. 11*) is threatened under the ESA. Habitat for these species occurs within and adjacent to the project area. The project falls within the designated watershed protected by California Forest Practice Rules (FPRs) for Anadromous Salmonid Protection (ASP) within the Watercourse and Lake Protection Zone (WLPZ) 14 CCR § 936.9. Widths of the WLPZ for different watercourse classes and the associated prescriptions for those zones designed to protect these species and their habitat is discussed below:

ASP WLPZ Widths

Slope	Class I			Class II-L		Class II-S		Class III	Class IV
	Core Zone	Inner Zone	Outer Zone	Core Zone	Inner Zone	Core Zone	Inner Zone		
<30%	30'	40'	30'	20'	80'	10'	40'	30'	25'
30-50%	30'	40'	30'	20'	80'	10'	65'	50'	50'
>50%	30'	40'	30'	20'	80'	10'	90'	50'	50'

Class I Watercourse Protection

Core Zone:
No timber operations are permitted in this zone.

Inner Zone:
The WLPZ will be clearly identified on the ground with blue and white striped flagging. Postharvest stand shall have a minimum 70% overstory canopy cover. The postharvest canopy may be composed of both conifers and hardwood species and shall have at least 25% overstory conifer canopy. Postharvest stand shall retain the 7 largest conifer trees (live or dead) on each acre of the area that encompasses the Core and Inner Zones.

Outer Zone:
Postharvest stand shall have a minimum 50% overstory canopy cover. The postharvest canopy may be composed of both

conifers and hardwood species and shall have at least 25% overstory conifer canopy.

Class II-S Watercourse Protection

Core Zone:
No timber operations are permitted in this zone

Inner Zone:
The WLPZ will be clearly identified with blue and white stripe flagging prior to the PHI. Timber operations are permitted in this zone. To protect water temperature, filter strip properties, upslope stability, and fish and wildlife values, 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.

Class II-L Watercourse Protection (14CCR § 936.9(g)(1)(A))

Core Zone:
No timber operations are permitted in this zone

Inner Zone:
The WLPZ will be clearly identified on the ground with blue and white stripe flagging prior to the PHI. Postharvest stand shall have a minimum 70% overstory canopy cover. The postharvest canopy may be composed of both conifers and hardwood species and shall have at least 25% overstory conifer canopy. Postharvest stand shall retain the 7 largest conifer trees (live or dead) on each acre of the area that encompasses the Core and Inner Zones.

Class III Watercourse Protection

The Equipment Limitation Zone (ELZ) shall be clearly identified on the ground with blue and white stripe flagging prior to the start of operations adjacent to the watercourse. At least 50% of the understory vegetation present before timber operations shall be left living and well distributed within the ELZ to maintain soil stability. Heavy equipment shall only be permitted within the ELZ on existing roads, and at existing crossings. Retain all:

- Pre-existing large wood on the ground within the ELZ that is stabilizing sediment and is necessary to prevent potential discharge into the watercourse.
- Pre-existing down wood and debris in the channel zone.
- Hardwoods, where feasible, within the ELZ.
- All snags (except as required to be felled for safety) within the ELZ.
- Countable trees needed to achieve resource conservation standards.

Channel trees and trees in the ELZ which show visible indicators of providing bank or bed stability shall not be harvested. Visible indicators of stability include roots that permeate the bank or provide channel grade control.

Class IV Watercourse Protection

All Class IV watercourses in use, as determined by the presence of flowing water at the time of timber operations shall be protected with an ELZ. Abandoned Class IV watercourse segments within the project area, as determined by the absence of flowing water at the time of operations shall be afforded protection as archaeological sites. The ELZ shall be clearly identified on the ground with blue and white stripe flagging prior to the start of operations adjacent to the watercourse. Heavy equipment shall only be permitted within the ELZ on existing roads, and at existing crossings.

No Class Watercourse Protection
There are multiple draws and swales that do not have potential to transport sediment to a higher order watercourse: Minimize the number of crossings and only cross the draws perpendicularly.

Spring and Wet Area Protection
Springs and wet areas shall be protected with a 10 foot ELZ identified with blue and white stripe flagging prior to the start of operations. Springs, wet areas, and spring fed inside ditches adjacent to roads where a crossing is located shall be given a perimeter ELZ protection Springs and wet areas associated with classified watercourses shall be protected by the corresponding ELZ or WLPZ width. Trees shall be felled away from all springs and wet areas.

Cascade Frog, Foothill Yellow-legged frog, and Western Pond Turtle
Cascade frogs (*Rana cascadae*) and Western pond turtles (*Emys marmot*) have been detected within the project area, and the foothill yellow-legged frog (*Rana boylii*) has been detected within 3 miles of the project area. Habitat for these species, which

includes streams, ponds and riparian habitats along streams, does exist within the project area. The Cascade frog is a State Candidate for the endangered species list. The Foothill yellow-legged frog is State endangered, and the Western pond turtle is a CA SSC. The project has been designed to protect these species and habitat including: (1) ASP WLPZ equipment limitation zones (ELZ) for Class I and II watercourses, (2) retention of understory vegetation with Class I and II ELZ's and, (3) erosion control measures on haul roads and skid trails.

