

Project Specific Analysis and Addendum to the
CalVTP PEIR

Project-Specific Analysis

Tenmile Creek Watershed Forest Health
Project

Tenmile Creek Watershed Forest Health Project Project-Specific Analysis and Addendum

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List of Abbreviations

ACB	Air Curtain Burner
ASR	Archaeological Survey Report
CAL FIRE	California Department of Forestry and Fire Protection
CalVTP	California Vegetation Treatment Program
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CE	Candidate Endangered
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CT	Candidate Threatened
CVTS	Coastal Vegetation Treatment Standards
CWHR	California Wildlife Habitat Relationships
DBH	Diameter at Breast Height
ERRP	Eel River Recovery Project
E	Endangered
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESHA	Environmentally Sensitive Habitat Area
ERA	Ecological Restoration Treatment Area
FRAP	CAL FIRE's Fire and Resource Assessment Program
GHG	Greenhouse Gas
GIS	Geographic Information Systems
HCP	Habitat Conservation Plan
QMD	Quadratic Mean Diameter
IPC	Invasive Plant Council
LTS	Less than significant
LTSM	Less than significant without mitigation incorporated
MCV	Manual of California Vegetation
MCAQMD	Mendocino County Air Quality Management District
MCRCD	Mendocino County Resource Conservation District
MIST	Minimum Impact Suppression Tactics
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NOA	Naturally Occurring Asbestos
ND	Negative Declaration
PEIR	Programmatic Environmental Impact Report
PPE	Personal Protective Equipment
PRC	Public Resources Code
PS	Potentially Significant

PSA	Project Specific Analysis
RM	Resource Management
RPF	Registered Professional Forester
RWQCB	Regional Water Quality Control Board
SENL	Single Event Noise Level
SOD	Sudden Oak Death
SPR	Standard Project Requirements
SRA	State Responsibility Area
SSC	Species of Special Concern
TMP	Traffic Management Plan
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	Vehicle Miles Traveled
WDR	Waste Discharge Requirements
WL	Watch List
WLPZ	Watercourse and Lake Protection Zone
WUI	Wildland Urban Interface

1.0 Project-Specific Analysis

1.1 Introduction

Over the past couple of centuries, wildland ecosystems in the western United States, particularly in California, have experienced significant changes due to shifts in land management and climate conditions. These changes have resulted in larger, more costly, and catastrophic wildfires, impacting communities and increasing the urgency to manage forests for resiliency and health (CALFIRE 2018). Experts agree that California's forests are overstocked and undermanaged, with altered disturbance regimes creating more fire-prone and less fire-tolerant vegetative communities (Newcomer et al. 2019).

In Mendocino County, a history of fire suppression coupled with a warmer, drier climate has degraded forest health and biodiversity. Forests and grasslands in the Tenmile Creek watershed are particularly in poor ecological health, which results in high risk of uncharacteristic large high intensity wildfire, loss of biodiversity, decreased stream baseflows, and soil erosion that causes water quality degradation (ERRP 2020). Douglas fir, and to a lesser extent Ponderosa pine, have spread widely since the cessation of Native American burning and are causing the loss of oak forests. Post-World War II logging removed larger conifers, opening up light gaps that grew back thick with conifers, hardwoods, and brush species. Grazing in the mid- to late 19th Century caused a loss of native grass species that were deep-rooted and perennial that were replaced by European annual species that lessened meadow water storage and posed much greater fire risk. Grasslands further deteriorated with the spread of star thistle. With recent severe droughts and increased air temperatures, the stage is set for uncharacteristic high intensity wildfire.

To address these issues, environmentally sensitive, landscape-level treatments are necessary to restore ecosystem resistance and resilience. The Mendocino County Resource Conservation District (MCRCD) seeks to do this through the *Tenmile Creek Watershed Forest Health Project*, which is a grant awarded to the Eel River Recovery Project (ERRP) by CAL FIRE from their Climate Change Investments (CCI) fund. This project includes two main categories of work: Plan A, comprised of 910 acres of private non-industrial lands on 24 privately-owned properties; and Plan B that involves the Cahto Tribe of the Laytonville Rancheria (109 acres). The latter is part of a separate NEPA process and is not part of this CalVTP PSA. Three additional landowners are covered under CalVTP CEQA planning but are not operational Phase II planning comprising 998 acres. Therefore, the scope of the PSA is 1,908 acres. The project spans various landowners and boundaries to optimize landscape-scale forest health improvements and protect terrestrial carbon stocks. It emphasizes local workforce development and utilization to enhance local socio-economic benefits and reinforce community involvement in restoration efforts. The focus includes fuel thinning and prescribed fire to optimize efficiency and ecological benefits.

The *Tenmile Creek Watershed Forest Health Project* aims to:

- Reduce fuel loads
- Restore oak woodlands
- Enhance soil moisture and fertility
- Restore native grasses and plants
- Restore hydrologic function
- Promote ecosystem health and carbon storage
- Protect rural communities
- Create local jobs

1.2 CEQA and Document Purpose

The California Vegetation Treatment Program (CalVTP) is a statewide program by which public agencies perform vegetation treatment activities for the purposes of preventing catastrophic wildfire. The CalVTP Programmatic Environmental Impact Report (PEIR) provides a powerful tool to enable expedited environmental review for projects that both follow the CalVTP treatment guidelines and implement an array of carefully crafted avoidance, minimization, and mitigation actions to ensure that implementation does not result in significant impacts to natural resources. The PEIR was certified in 2019 as a document compliant with the California Environmental Quality Act (CEQA). This PEIR offers an array of permissible vegetation treatments that allow for ecological restoration, forest health treatments, and other vegetation treatments aimed at reducing the risk of wildfire and increasing ecological resilience. Compliance with the PEIR requires preparation and submission of a Project Specific Analysis (PSA).

For purposes of CEQA, the MCRCD is the project proponent and acting as the lead agency for the preparation of the PSA/Addendum. The MCRCD is responsible for both reviewing and approving the PSA. Once reviewed, the MCRCD Board of Directors must pass a formal resolution approving the document and the project. This document serves as both the PSA and the Addendum to the CalVTP PEIR for MCRCD review and approval under CEQA for the proposed treatments. The PSA must demonstrate how the project will comply with Standard Project Requirements (SPRs) and Mitigation Measures (MMs) from the PEIR. If a proposed vegetation treatment is covered by the evaluation of environmental effects in the PEIR, it may be approved by a lead or responsible agency using a finding that the project is within the scope of the PEIR for its CEQA compliance, consistent with CEQA Guidelines Section 15168(c)(2).

CalVTP Treatable Landscape Acreage by Treatment Area Footprint			
	Acres Within the CalVTP Treatable Landscape	Acres Outside of the CalVTP Treatable Landscape	Total Acreage
Treatment Area Footprint	1768	140	1,908
Cal VTP Treatable Acreage by Treatment Activity			
Treatment Activity	Acres Within the CalVTP Treatable Landscape	Acres Outside of the CalVTP Treatable Landscape	Total Acreages
Rx Burn	847	0	847
Mechanical	40	0	40
Handwork	1728	140	1868
Total Activity Acreages	2,615	140	2,755

Table 1: CalVTP Treatable Landscape Acreage

Among the other criteria for determining whether a project is within the scope of the CalVTP PEIR is whether it is within the CalVTP 'treatable landscape' (i.e., the geographic extent of analysis covered in the PEIR), it may be approved using a finding that the project is within the scope of the PEIR for its CEQA compliance. Per the PEIR, if areas of the proposed project lie outside of the CalVTP treatable landscape, but have essentially the same, or substantially similar, landscape conditions as the treatable landscape, the environmental analysis of the PEIR would still be applicable. Here, 140 acres of the proposed project treatment area extend outside of the CalVTP treatable landscape; however, these areas are essentially the same or substantially similar to those within the treatable landscapes, and so the PEIR would still apply under CEQA guidelines. The project-specific mitigation

monitoring and reporting program, which identifies the CalVTP SPR and MM's applicable to the proposed project, is provided in the Mitigation Monitoring Plan (Appendix A).

Consistent with CEQA Section 21166 and CEQA Guidelines Sections 15162, 15163, 15164, and 15168, an Addendum to an EIR is appropriate when the previously certified EIR has been prepared and changes or revisions to the project are proposed, or the circumstances surrounding the project have changed. This is valid as long as those changes or revisions do not result in any new or substantially more severe environmental impacts than were covered in the PEIR. This PSA proposes the inclusion of areas outside of the CalVTP treatable landscape, which constitutes a proposed change or revision to the originally certified PEIR. Each impact analysis in the PSA includes additional specific justification for inclusion of areas outside of the treatable landscape, which support an Addendum to the CalVTP PEIR. The impact analyses evaluate whether the later treatment project (project proposed for inclusion under the CalVTP PEIR), including an addition of geographic area, would result in significant impacts that would be substantially more severe than those covered in the CalVTP PEIR, or would result in any new impacts that were not analyzed in the PEIR.