Northern Goshawk,
Northern goshawk (*Accipiter gentilis*) nest sites have been detected adjacent to the project area. The northern goshawk is a CA SSC and Board of Forestry sensitive species. In the event that nesting goshawks are discovered on or adjacent to the project area, operations shall cease immediately within 0.25 miles of the nest and the RPF, CAL FIRE, and CDFW shall be notified so that proper mitigations can be employed.

Cooper's Hawk and Sharp-shinned hawk
Cooper's hawk (*Accipiter cooperii*) and sharp-shinned hawk (*Accipiter striatus*) nests have been detected within and adjacent to the project area. The Cooper's hawk and sharp-shinned hawk are on the California Watch List (WL). Any observations of these species shall be investigated to determine the likelihood of nesting activity nearby. In the event that the species are discovered nesting in the project area, the nest tree, screening tree(s), perch tree(s) and replacement tree(s) shall be left standing and unharmed. The RPF, CAL FIRE, and CDFW shall determine whether additional mitigation is necessary.

California Spotted Owl
A known California spotted owl (*Strix occidentalis occidentalis*) nest and several detections have been made adjacent to the east end of the project area. The CA spotted owl is a CA SSC. Any observations of spotted owls shall be investigated to determine the likelihood of nesting activity nearby. In the event that spotted owls are discovered nesting on or adjacent to the project area, operations shall cease immediately within 0.25 miles of the nest and the RPF, CDF, and CDFW shall be notified. Operations shall not resume until a consultation with CDFW has been conducted and proper mitigations employed.

Osprey
This species is known to occur adjacent to the project area. This species is a Board of Forestry Sensitive Species and on the CA WL. No indications of species presence within the project area have been observed. Habitat for species does exist within the project area and care has been and will continue to be taken during operations to identify any potential species nest sites or other indications of the species presence within the area. Any suspected species nests within 0.25 miles of the project area shall be evaluated and/or monitored by the RPF, or her designee, to determine if the site is active and if the species may be using the area. In the event that nesting osprey are discovered on or adjacent to the project area, operations shall cease immediately within 0.25 miles of the nest and the RPF, CAL FIRE, and CDFW shall be notified so that proper mitigations can be employed.

Bald Eagle
This species is not known to occur within the project area. Bald eagles have been detected 7.5 miles south of the project area at McCumber Reservoir. The species is currently state listed as endangered. No indications of species presence within the project area have been observed. Habitat for species does exist within the THP area and care has been and will continue to be taken during operations to identify any potential species nest sites or other indications of the species presence within the area. Any observations of species shall be investigated to determine the likelihood of nesting activity nearby. In the event that nesting bald eagles are discovered on or adjacent to the project area, operations shall cease immediately within 0.5 miles of the nest and the RPF, CAL FIRE, and CDFW shall be notified so that proper mitigations can be employed.

Fisher
The species has been detected within and adjacent to the project area. There is suitable foraging habitat for fisher within the project area. There are no currently known larger decayed or cull trees with large cavities suitable for potential fisher resting or denning trees within the project area. Fisher is currently a California Species of Special Concern (SSC). The critical period for fisher is March 1st through July 31st, where reproduction and caring of young occurs and the highest potential for disturbance exists.

The following are operational measures for fisher:

1. During project implementation between March 1st through May 15th, if a fisher natal den or a female with young is observed, operations shall cease within 0.25 miles and the operator shall notify the RPF, CAL FIRE, and CDFW shall be notified immediately so that additional protection measures can be agreed upon. During operations between May 16th to July 31st, if a confirmed maternal den site is found, no operations shall occur with 375 feet of the den site.
2. Any green culls, large snags, hardwoods, and large down wood will be retained where they exist to the degree that

allows for operational safety.
3. During project implementation, the operator will make an effort not to incorporate large down LWD conifer and hardwoods into and burn piles.
4. Retention of oaks, where they exist, will be prioritized within the project area.

Ringtail cat

Ringtail cats (*Bassariscus astutus)* have been detected within and adjacent to the project area. The ringtail cat is a CA SSP and Fully Protected (FP) species. During project implementation, if a ringtail cat den or a female with young is observed, operations shall cease 0.25 miles, until the area can be surveyed by a qualified wildlife biologist, and proper mitigations developed.

Gray Wolf

The Gray wolf (*Canis lupus*) has not been detected within or adjacent to the project area. The gray wolf is listed as federally endangered and state endangered. The CDFW Gray wolf website at https://wwwl.wildlife.ca.gov/Conservation/Mammals/Gray-Wolf will be monitored to determine if planned activities will intersect with known wolf locations. If so, CDFW will be consulted prior to the commencement of project activities. In addition, if any wolves, dens, or rendezvous sites are found prior to or during project operations, operations shall be suspended and consultation with CDFW shall occur immediately.

It has been determined that the proposed project as designed will have no impact on threatened, endangered, candidate, or wildlife species of special concern.

Cultural Resources

☐ This topic does not apply to a project of this type and was not evaluated further.
☒ This topic could apply to a project of this type, and results of the assessment are provided below:

☒ Yes ☐ No Was a current archaeological records check completed?

Yes. The Northeast Information Center (NEIC) Archaeological Records Searches identified 29 previously recorded historic sites and 2 prehistoric sites within the project area.

☒ Yes ☐ No Was a Staff or Contract Archaeologist consulted? Yes.

An RPF with CALFIRE Archaeological Training for Resource Professionals Certification conducted background research and a survey of the project area.

☒ Yes ☐ No Was an archaeological survey of the project area completed?

Yes (*See* Attachment B – Whitmore Forest and Watershed Restoration Project Archaeological Survey Coverage Map)

☐ Yes ☒ No Will the project effect any historic buildings or archaeological site?

No. The project will have no effect on any cultural resources. All identified sites and any additional sites discovered during implementation will be documented, flagged and avoided.

Geology and Soils

☐ This topic does not apply to a project of this type and was not evaluated further.
☒ This topic could apply to a project of this type, and results of the assessment are provided below:

Mastication treatments are expected to result in an increase in effective soil cover and fine organic matter as masticated debris is broadcasted away from the machine.

Effective soil cover and surface organic matter standards would be met with hand treatment because the forest floor is substantially less disturbed relative to mechanical thinning and because hand piling limits the amount of slash that can be cost-effectively removed from the treated units. Soil compaction and topsoil displacement caused by hand thinning treatments would be practically nonexistent since no heavy equipment traffic is involved. Pile burning would decrease soil cover to zero under the pile and there is a risk of nutrient pollution in ash moving off

site to water bodies. The small areal extent of burn piles on the landscape would ensure that runoff in the treated areas would not be substantially increased and soil nutrients not significantly impacted.

Prescribed fire can decrease soil cover since the duff layer and fine organic matter will be partially consumed by fire, but prescribed fire treatments would be designed and timed to burn at low severity so that effective soil cover and surface organic matter are not heavily impacted. Additionally, specifications would be included in contracts or direction to crews to ensure that minimum soil cover and surface organic matter standards and desired conditions are met. BMPs used during prescribed burning are highly effective at preventing water quality impacts.

In summary, vegetation treatments proposed under this project would not significantly impair soil quality. Water quality would effectively be protected by BMPs and project design elements, assuring that State-defined beneficial uses of water would not be significantly affected. Soil hydrologic function would be protected, and vegetation treatments would not significantly affect project area hydrology.

Greenhouse Gas Emissions

☐ This topic does not apply to a project of this type and was not evaluated further.
☒ This topic could apply to a project of this type, and results of the assessment are provided below

☐ Yes ☒ No Would the project generate significant greenhouse gas (GHG) emissions?

Not when considered over the life of the project. This project would include up to 148 acres of underburning and pile-burning which may cause an immediate release of carbon, and hence a small and short-term impact to GHG emissions. This project's modest release of GHGs should be weighed alongside the potential for catastrophic wildfire, with its extreme release of greenhouse gases, which the project is designed to make less likely. California's Forest Carbon Action Plan describes how Sierran forests were and are able to act as a long-term carbon sink even as they burned regularly, but forests that experienced long-term fire suppression eventually became net carbon sources. Thus, GHG releases from low-intensity fire are not inconsistent with net GHG reductions; in fact, they may be necessary to achieve them. In conclusion, this project, as proposed, will have no significant adverse impact on the annual release of GHGs.

☐ Yes ☒ No Would these GHG emissions result in a significant impact on the environment?

No. See above.

☐ Yes ☒ No Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No, this project does not conflict with the State of CA plan to reduce carbon or greenhouse gas emissions, and is a permissible practice within the SCAQMD.

Hazards and Hazardous Materials

☒ This topic does not apply to a project of this type and was not evaluated further.
☐ This topic could apply to a project of this type, and results of the assessment are provided below:

Hydrology and Water Quality

☐ This topic does not apply to a project of this type and was not evaluated further.
☐ Yes ☒ No Will the project potentially affect any watercourse or body of water?
☒ This topic could apply to a project of this type, and results of the assessment are provided below:

Mastication equipment will be utilized for hazardous fuel reduction activities. For the protection of water quality, existing drainage patterns, and to minimize surface runoff and surface erosion, the project incorporates FPR WLPZ protection buffers where mechanical equipment is excluded (14 CCR §936).

The project entails treatment of suppressed trees, dead and dying trees, woody vegetation and brush, and will have no effect on groundwater supplies. Through the establishment of the ASP WLPZ's (*See* Biology section), existing drainage patterns will be protected. The project will not alter the course of any stream or river.

Land Use and Planning
☒ This topic does not apply to a project of this type and was not evaluated further.

This project does not conflict with any land use or planning or change the land use designation for any parcel.

☐ This topic could apply to a project of this type, and results of the assessment are provided below:

Mineral Resources
☒ This topic does not apply to a project of this type and was not evaluated further.