In this case, the only change compared to the PEIR, is the inclusion of areas outside of the CalVTP treatable landscape. The PSA checklist (refer to Section 4, "Project-Specific Analysis") includes the criteria to support an Addendum to the CalVTP PEIR for the inclusion of these changes. The checklist evaluates each resource in terms of whether the project, including the "changed condition" of additional geographic area, would result in significant impacts that would be substantially more severe than those covered in the PEIR and/or would result in any new impacts that were not covered in the PEIR.

This PSA/Addendum and attachments together support the finding that the proposed project is within the scope of the CalVTP PEIR. Each resource topic below includes a discussion of impacts related to that resource area followed by discussions of SPRs and MMs that are applicable for avoiding, minimizing, and mitigating impacts for that resource area. Supplemental analysis and information supporting the impact discussions can be found in the corresponding attachments. A finding that a project is within the scope of the PEIR requires the following components:

- Description of the impact of the proposed treatment project
- Summary of the impact in the CalVTP PEIR
- Evidence the project impact is addressed by the PEIR
- CalVTP SPRs and MMs applicable to the proposed project
- Conclusion regarding consistency with the PEIR

This PSA includes a mitigation monitoring and reporting program (MMRP) (Appendix A) in accordance with CEQA and the State CEQA Guidelines (Public Resources Code Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097). A MMRP is required for approval of the proposed project because this PSA identifies potential significant adverse impacts and all feasible mitigation measures have been adopted. SPRs, environmental protection features included as part of the project description, have been incorporated into this project to avoid or minimize adverse effects. Where potentially significant impacts remain after application of SPRs, mitigation measures have been identified to further reduce and/or compensate for those impacts. The numbering of SPRs and mitigation measures follows the numbering used in the PEIR. The MMRP requirements covered in this PSA are described below.

- SPRs and MMs – Brief discussions indicating whether an SPR or MM is applicable to this project are included under each resource section below.
- Implementing Entity and Timing of Implementation – This identifies the agency responsible for implementing the measure and time frame in which the SPR or MM will be implemented for each applicable SPR/MM.

- Verifying/Monitoring Entity – This column identifies the party responsible for verifying and monitoring implementation of the SPR or MM.

The MMRP will be adopted by the MCRCD with regard to its discretionary approval of the proposed project. As this PSA is used for CEQA compliance of future discretionary approvals by other state and local agencies related to treatments in the project area, those agencies will adopt separate MMRPs that specify the SPRs and MM relevant to their approval and within their jurisdiction. The MCRCD will document and describe the compliance of the project treatment work with the required SPRs and MMs either by adopting a project-specific MMRP table or preparing a separate post-project implementation report pursuant to the requirements of SPR AD-7.

1.3 Project Location

The Tenmile Creek Watershed Forest Health Project is located in Mendocino County near Laytonville, CA. The total project area evaluated in the CalVTP PSA encompasses 1908 acres, however, initial and maintenance treatments (Phase I) are proposed to occur over 910 acres on 24 private parcels and one school district property. Phase II areas (987 acres) are planning only on three separate private ownerships and future treatments area anticipated on those areas when funding becomes available. As future funding becomes available, additional treatment areas may be proposed and amended through subsequent PSA approvals.

The project is located within the Cahto Peak, Laytonville, and Tan Oak Park USGS 7.5" quadrangles. It encompasses parts of Sections 3, 10, 13, 14, 15, 21, 22 in T21 N R15 W of the Mount Diablo Meridian (MDM); Sections 8, 9, 18, 19, 21, 22, 23, 33, 34 in T22 N R15 W of the MDM; and Sections 14, 15, 21, 22 in T22 N R16 W of the MDM.

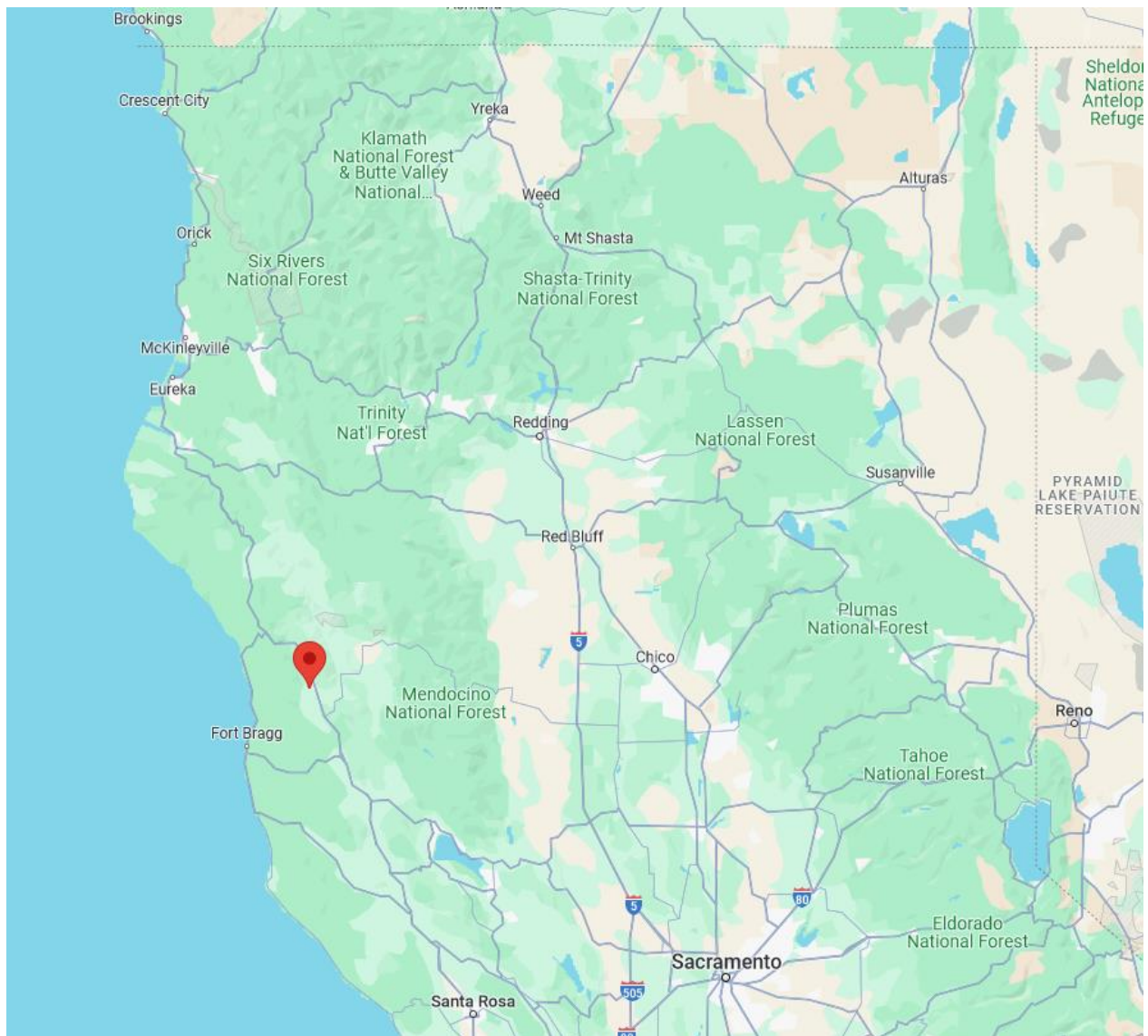


Figure 1: Regional vicinity map of Tenmile Creek Watershed, located in Mendocino County near Laytonville, California

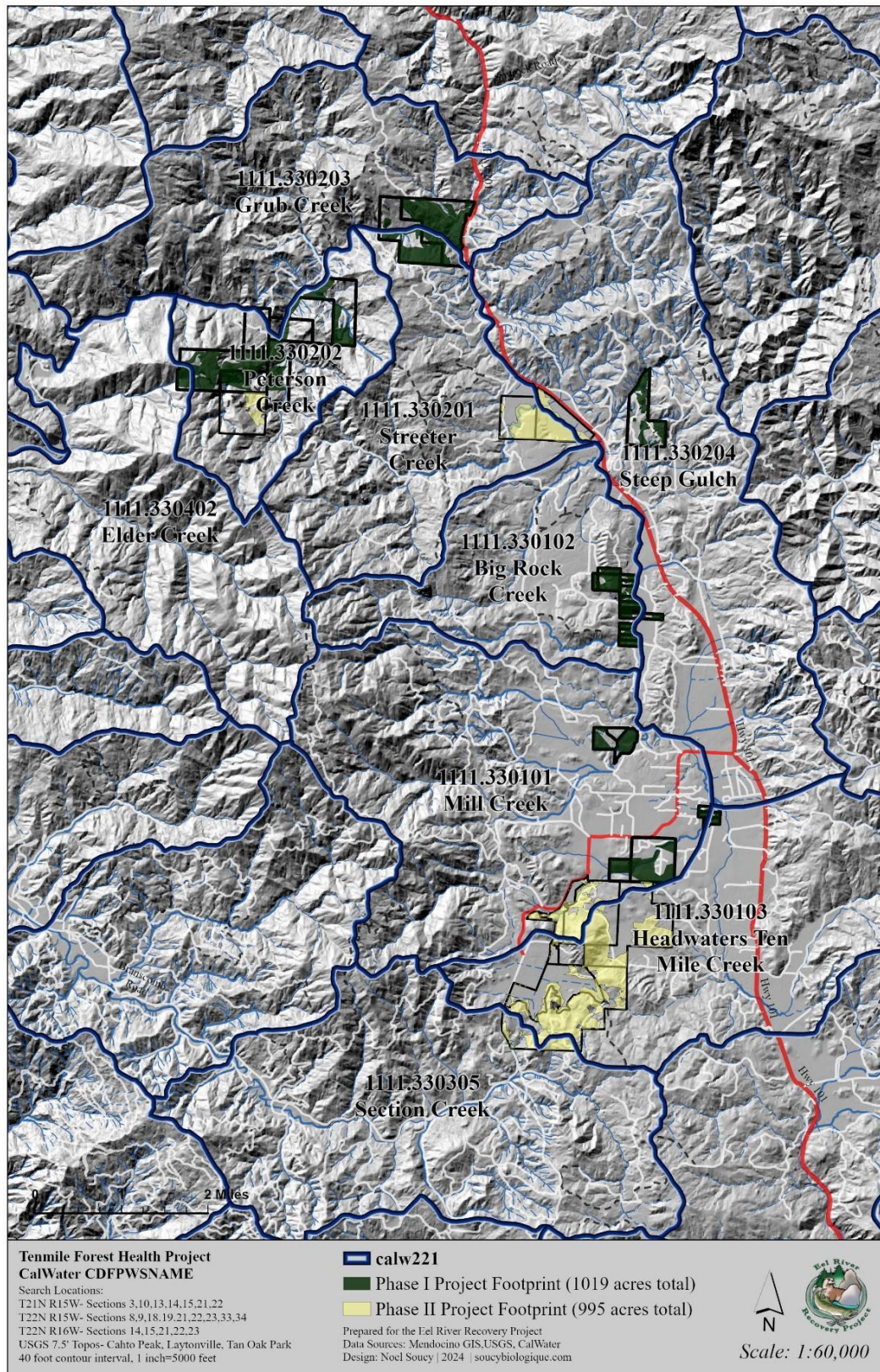


Figure 2: USGS project area map of Tenmile Creek Forest Health Project, located in Mendocino County near Laytonville, California