There are no known or related mineral resources or extraction as part of this project, and the project does not restrict access for any future mineral extraction activities.

☐ This topic could apply to a project of this type, and results of the assessment are provided below:

Noise
☐ This topic does not apply to a project of this type and was not evaluated further.
☒ This topic could apply to a project of this type, and results of the assessment are provided below:

The proposed project will entail the use of mechanical equipment Equipment operations will be within the allowable limits established by the County of Shasta. During the actual fuel reduction activities, there could be an increase in normal noise levels due to activity associated with the operation of masticators and chainsaws. The project is not located within an airport land use plan or within two miles of a public airport. The project is not located within the vicinity of a private airstrip. The project area is rural and sparsely inhabited and over 2 miles from any school, hospital, or daycare center.

Population and Housing
☒ This topic does not apply to a project of this type and was not evaluated further.

This project has no applicability to population and housing issues in Shasta County, CA.

☐ This topic could apply to a project of this type, and results of the assessment are provided below:

Public Services
☒ This topic does not apply to a project of this type and was not evaluated further.

This project has no applicability to public services or infrastructure in Shasta County, CA. Involvement of police protection, schools, parks, and other public services are not required for project implementation. As such, no adverse impacts to public services are expected from project implementation.

☐ This topic could apply to a project of this type, and results of the assessment are provided below:

Recreation
☒ This topic does not apply to a project of this type and was not evaluated further.

This project is not located within any special or designated recreation areas. As such, adverse impacts to recreational resources as a result of implementation of the proposed project are not expected.

☐ This topic could apply to a project of this type, and results of the assessment are provided below:

Transportation/Traffic
☐ This topic does not apply to a project of this type and was not evaluated further.

☒ This topic could apply to a project of this type, and results of the assessment are provided below:
Minimal increases in traffic along adjacent public roads could occur as a result of project implementation as the project coordinators, equipment operators, fire crews, and hand thinning crew will be accessing project units. This increase in traffic will be minor and insignificant as the regional roads have been designed to accommodate the anticipated level of traffic. Smoke management plans for prescribed fires and pile burning will provide mitigation measures to reduce smoke to a level that does not impact local road visibility. As such, the project as proposed will not cause significant changes in current transportation traffic patterns and frequencies.

Utilities and Service Systems
☒ This topic does not apply to a project of this type and was not evaluated further.

This project will have no bearing or effect on public utilities or service systems.

☐ This topic could apply to a project of this type, and results of the assessment are provided below:

Project Design Features That Avoid Environmental Impacts:
Adverse environmental impacts have been avoided through careful review of site conditions prior to treatment method determination. Site soils, slope, habitat, and water resources were thoroughly examined during project design and layout. Equipment has been excluded from slopes over 40% and all Class II and III Watercourse Protection Zones to provide for soil and water resource protection as well as to protect sensitive aquatic life. All water features have been afforded protection from equipment operations through the establishment of WLPZs. Sensitive plants and wildlife have been identified during the scoping process and surveyed for and the project as designed will not adversely affect them. Sensitive cultural resources have been surveyed for and the project has been designed to have no impact on them.

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

Justification for Use of a Categorical Exemption (discuss why the project is exempt, cite exemption number(s), and describe how the project fits the class): Based on no effects, negative, or cumulative impacts to natural resources, and a greenhouse gas benefit, this project fits within a Categorical Exemption.

This review of hazard fuel reduction for wildfire prevention and forest health improvement in the Whitmore project area concludes that project implementation as designed would have less than significant impact in each resource area. Class 4 exemption (CCR Section 15304) covers minor alterations to vegetation such as fuel reduction activities. The Western Shasta Resource Conservation District (RCD) has determined that the objective of fuel reduction and the implementation activities as designed for this project will result in minor alterations to land and therefore fit within the CCR Section 15304 exemption. Additional environmental analysis was conducted by Registered Professional Foresters and Environmental Specialists regarding proposed project effects on rare, threatened and endangered plants; threatened, endangered and special status wildlife species; and cultural resources. The RCD has reviewed these reports and determined that the project's implementation will result in multiple benefits, including reduction of fuels in the Whitmore area that will protect property, human lives, and communities. There will be no significant adverse impacts on endangered, rare, or threatened species or their habitats. There are no hazardous materials at or around the project site. The project will avoid all archeological resource sites. The project will not result in cumulatively significant impacts. The Project will have no significant adverse effect on the

environment.

Conclusion:

☒ After assessing potential environmental impacts and evaluating the description for the various classes of Categorical Exemptions to CEQA, Western Shasta RCD has determined that the project fits within one or more of the exemption classes and no exceptions exist at the project site which would preclude the use of this exemption. The District considered the possibility of (a) sensitive location, (b) cumulative impact, (c) significant impact due to unusual circumstances, (d) impacts to scenic highways, (e) activities within a hazardous waste site, and (f) significant adverse change to the significance of any historical resource. A Notice of Exemption will be filed with the Shasta County Clerk-Recorder.