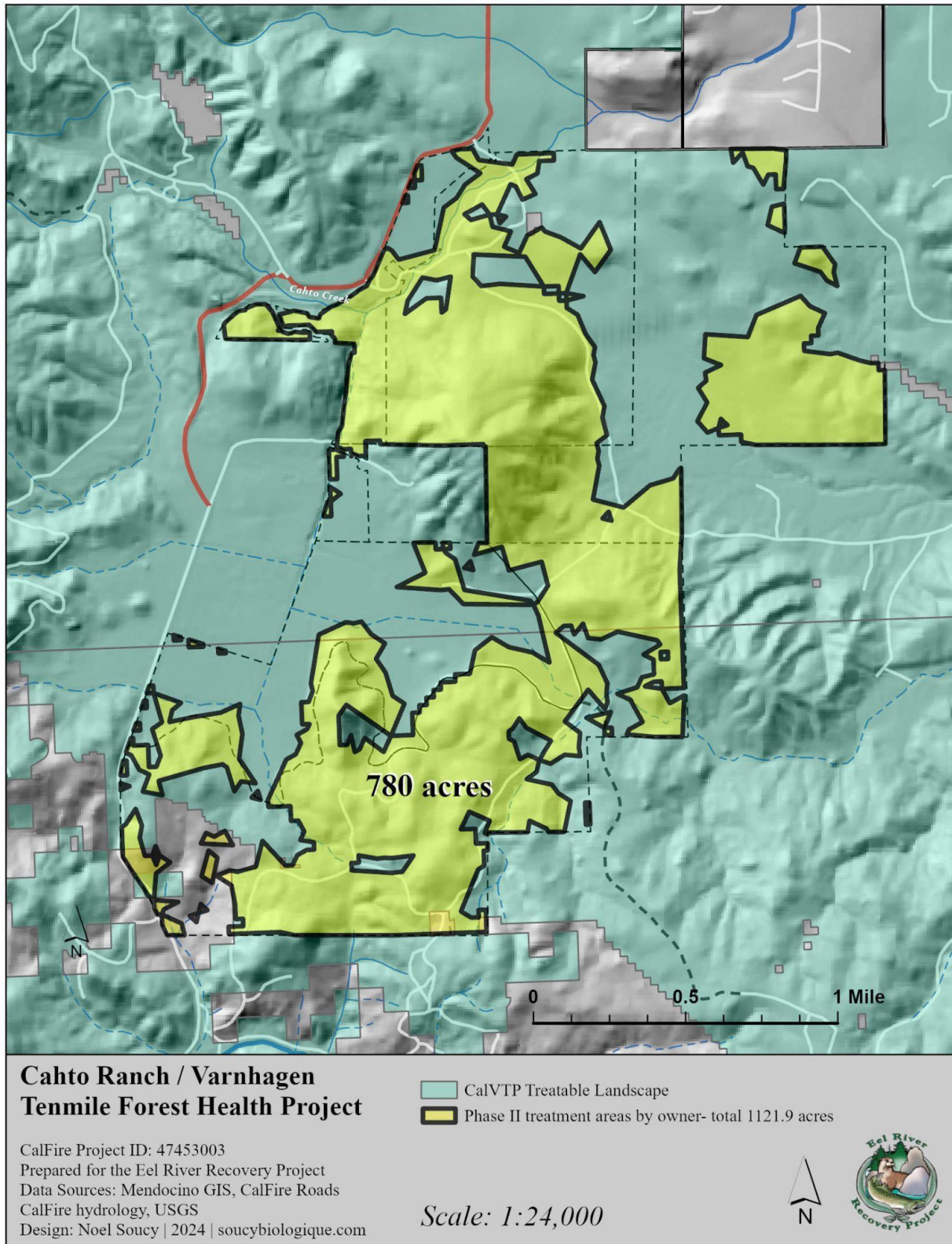


Figure 3: Phase II Cahto Ranch / Varnhagen Property

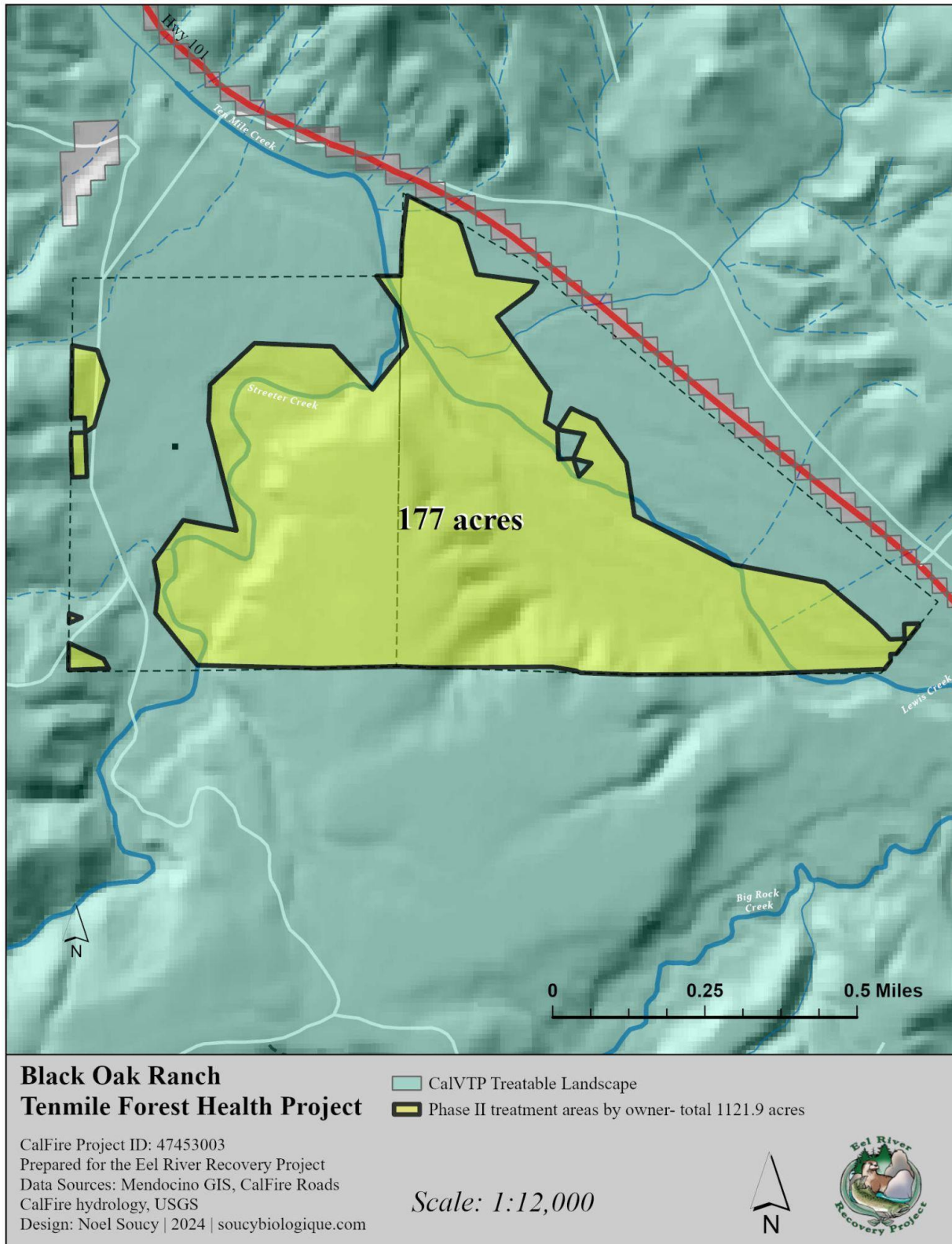


Figure 4: Phase II Black Oak Ranch Property near Laytonville, California

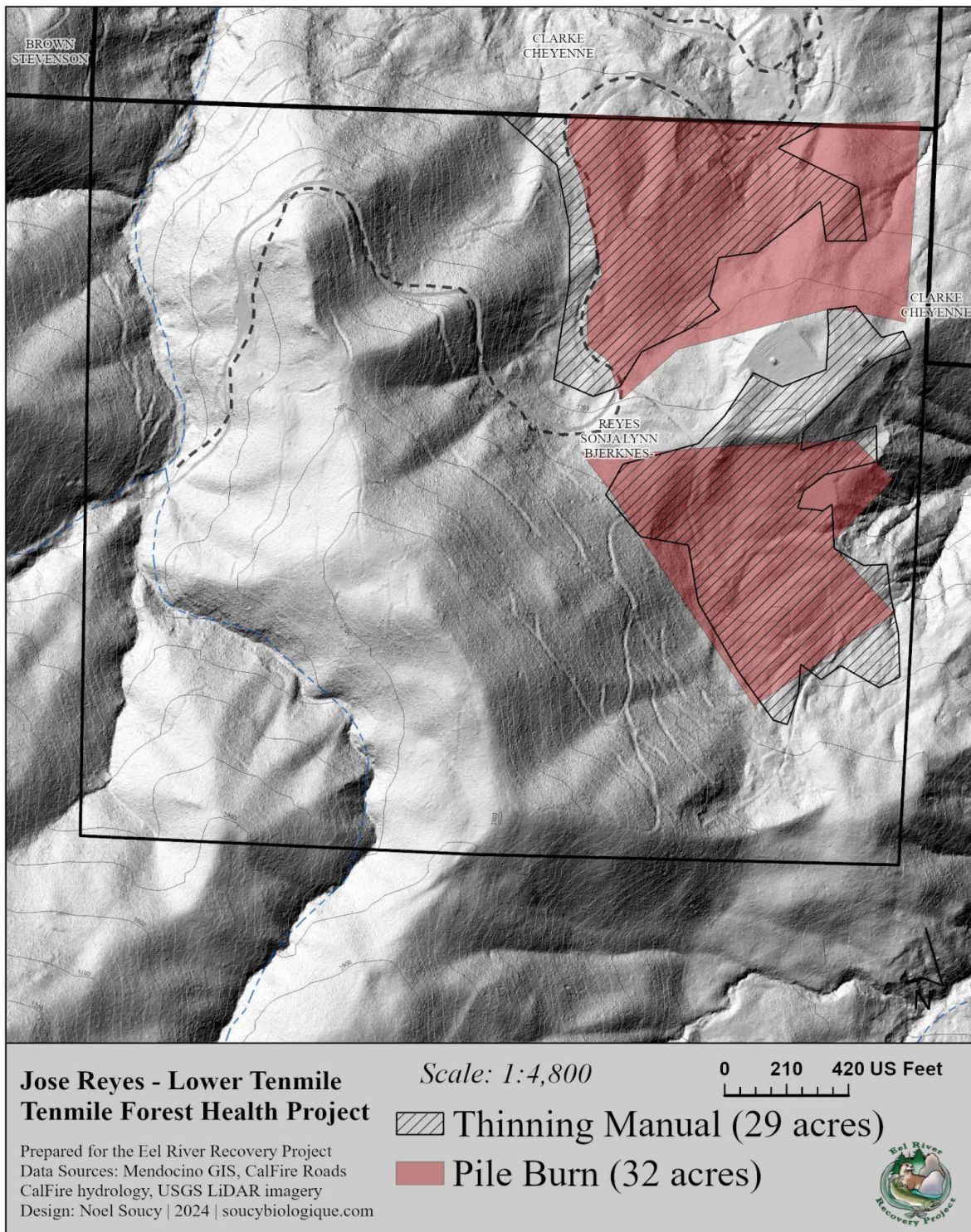


Figure 5: Phase II Reyes Property near Laytonville, California

1.4 Ecosystem Conditions

Project sites within the Tenmile Creek Watershed are located within the greater Eel River watershed, which is the ancestral lands of the Cahto People. The Cahto People likely heavily utilized the riparian corridor of Tenmile Creek for fishing and hunting, which runs through the area. They also likely managed upland areas to help oak woodlands and grasslands thrive to serve their cultural needs, maintaining them with fire and other traditional land management techniques. The area is now a combination of forested parcels with commercial conifers and hardwoods, grassland areas, and oak woodlands (Eel River Recovery Project, 2021a; Eel River Recovery Project, 2021b; Eel River Recovery Project, 2021c; Eel River Recovery Project, 2021d). Ground data collected in the West Tenmile parcels or Cahto Creek Trail parcels found that conifers are less than 160 years old; therefore, it is likely that Douglas fir and Ponderosa pine encroached on the area after cessation of burning and intensive early European and colonial American management (Eel River Recovery Project, 2021a).

The Project Area is dominated by forested habitats with developed areas and open grasslands mixed throughout. Forested portions of the project area consist of Montane Hardwood Conifer, Douglas-Fir, and Montane Riparian habitat types, as defined by the California Wildlife Habitat Relationships (CWHR) classification system. There are mature black oak and white oak trees in the forest within the Project Area. Some collaborating property owners have noticed major changes in vegetation over the past several years, including substantial expansion of Manzanita and conifer saplings and seedlings, mature trees showing signs of drought stress, and also increasing conifer mortality.

The project area is within the Sudden Oak Death (SOD) Zone of Infestation. SOD has been documented at the Triple Creek Ranch by Dr. Mike Jones, the University of California regional Forestry Advisor, during the course of this project. (Eel River Recovery Project, 2021c) This location is on the east side of the Tenmile Creek basin and only 7 miles from the Cahto Trail property. SOD is not known to exist elsewhere within the watershed although another positive detection was made in the Tenmile River area, 14 miles southwest of the Cahto Trail property (Eel River Recovery Project, 2021a). SOD presence was not observed during field work associated with the creation of the West Tenmile Forest Management Plan in 2021 (Eel River Recovery Project, 2021d). This does not mean it is absent, only that it was not observed in levels high enough to warrant notice. Tanoak is the most susceptible to SOD, but black oak is also susceptible. White oak trees are immune to SOD, while Madrone is susceptible generally to non-fatal foliage infection but can sometimes die from trunk cankers. California laurel is a foliar host, and noticeable symptoms beyond bleeding cankers include significant branch dieback.

2.0 Project Description

The Tenmile Creek Watershed Forest Health CalVTP Project covers 910 acres of non-industrial private and school district land, with the goal of enhancing forest health and ecological stability. Objectives include reducing fuel loads, restoring oak woodlands, enhancing soil moisture and fertility, restoring native grasses and hydrologic functions, and creating employment opportunities to provide local socio-economic benefits.

Key management actions include thinning overstocked forest areas, creating shaded fuel breaks, and applying pile and prescribed burns to reduce surface and ladder fuels (Agee and Skinner 2005), which will enhance ecosystem resilience and carbon storage. These efforts are designed to protect rural communities, promote biodiversity, and improve hydrological function. The project leverages local workforce for implementation, reinforcing community involvement and utilizing traditional ecological knowledge (TEK) from the Cahto Tribe to restore landscape health.

Mechanized treatments will occur predominantly on slopes less than 40% and averaging 30% throughout the project site. Operations may occur on slopes greater than 40% when traveling between treatment areas. Understory vegetation, brush, and shrubs that are under the drip lines of trees shall be cut and masticated,

leaving root systems intact for resprouting. All debris and material left by masticating equipment will be scattered throughout the treatment area. Manual treatment may include the use of chainsaws and/or other various hand mechanized or hand tools to prune trees and woody vegetation, buck (meaning to cut into smaller sizes and lengths) downed debris and materials, and to remove dead, dying, and diseased trees. Manual treatments may occur on slopes greater than 40% or where access of mechanized equipment is infeasible. Mechanized and hand treatments are planned to occur on 40 acres. As part of a CAL FIRE Forest Health Grant for the project, awarded in 2023, 38 acres of mechanized treatment and 881 acres of hand treatment are expected to occur between 2024 and 2028. The remaining areas of mechanized and hand treatment will occur as funding becomes available throughout the lifespan of this document and subsequent CEQA compliance approval. Additionally, prescribed broadcast burning and pile burning will be used to achieve similar treatment prescriptions, as described above. Broadcast burning will be used irrespective of localized-scale variations in slope and will aim to reimplement appropriate fire return intervals on 337 acres. Pile burning will also be utilized as a means of biomass removal or treatment on 510 acres.

2.1 Treatment Specifications

Fuel reduction treatments will be accomplished according to the following guidelines and specifications: All slash produced (branches, limbs, and treatment debris less than four inches in diameter) will be treated using one of the following methods:

- Chip or masticate adjacent (within 100') to roads, landings, building pads and other accessible portions of the treatment areas. Equipment includes power chippers, whereby material would be hand fed and chips would be blown onto the ground. Mastication involves reducing the size of residual down and dead material by grinding, shredding, or chopping material and leaving it on-site as mulch.
- Pile and burn: Pile and burn operations would occur where vehicle access is available. Piles will be placed on road sides and in appropriate locations throughout the units, utilizing existing openings and compacted ground as feasible. Piles will be created using hand crews.
- Lop and scatter: Lopping is the severing and spreading of slash so that no part of it remains more than 18 inches above the ground. Lop and scatter will be implemented by hand crews on steeper slopes and areas with limited access where chipping, mastication, and burning piles is not feasible.
- Pruning will reduce ladder fuels and improve wood quality. Prune residual trees by lopping low branches up to a minimum height of 8' (above the level of slash on the uphill side of the tree).
- Broadcast Burn: Understory burns would be implemented in accordance with a specific prescription and burn plan that defines the desired maximum flame lengths and fire spread rates based on the fuel types, weather, slopes, aspect, staffing levels, containment lines and strategies set out in a burn plan. Interior portions of prescribed fires may exceed the prescribed flame lengths planned at the control lines, but the overall prescription is designed to safely contain the fire within the planned fire perimeter. Burns could occur from January through December during which conditions would be conducive to burning targeted fuels. Broadcast burning may require the construction of new control lines or enhancement of existing control lines. This may include handlines, mow lines, and/or dozer lines.

Vegetation treatment work adjacent to defined watercourses will include the following Watercourse and Lake Protection Zones:

Water Class Characteristics or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for non-fish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	No aquatic life present, Watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high water flow conditions after completion of Timber Operations.
Water Class	Class I	Class II	Class III
Slope Class (%)	Buffer Zone Width (Feet)	Buffer Zone Width (Feet)	Buffer Zone Width (Feet)
<30	75	50	25
30-50	100	75	50
> 50	150	100	75

Table 2: Watercourse and Lake Protection Zones

Plants and trees of cultural significance will not be removed. This includes Pacific yew, sugar pine and big leaf maple.

2.2 Project Justification

The Tenmile Creek watershed has been identified as a high-priority location for forest health treatments due to the local area forest health impairments and potential for restoration activities. Furthermore, due to drought, and past land-use practices, many locations throughout the project area contain forest, shrubland, and grassland ecosystems that are now vulnerable to changing climatic regimes and the subsequent variable forms of disturbance that follow, including uncharacteristic large and high-intensity wildfire, drought, and pest and pathogen infestations. The ecologically restorative treatments proposed for this project build upon the opportunity presented by many of the ownership's Forest Management Plans and federal and state forest improvement projects that have ecosystem-driven forest health goals. Related activities will promote a mosaic of vegetation types, increasing the health and development of large overstory trees and the species that rely on them, and ultimately promoting a landscape equipped to adapt and persist with a changing climate.

In order to reduce wildfire risk and improve overall forest health and resiliency against future disturbance, the Eel River Recovery Project (ERRP) identified, discussed, and prioritized a varied and comprehensive management scheme with the overarching goal of thinning overly dense vegetation, and reimplementing targeted prescribed fire in the project area. The *Tenmile Creek Watershed Forest Health Project* includes a group of private landowners, school district land and the Cahto Tribe Rancheria within a regional landscape of forest, grassland, and shrubland ecosystems that could benefit from restorative treatments.

In addition to providing ecological benefit, these treatments also create opportunities for CAL FIRE and other fire suppression agencies to make informed decisions on when, where, and how to employ firefighting tactics in the event of a wildfire. With preexisting control lines and locations with reduced fuel loads, fire suppression agencies will have an opportunity to minimize ground disturbing activities utilizing tractors and other heavy equipment during suppression operations. Instead, suppression personnel will be afforded the opportunity to utilize minimum impact suppression tactics (MIST), such as back burning or backfiring to reduce fuel loads through targeted application of low intensity fire in advance of the high intensity flaming front. MIST techniques are represented on a spectrum and depend highly on fire activity, fuel conditions, weather, personnel/equipment availability, as well as several other variables. In general, techniques such as hand lines and back burning operations will have less detrimental environmental effects compared to suppression techniques utilizing heavy equipment or fire retardant. Suppression agencies may be better able to implement

MIST techniques in a safe manner when prior forest health/fuel reduction activities have been completed. Furthermore, CAL FIRE will be able to incorporate the control lines or previously treated areas within this project for future fire suppression efforts in a timely and informed manner during a wildfire.

Numerous resource protection measures are outlined in this CalVTP PSA for the Tenmile Creek Forest Health Project. These measures provide opportunities for significant avoidance, minimization, and mitigations, and are thoroughly evaluated in this PSA to understand the full extent of CEQA-compliance. Key measures include: biological and botanical surveys prior to project implementation, nesting bird and bat maternity roost surveys (if operations occur from February 1st to August 31st), no road building, no mechanized operations on slopes greater than 40%, no heavy equipment operations or vegetation treatments in proximity to watercourses, canopy and native vegetation retention requirements, control of invasive exotic species, mitigations to reduce the spread of forest pests and pathogens, the protection of sensitive archaeological and cultural resources, requirements to follow local policies and public noticing, and a pre-operational meeting with contractors to educate and advise them of key natural resource issues.

2.3.1 Treatment Types

Proposed treatment types consist of ecological restoration, wildland urban interface (WUI) fuel reduction, and fuel breaks. Each treatment type is described in more detail below and consistent with the treatment types described in the CalVTP PEIR. Refer to Figure 2-1 for the location of each treatment type.