☐ After assessing potential environmental impacts and evaluating the description for the various classes of Categorical Exemptions to CEQA, Western Shasta RCD has determined that the project does not fit within the description for the various exemption classes or has found that exceptions exist at the project site which precludes the use of a Categorical Exemption for this project. Additional environmental review will be conducted and the appropriate CEQA document used may be a Negative Declaration or a Mitigated Negative Declaration.

Signed:

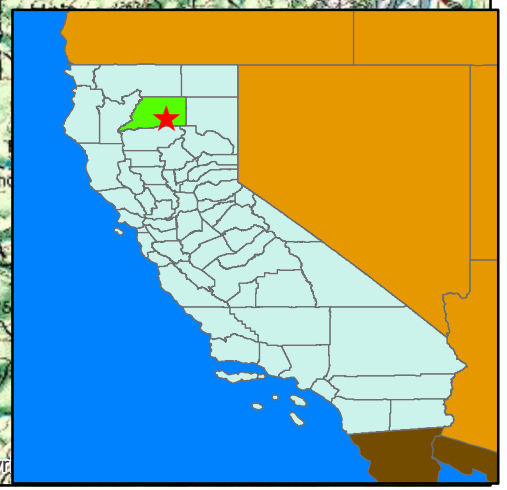
Dennis R. Heiman

Dennis Heiman, Board President
Western Shasta Resource Conservation District

10/10/21
Date

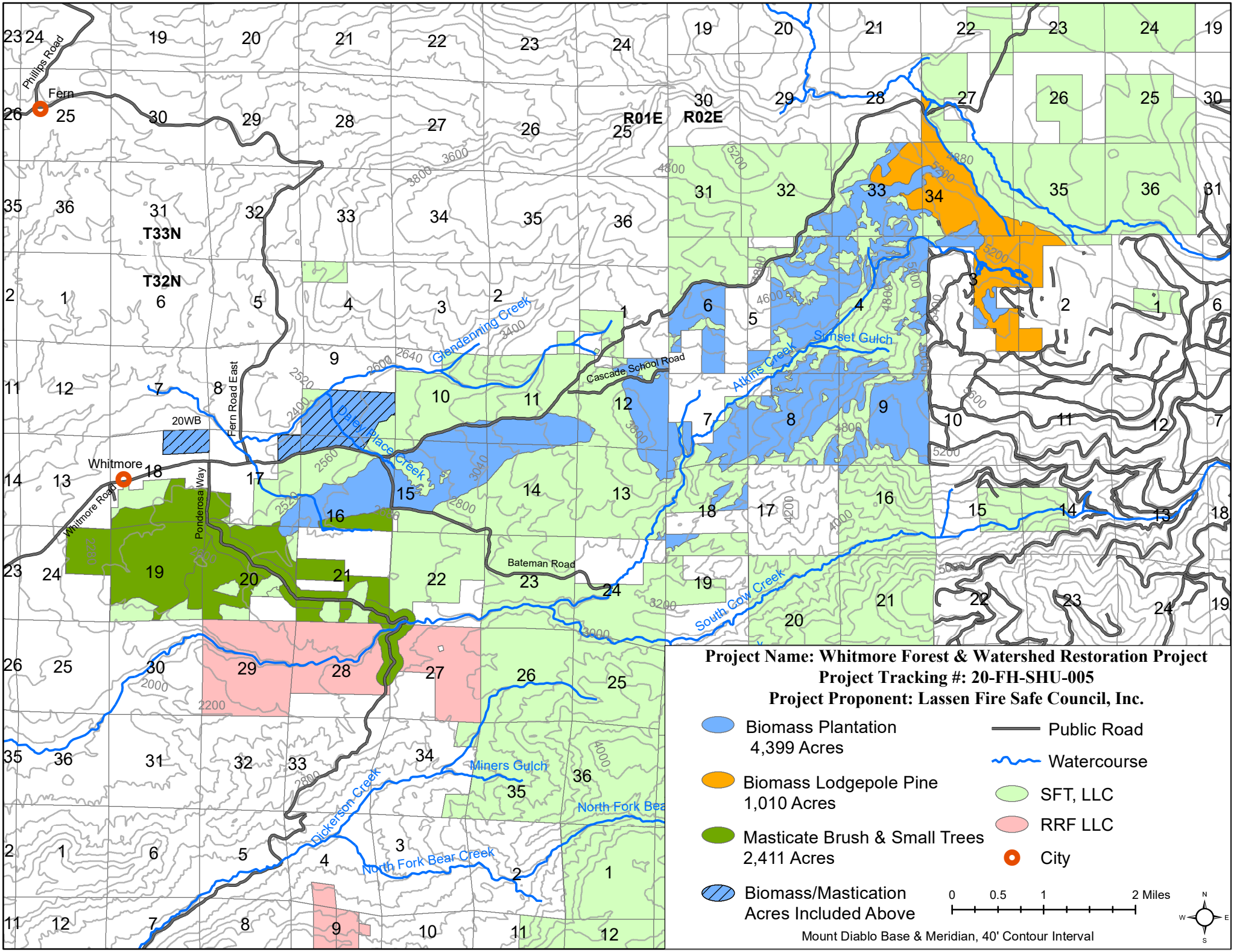
Whitmore Forest & Watershed Restoration Project
Project Vicinity Map
Shasta County, CA; Scale 1:250,000

Whitmore Project Area



0 3.75 7.5 15 Miles

TCKEcological 09232021


Project Name: Whitmore Forest & Watershed Restoration Project
Project Tracking #: 20-FH-SHU-005
Project Proponent: Lassen Fire Safe Council, Inc.
Biomass Plantation
4,399 Acres
Biomass Lodgepole Pine
1,010 Acres
Masticate Brush & Small Trees
2,411 Acres
Biomass/Mastication
Acres Included Above
Public Road
Watercourse
SFT, LLC
RRF LLC
City
0 0.5 1 2 Miles
Mount Diablo Base & Meridian, 40' Contour Interval
Fern
Whitmore
Phillips Road
Whitmore Road
Fern Road East
Ponderosa Way
Cascade School Road
Bateman Road
Glendenning Creek
Dry Place Creek
Atkins Creek
Sunset Gulch
South Cow Creek
Miners Gulch
Dickerson Creek
North Fork Bear Creek
T33N
T32N
R01E
R02E
20WB

Attachment A: Biological Assessment

Wildlife and Botany

Biological Assessment - Wildlife

Scientific 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 creation of canopy openings.
Fish						
Oncorhynchus mykiss irideus pop. 11	Steelhead – Central Valley DPS	Threatened	None	This salmonid is an anadromous species that fulfills part of its life-cycle in freshwater streams and rivers and part in the ocean.	Yes	Habitat will be protected within Anadromous Salmonid Protection (ASP) Watercourse and Lake Protection Zone (WLPZ)
Oncorhynchus tshawytscha pop. 11	Chinook Salmon – Central Valley Spring-Run ESU	Threatened	Threatened	This salmonid is an anadromous species that fulfills part of its life-cycle in freshwater streams and rivers and part in the ocean.	Yes	Habitat will be protected within ASP WLPZ.
Amphibians						
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	Yes	No known occupied habitat within the project area. Habitat within ASP WLPZ will be protected

Scientific Name	Common Name	Federal Status	State Status	Habitat	Habitat in the Project Area	Potential Impact
				require up to two over-wintering periods completing their aquatic development.		
Rana boylii	Foothill yellow-legged frog	None	Endangered	They inhabit partially shaded, rocky perennial streams and their life cycle is synchronized with the seasonal timing of streamflow conditions. They breed in streams with riffles containing cobble-sized or larger rocks as substrate. These frogs need perennial water where they can forage through the summer and fall months. Usually found within a few feet of water.	Yes	No known occupied habitat within the project area; detections within 3 miles of project area. Habitat within ASB WLPZ will be protected.
Rana cascadae	Cascade Frog	None	Candidate Endangered	Distribution is associated with montane and sub-alpine landscapes at elevations above 1220 m. Found in all types of aquatic habitats including ponds, meadows, deep lakes, and creeks suggesting individuals may move seasonally depending on specific life history attributes such as breeding, summer and wintering.	Yes	Detection within and adjacent to the project area. Habitat will be protected with ASP WLPZ.
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 ASP WLPZ will be protected.
Reptiles						
Emys marmot	Western pond turtle	None	SSC	Associated with permanent or nearly permanent water in a wide variety of habitat types; require basking sites such as partially submerged logs, rocks, floating vegetation, or open mud banks.	Yes	Known occurrences within the project area. Habitat with the ASP WLPZ will be protected.

Scientific Name	Common Name	Federal Status	State Status	Habitat	Habitat in the Project Area	Potential Impact
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	No known nest sites within the project area; Known nest +1 mile from project area; may forage or fly over.
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	Known nest sites within +2 miles of the project area will be monitored and protected per Forest Practice Rules.
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 adjacent to 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. Seldom found in areas without dense tree stands, or patchy woodland habitat. Dense stands with moderate crown-depths used for nesting.	Yes	Known nest sites within the project area will be monitored and protected per Forest Practice rules.
Accipiter striatus	Sharp-shinned hawk	None	WL	Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers, but not restricted to, riparian habitats. North facing slopes, with plucking perches are critical requirements.	Yes	Known nest sites within the project area will be monitored and protected per Forest Practice rules.

Scientific Name	Common Name	Federal Status	State Status	Habitat	Habitat in the Project Area	Potential Impact
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 the project area; known nest sites within 3 miles of project area; may forage or fly over.
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 or suitable habitat within the project area.
Mammals						
Pekania pennanti	Fisher	None	SSC	High cover and structural complexity in large tracts of mature and old growth forests	Yes	Detections within and adjacent to project area. Project design will protect important habitat requirements (*See* Environmental Review – Biology)
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 core range and elevation. No recent detections within or adjacent to the project area.