Fuel Breaks (shaded)

In strategic locations, fuel breaks create zones of vegetation removal, often in a linear layout, that reduce wildfire risk and support fire suppression by providing responders with a staging area or access to a remote landscape for fire control actions. They can also provide safe emergency egress during wildfires. Fuel breaks will be shaded, meaning that primarily the understory vegetation will be removed while leaving a relatively intact canopy. Fuel breaks would: thin ladder fuels (i.e., hardwoods and conifers) less than 12 inches DBH; remove most small diameter (i.e., less than 12 inches DBH) trees where larger (i.e., greater than or equal to 12 inches DBH) conifers and oaks exist;

- thin areas where only small diameter trees are present to an average of 24 feet between trees;
- reduce ground fuels to less than 5 tons per acre by prescribed fire, pile burning, chipping, lop and scatter or mastication;
- prune up lower branches of trees up to 8 feet;

Ecological Restoration

Ecological restoration treatments would be designed to reduce wildfire risk, enhance natural processes, and increase forest health. Ecological restoration treatments would occur in several vegetation types: conifer forest, hardwood forest and oak woodland. Species preference (i.e., tree species that would be retained) will vary, but in general will include black oak (*Quercus kelloggii*), incense cedar (*Calocedrus decurrens*), sugar pine (*Pinus lambertiana*), and large ponderosa pine (*Pinus ponderosa*) and Douglas fir (*Pseudotsuga menziesii*). Some excess woody material may be utilized for erosion control in mapped and designated active gullies or headwall swales, or Class III watercourses. A PSA addendum has been provided for this type of ecological restoration treatment.

Wildland-Urban Interface Fuel Reduction

WUI fuel reduction treatments would be designed to reduce wildfire risk, improve forest health, and encourage sustainable species mix. Activities implemented within the WUI fuel reduction treatment type would primarily occur outside of the 100-foot defensible space requirements described in Public Resources Code (PRC) 4291.

Treatments would vary slightly depending on the vegetation type being treated. WUI fuel reduction treatments would:

- thin ladder fuels (i.e., hardwoods and conifers) less than 12 inches DBH;
- remove all small diameter (i.e., less than 12 inches DBH) trees where larger (i.e., greater than 12 inches DBH) conifers and oaks exist;
- thin areas where only small diameter trees are present to an average of 24 feet between trees;
- preferentially remove trees with mistletoe infections, sooty mold, conks or other signs of rot, broken tops, or other damage;
- remove all down logs outside 100 feet but within 300 feet of homes;
- remove all shrubs outside 100 feet but within 300 feet of homes;
- reduce ground fuels to less than 5 tons per acre by prescribed fire, chipping, or mastication;
- prune up lower branches of trees up to 8 feet;

2.3.2 Treatment Activities

Hand thinning, mechanized thinning, prescribed broadcast, and pile burning techniques are all proposed to be utilized for this project. The proposed project also includes 1,908 acres of manual and mechanical vegetation treatments under the CalVTP Fuel Break Treatment Type. The various fuel break treatment types are described below and shown in Figures 2.

2.3.3 Prescribed Fire and Cultural Fire

Prescribed burning, including pile burning and broadcast burning, is proposed for approximately 847 acres of the private land within the Project area. Prescribed fire and cultural fire treatments include applying fire to the landscape to reduce fuel loads, create heterogeneous and diverse vegetated landscape, maintain cultural practices of indigenous communities, and/or promote healthy ecosystem processes, such as water storage and pest control. Distinguished from prescribed fire, cultural fire is the intentional application of fire to the land by an Indigenous person or cultural group (e.g., family unit, Tribe, clan/moiety, or society) to achieve cultural goals or objectives based on Tribal or Traditional Indigenous law (Lake and Long 2014). Cultural burns will take place on the Cahto Tribe Rancheria, but that is covered separately as part of a parallel NEPA process.

Prescribed burning will be strategically implemented under the supervision of a qualified Burn Boss across the most vulnerable stands to diminish surface and ladder fuels while enhancing the resilience of individual stems and the broader ecosystem. This process will be governed by detailed burn plans crafted by the Burn Boss, including a Smoke Management Plan coordinated with the North Coast Unified Air Quality Management District and local CAL FIRE unit permits. Burn units will be delineated by natural landscape features such as roads and watercourses, optimizing control efforts and managing smoke dispersion based on daily conditions. Both broadcast and pile burning techniques will be employed when environmental conditions align with our resource management objectives outlined in the burn plan. These controlled burns aim to decrease surface fuel loading by 25-85% and reduce understory woody vegetative cover by 15-65%, relative to pre-burn levels. The overarching goals of our prescribed burning activities are to lower the risk of high-intensity wildfires, promote the growth of woody shrubs, oaks, and conifers, enhance water yields, and support the restoration of meadows and oak habitats. Additionally, these efforts will focus on the revival of native grasses by curbing invasive, non-native species, and mitigating conifer encroachment into oak woodlands and grasslands (Cocking et al. 2012). Proposed treatments would occur predominantly in tree fuel types with a shrub fuel type component in the understory, as described in the CalVTP Final PEIR Section 2.4.1.

Pile Burning

This project proposes to implement pile burning as described in the PEIR (CalVTP Final PEIR Volume II Section 2.5.2, page 18) on 461 acres. Piling is the placing, laying, heaping or stacking of slash into piles for later burning during appropriate environmental conditions. Pile burning can be used as a means of reducing fuel load, as well as to restore and maintain appropriate fire regimes. The project proposes to utilize pile burning in locations where access to mechanical equipment is infeasible or as an alternative to mechanical removal of biomass.

Prescribed pile burning will be conducted according to precise specifications to ensure environmental compliance and safety. Biomass resulting from manual treatments will be gathered by hand crews and organized into piles for burning in designated areas that typically lack a live overstory and are outside of Watercourse and Lake Protection Zones (WLPZs). To minimize disruption and ensure safety, all piles will be strategically placed within the boundaries of the treatment units, away from roadways, critical control areas, standing snags, large downed logs, private property boundaries, and power lines, maintaining a minimum distance of 15 feet where applicable. Additionally, no piles will be constructed in stream exclusion zones.

To prepare for burning, each pile will be compacted to minimize air spaces, with limbs, stems, and other debris laid tightly together. The piles will be covered with waxed paper tarps provided by the district to protect against moisture and ensure a controlled burn. These tarps will cover at least one-third of the pile's surface area and be anchored securely to prevent displacement by wind. Care will be taken to ensure that the material does not protrude from the pile's general contour, with any excess being trimmed and returned to the pile. The spacing between piles will be maintained at one and a half times the height of the pile to further enhance safety and control during the burning process. Special caution will be exercised near power and phone lines to avoid the risk of interference with utility services.

Broadcast Burning

This project proposes to utilize broadcast burning as described in CalVTP PEIR Section 2.5.2 on 386 acres. Broadcast burning will be utilized to reduce fuels over a large area, irrespective of equipment access, slopes, or other factors prohibiting the use of other methods. The general goals for broadcast burning will be to reimplement appropriate fire regimes, reduce the continuity of dead, downed, and overly dense fuels, raise the canopy of mid and overstory trees to decrease vertical fuel continuity, reduce duff and litter depths, improve habitat for native perennial bunchgrass, and reduce conifer encroachment in oak woodlands.

Understory burns would be implemented in accordance with a specific prescription that defines the desired maximum flame lengths and fire spread rates based on the fuel types, weather, slopes, aspect, staffing levels and containment lines and strategies set out in a burn plan. Interior portions of prescribed fires may exceed the prescribed flame lengths planned at the control lines, but the overall prescription is designed to safely contain the fire within the planned fire perimeter. Burns could occur from January through December during which conditions would be conducive to burning targeted fuels. Broadcast burning may require the construction of new control lines or enhancement of existing control lines, which may include handlines, mow lines, and/or dozer lines.

Broadcast burning will be overseen by a qualified Burn Boss and ignition will be conducted with handheld devices such as drip torches, fusees, and flare guns). Broadcast burning would require between 5 and 50 crew members, depending on size and site characteristics of the burn unit. Typically, each burn would last 1 day to 2 weeks. Equipment could include water trucks, fire engines, water pumps, dozers, all-terrain vehicles (ATVs), utility terrain vehicles (UTVs), hand tools, leaf blowers, weed trimmers, drip torches, and chainsaws. All burning will occur in accordance with regulations regarding the use of prescribed burning. This would include the preparation and implementation of a burn plan that includes a smoke management plan, where applicable. More detailed information on pile and broadcast burning can be found in the Environmental Checklist below.