Scientific Name	Common Name	Federal Status	State Status	Habitat	Habitat in the Project Area	Potential Impact
Canis lupus	Gray Wolf	Endangered	Endangered	Wolves have historically occupied diverse habitats in North America, including tundra, forests, grasslands, and deserts (Mech 1970). As a consequence, and because they travel long distances and require large home ranges, wolves are considered habitat generalists (Paquet and Carbyn 2003).	Yes	Has not been detected within or adjacent to the project area; CDFW Gray wolf updates will be monitored during project implementation.
Taxidea taxus	American badger	None	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils	Yes	Based on the species preferred habitat, not likely to be impacted by the current project.
Bassariscus astutus	Ring-tailed cat	None	FP; SSC	Occurs in various riparian habitats, and in brush stands of most forest and shrub habitats, at low to middle elevations. Suitable habitat for ringtails consists of a mixture of forest and shrubland in close association with rocky areas or riparian habitats. Nests in rock recesses, hollow trees, logs, snags, abandoned burrows, or woodrat nests.	Yes	Detections within and adjacent to project area. Project design will protect important habitat requirements (*See* Environmental Review – Biology)

Biological Assessment – Botany

Scientific Name	Common Name	Federal Status	State Status	Flowering Period	Elevation (m)	Habitat/Ecology	Impact	Rationale
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 minganense	Mingan moonwort	None	2B.2	July-Sept	1500-3100	Wet soils in forests, along streams	No	Protected within WLPZ
Botrychium montanum	Western goblin	None	2B.1	July-Sept	1500-2100	Shady conifer woodland, especially under *Calocedrus* along streams	No	Protected within WPLZ
Botrypus virinianus	Rattlesnake fern	None	2B.2	June–Sept	715-1355	Moist shady valleys along small streams; Bogs and fens; Lower montane coniferous forest (mesic); Meadows and seeps; Riparian forest	No	Protected within WLPZ
Calochortus syntrophus	Callahan's mariposa lily	None	1B.1	May-June	525-1145	Stony sandstone (Kilarc series) in blue-oak woodland; cismontane woodland; Valley and foothill grassland (vernally mesic)	No	No habitat within project area.
Castilleja lassenensis	Lassen paintbrush	None	1B.3	July-Sept	1550-3700	Moist meadows	No	Found at higher elevations in LVNP
Cryptantha crinita	Silky cryptantha	None	1B.2	Apr-May	90-1120	Rocky volcanic soils, gravelly streambanks, gravel bars, generally foothill woodland	No	No habitat within project area.
Cusuta jepsonii	Jepson's dodder	None	1B.2	July-Sept	1200-2300	On *Ceanothus diversifolius, Ceanothus prostratus*	No	No known occurrences within assessment area.

Scientific Name	Common Name	Federal Status	State Status	Flowering Period	Elevation (m)	Habitat/Ecology	Impact	Rationale
Drosera anglica	English sundew	None	2B.3	June-Sept	1300-2000	Wetlands; meadows and seeps (mesic); bogs/fens, swamps peatlands, often with sphagnum; Freshwater wetlands, Yellow pine forest, wetland-riparian	No	Protected within WLPZ
Horkelia daucifolia var. indicta	Jepson's horkelia	None	1B.1	June-July	240-670	Dry open places, often on serpentine clay	No	No habitat within project area, found at lower elevations
Hulsea nana	Little hulsea	None	2B.3	July-Aug	2400-3000	Alpine fell-fields; volcanic talus; subalpine coniferous forest	No	No habitat within project area, found at higher elevations
Juncus digitatus	Finger rush	None	1B.1	May-June	660-790	Wetlands; vernal pools, swales, volcanic seeps; openings within cismontane and lower montane coniferous forests	No	Protected within WLPZ
Juncus leiospermus var. leiospermus	Red Bluff dwarf rush	None	1B.1	Mar-June	35-1250	Wetlands; vernal pools; mesic areas in Foothill woodland, chaparral, valley grassland, and wetland-riparian	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
Meesia uliginosa	Broad-nerved hump moss	None	2B.2	Oct	Low-high	Rich fens, calcareous soil banks, soil covered rock crevices	No	Protected within WLPZ
Neviusia cliftonii	Shasta snow-wreath	None	CE	Apr-June	300-590	Riparian in cismontane woodland and lower montane coniferous forests; shaded north	No	Protected within WLPZ; Found at lower

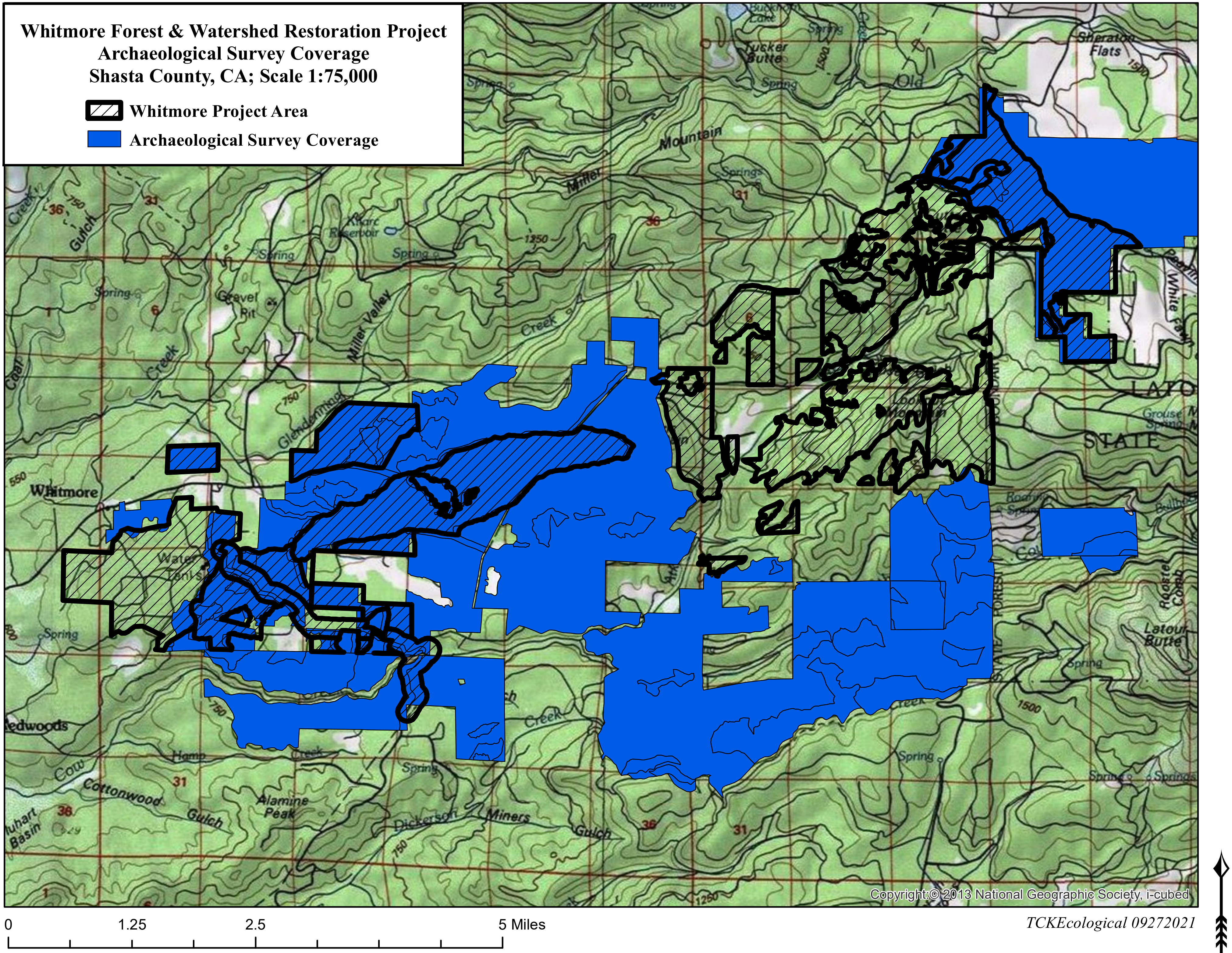
Scientific Name	Common Name	Federal Status	State Status	Flowering Period	Elevation (m)	Habitat/Ecology	Impact	Rationale
						facing slopes		elevations
Poa sierra	Sierra blue grass	None	1B.3	Apr-June	365-1500	Shady moist slopes, often on mossy rocks, in canyons, forest	No	Protected within WLPZ
Potentilla newberryi	Newberry's cinquefoil	None	2B.3	May-Aug	1300-2200	Wetlands; Freshwater-marsh. Edges; receding shorelines; vernal pools.	No	Protected within WLPZ
Stachys pilosa	Hairy marsh hedge-nettle	None	2B.3	June-Sept	1200-1770	Wetlands in sagebrush scrub,; meadows and seeps; wetland-riparian	No	Protected within WLPZ
Stellaria longifolia	Long-leaved starwort	None	2B.2	May-Aug	+/-900	Wetlands and meadows in northern coastal scrub and yellow pine forest	No	Protected within WLPZ
Trifolium siskiyouense	Siskiyou clover	None	1B.1	June-July	880-1500	Wet mountain meadows and seeps.	No	Protected within WLPZ

State Status
CE – Candidate Endangered

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

Attachment B: Archaeological Survey Coverage Map


Whitmore Forest & Watershed Restoration Project
Archaeological Survey Coverage
Shasta County, CA; Scale 1:75,000
Whitmore Project Area
Archaeological Survey Coverage
Whitmore
Miller Valley
Mountain
Tucker Butte
Sheraton Flats
Gravel Pit
Glendenning
Kharc Reservoir
Redwoods
Cottonwood
Gulch
Alamine Peak
Dickerson
Miners
Latour Butte
Rooster Comb
STATE
Cow
Hump
Creek
Spring
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