Figure 6: Pile burning examples, Scott River (Left) Ruth Lake, CA (right)

2.3.4 Forest Fuels Reduction (Thinning)

Forest fuels reduction is proposed for approximately 1,908 acres of the Project area. Forest fuels reduction consists of treating understory trees and brush with the goals of reducing fire hazards, improving tree growth, stabilizing carbon in retained trees, and increasing forest resilience to high intensity wildfire disturbances. Forest thinning activities can be manual or mechanical and must be designed to change stand structure to: 1) concentrate carbon storage in widely-spaced and larger trees that are more resilient to wildfire, drought, and pest outbreaks; 2) reduce the likelihood of wildfire transitioning into the forest canopy; and 3) provide co-benefits such as fish and wildlife habitat, increased biodiversity, increased stream base-flows and wildlife. Conifers that are overtopping deciduous oak trees may be girdled (to create a wildlife snag) instead of removal if removal or felling could damage to residual oak trees. Thinning stands will reduce tree stem density while increasing the quadratic mean diameter (QMD) of the remaining trees.

Fuel Break

This project proposes to include shaded fuel break treatment types in areas where flammable vegetation can be treated or modified to reduce fire spread to structures and natural resources, while providing strategic locations for firefighters to employ fire suppression techniques as defined by the PEIR (CalVTP Final PEIR Volume II Section 2.5.1, pages 11-14). Proposed activities will increase canopy height from the forest floor to the base of tree crowns by pruning branches, reduce the amount of woody debris directly below trees, and remove small trees and brush that could act as ladder fuels, carrying fire into the canopy. Fuel reduction treatments will be accomplished according to following guidelines:

- Saplings and seedlings will be removed adjacent to co-dominant and dominant trees to allow for additional growing space.
- Trees with the most desirable phenotypes will be retained, i.e. full crowns, fast growing, and disease-free.
- Trees preferred for removal will be those exhibiting signs of poor growth or containing disease.
- Dense shrub cover will be broken up for purposes of removing fuel continuity.
- In open areas, residual trees will be left for stocking, with a preference for retaining oak species.
- Residual trees will be pruned by lopping low branches up to a minimum height of 8' (above the level of slash on the uphill side of the tree).

- All slash produced (branches, limbs, and treatment debris less than four inches in diameter) will be treated using one of the following methods:
 - Chip or masticate adjacent to roads and other accessible portions of the treatment areas. Care should be taken not to pile chipped material against the base of remaining trees. Equipment includes power chippers whereby material would be hand fed and chips would be blown into the forest understory. Mastication involves reducing the size of forest vegetation and downed material by grinding shredding or chopping material and leaving it on-site as mulch.
 - Pile and burn: slash piles for burning should be located away from residual trees and structures. Pile and burn operations would occur where vehicle access is available along existing ranch roads utilizing existing openings and compacted ground as feasible.
 - Lop and scatter: lopping is the severing and spreading of slash so that no part of it remains more than 18 inches above the ground. Hand crews will lop and scatter vegetation on steeper slopes and areas with limited access where chipping, mastication, and burning piles is not feasible.

During the creation of this PSA, CAL FIRE has changed its terminology and no longer recognizes Shaded Fuel Breaks as a treatment type. Therefore, ERRP reclassified Shaded Fuel Break areas into Forest Thinning and Oak Woodland Restoration. The latter includes removing competing conifer species and other vegetation crowding oak trees and increasing fuel loads, but uses similar methods to Forest Thinning.

2.3.5 Invasive Plant Removal

Invasive plant removal is proposed for the project area where concentrations of invasive plants such as Scotch broom area are observed within coincident mapped forest health treatment areas (thinning, burning, etc.). The areas of invasive plant occurrence within the project area have not been measured. Invasive plant removal will be performed through manual and mechanical means.

Manual Treatment

Manual treatments may utilize chainsaws, loppers, pruners, or other hand-operated equipment to cut, or prune woody species as described in the CalVTP PEIR Section 2.5.2. An integrated pest management approach, using manual hand treatments to remove invasive species such as, but not limited to, Himalayan Blackberry, Scotch Broom, Spanish Broom, French Broom, and other non-native species occurring in the project area. Manual treatments include the use of hand tools and hand-operated power tools to cut, clear, or prune herbaceous or woody species. Manual activities may operate on slopes greater than 50% as needed and will adhere to the following specifications.

Selection of Cut Trees and Treatment of Slash

In existing forest stands, thin dead, dying and diseased conifers and select live conifers <12" DBH will be selected for treatment. Healthy conifers selected for retention that are <12 inches DBH will achieve a 10 - 20 foot spacing from bole to bole and 100-200 trees per acre where feasible. Where stands are composed solely of conifers <12 inches DBH, these stands will be spaced approximately 25 feet apart from bole to bole.. Thinning conifers >12"DBH that are not shipped to a sawmill will be lopped and scattered to a depth of less than 18". Downed logs should have good contact with the soil to facilitate decomposition. Some conifers >16" DBH may be girdled within oak woodlands or adjacent to white oak and black oak trees, if the conifers are in direct competition with oaks or damage to oaks could potentially occur during conifer felling and removal. Some conifers >16" DBH in tanoak-dominated areas may be girdled to improve acorn production and habitat. After treatment, tree stump heights shall be no more than 12 inches high as measured on the uphill side or 4 inches above natural obstacles (i.e. logs, rocks).



Figure 7: Tenmile Creek. Untreated dense timber stand on the left. Treated (thinned) area on right. proposed for thinning.

Treatment of Brush and Invasives

Approximately 70% of the understory brush will be cut and piled. Islands of brush may be left if they do not contribute to horizontal or vertical fuel continuity in an effort to provide habitat for wildlife. For the purpose of this project, oaks are NOT considered brush. All brush shall be cut within 4 inches of the ground or 4 inches of obstacle (i.e. rocks, down logs). Invasive exotic plants will be removed with hand tools.

Pruning

Remaining trees will be pruned to a height of at least 8 feet but never remove more than 30 percent of the crown. Pruned material will be hand piled or lopped and scattered.

Hand Piling

Material less than 10" diameters will be piled. Piles will be located outside the drip line of desirable trees. No piles will be constructed on slopes greater than 40%. Piles should be located outside the dripline of overstory trees where possible, and at least 20 feet from the edge of the project area. If piles cannot be located outside of drip line, then they must be at least 20 feet from the bole of any leave tree, and pile size may be decreased to prevent damage to residual stand (i.e. scorching). Where openings exist that will accommodate a larger pile, large piles are preferred. Piles size may not decrease to less than 4 feet in diameter. Piles shall be compact with a maximum diameter of 10 feet and maximum height of 6 feet. Piles will be constructed with boles and limbs laid parallel to slope to reduce roll-out and to maintain compactness. No material shall extend from the general perimeter of the pile more than 18 inches. No piles will be created within Watercourse Protection Zones.



Figure 8: Examples of hand crews conducting manual vegetation removal.

Trees, Shrubs and other Plants to Be Left Untreated

To maintain habitat function for special-status wildlife, the following features would be retained within all treatment areas:

- Healthy, native hardwoods greater than 16" DBH and all riparian vegetation.
- Downed woody debris in strategic locations to maintain forest floor complexity while reducing fuel connectivity;
- Any activities conducted within a riparian corridor will be conducted to avoid alteration to a bed, channel, or bank of a waterway and all debris, including sawdust, chips, or other vegetative material, will be prevented from entering the bed, channel, or bank of a waterway.
- In forest habitats determined to be occupied by Northern spotted owls through implementation of surveys under SPR BIO-10, treatments would be designed to reduce canopy cover by no more than 20 percent from existing conditions, and a minimum of 60 percent canopy cover would be retained.
- Retain large snags up to two per acre beyond 300 feet from homes (with a preference for the largest snags that exhibit the form and decay characteristics favored by wildlife) unless the snags pose a hazard to implementation or personnel.

Mechanical Treatment

As stated in the CalVTP PEIR Section 2.5.2, mechanical treatments are designed to cut, uproot, crush/compact, or chop target vegetation. Additionally, the PEIR also states that mechanical treatments may be the best tool to restore a healthy forest canopy when a high level of control is required for the situation (CalVTP Final PEIR Volume II Section 2.5.2, page 23).

Mastication

Masticators are typically low-ground pressure tracked vehicles, such as a skid steer with a forward-mounted drum-like attachment with external masticating teeth used to cut and shred woody material and live vegetation. Excavators may also be employed, utilizing a smaller masticating head (drum or rotary), which attaches to the boom. Limited mastication within some treatment units would occur on slopes less than ~50 percent and where previous salvage logging has occurred. Cutting brush and small trees within road prisms cut and fill slopes greater than 35 percent may be accomplished by an excavator masticator (while positioned in the road) in lieu of cutting and chipping. Dead standing vegetation generally less than 12-inch DBH may be masticated to reduce ladder fuel and achieve desired tree spacing. Similarly, mastication may be applied to treat re-sprouting brush, regrowth, and fallen debris to maintain desired conditions. Masticator mechanical work is a treatment type considered within the scope of the PEIR.

Chipping

Roadside mechanical cutting and chipping of existing surface fuels and slash created from tree felling and yarding. Existing surface fuels, thinning and pruning residue, and cut brush would be pulled to forest roads and chipped into small pieces using a chipper. Chipping residue would be distributed back into the treatment unit, utilized for biomass, or utilized as a cover to reduce the risk of invasive plant establishment at landings and roads.

The project is within an area that the Board of Forestry and Fire Protection has declared a Zone of Infestation or Infection for sudden oak death (SOD) pursuant to Public Resources Code § 4716 (Lee 2009). Common SOD host species include Douglas-fir (*Pseudotsuga menziesii*), bay laurel (*Umbellularia californica*), huckleberry (*Vaccinium ovatum*), and big leaf maple (*Acer macrophyllum*), will not be removed from the regulated area unless appropriate state and federal permits are obtained. As described in the PEIR (CalVTP Final PEIR Volume II Section 2.5.2, pages 23-24), biomass will be disposed of utilizing a combination of methods.

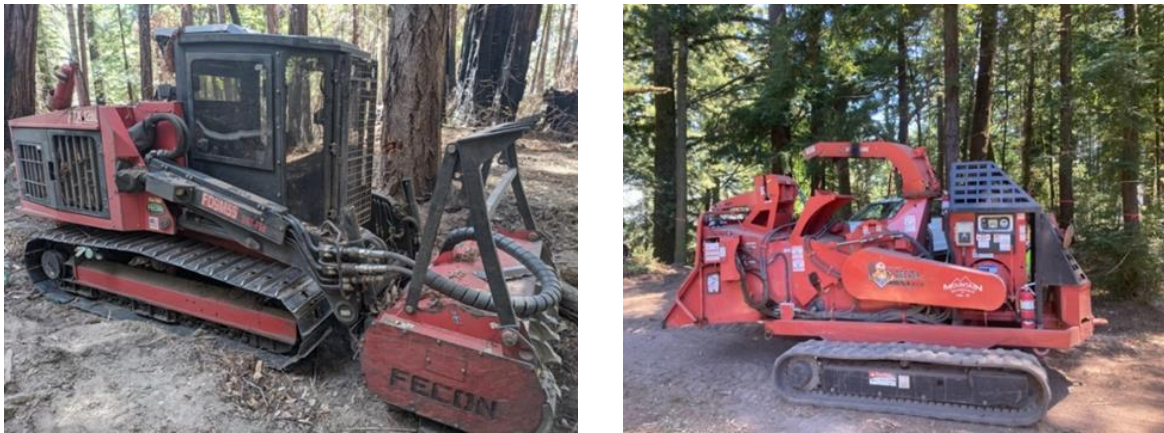


Figure 9: Examples of Mechanized Equipment – Fecon FTX 128 Series compact track loader with masticating head attachment (left). Morbark Beaver M15R tracked chipper (right)



Figure 10: Example of Mechanized Equipment – Link-Belt 145 x 4 excavator with masticating head attachment.

Treatment Maintenance

Maintenance, or retreatment, of the areas treated under the proposed project could include the same treatment types (i.e., ecological restoration, WUI fuel reduction, shaded fuel breaks) and treatment activities (i.e., prescribed burning, mechanical treatments, manual treatments) as described above for the initial treatments. Retreatment would be dependent on regrowth conditions and would differ by location. However, retreatment is anticipated to occur between 5 and 10 years. ERRP is helping organize volunteers to assist with prescribed burns in the hope that there will be on-going stewardship with community participation into the future.

Prior to implementing a maintenance treatment, the project proponent will verify that the expected site conditions as described in the PSA/Addendum are present in the treatment area. As time passes, the continued relevance of the PSA/Addendum will be considered by the project proponent in light of potentially changed conditions or circumstances. If environmental conditions evolve or project approaches change to the degree that the project proponent finds new or substantially more severe impacts may occur, the project proponent will determine whether a new PSA/Addendum or other environmental analysis is warranted.

In addition to verifying that the PSA/Addendum continues to provide relevant CEQA coverage for treatment maintenance, the project proponent will update the PSA at the time a maintenance treatment is needed when more than 10 years have passed since the approval of the PSA/Addendum or the latest PSA/Addendum update. For example, the project proponent may conduct a reconnaissance survey to verify conditions are substantially similar to those anticipated in the PSA/Addendum. Updated information should be documented.

3.0 ENVIRONMENTAL CHECKLIST (EC)

VEGETATION TREATMENT PROJECT INFORMATION

1. **Project Title:** Tenmile Creek Watershed Forest Health Project
2. **Project Proponent Name and Address:** Mendocino County Resource Conservation District
410 Jones Street Ste C-3 Ukiah, CA 95482
3. **Contact Person Information and Phone Number:** Joe Scriven, MCRCD
joe.scriven@mcrcd.org
(707) 245-2314
Pat Higgins Eel River Recovery Project
phiggin@sonic.net
(707) 839-4887
4. **Project Location:**

The project is located in Tenmile Creek watershed
Approximately 2 miles west of Laytonville, CA
Cahto Peak, Laytonville, and Tan Oak Park
USGS 7.5" quadrangle including portions of:
3,10,13,14,15,21,22, T21N R15W- MDMB
8,9,18.19.21,22,23,33,34 T22N R15W- MDMB
14,15,21,22, T22N R16W- MDMB
Latitude (Y): 39.770801 N
Longitude (X): -123.554373
Refer to Attachment X, maps X and X

The project includes portions of the following
CALWATER State Planning Watershed: Version
2.21.:

 - Big Rock Creek 1111.330102
 - Woodman Creek 1111.420102
 - Peterson Creek 1111.330202
 - Streeter Creek 1111.33020`
 - Grub Creek 1111.330101
 - Mill Creek 1111.330101
 - Headwaters Tenmile Creek 1111.330103

CDFPWSNAME	CALWNUM	watershed acreage	Phase I Treatment acreage	Phase II Treatment acreage
Big Rock Creek	1111.330102	3618	132	0
Elder Creek	1111.330402	6109	27	0
Grub Creek	1111.330203	5969	151	0
Headwaters Ten Mile Creek	1111.330103	7145	12	574
Mill Creek	1111.330101	8442	60	142
Peterson Creek	1111.330202	2834	340	38
Section Creek	1111.330305	8129	0	62
Steep Gulch	1111.330204	9113	79	32
Streeter Creek	1111.330201	4730	111	146

Table 3: Project area by Cal Watershed Planning Unit Version 2.21

5. Total Area to be Treated (acres): up to 1,908 acres

6. Description of Project:

The *Tenmile Creek Watershed Forest Health CalVTP Project* covers 1,908 acres of non-industrial private land with the goal of enhancing forest health and ecological stability. Objectives include reducing fuel loads, restoring oak woodlands, enhancing soil moisture and fertility, restoring native grasses and hydrologic functions, and creating employment opportunities to boost local socio-economic benefits.

Key management actions include thinning overstocked forest areas, creating shaded fuel breaks, and applying pile and prescribed burns to reduce surface and ladder fuels, while enhancing ecosystem resilience and carbon storage. These efforts are designed to protect rural communities, promote biodiversity, and improve water yields.

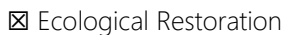
Treatment Types [see description in CalVTP PEIR Section 2.5.1, check every applicable category; provide detail in description of Initial Treatment]



Wildland-Urban Interface Fuel Reduction

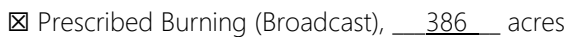


Fuel Break



Ecological Restoration

Treatment Activities [see description in CalVTP PEIR Section 2.5.2, check every applicable category; include number of acres subject to each treatment activity, provide detail in description of Initial Treatment]



Prescribed Burning (Broadcast), 386 acres



Prescribed Burning (Pile Burning) 461 acres



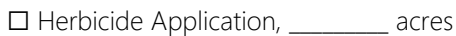
Mechanical Treatment, 38 acres



Manual Treatment, 1,908 acres



Prescribed Herbivory, _____ acres



Herbicide Application, _____ acres

a. Treatment Maintenance

Treatment Types [see description in CalVTP PEIR Section 2.5.1, check every applicable category; provide detail in description of Treatment Maintenance].

Prior to implementing a maintenance treatment, the project proponent will verify that the expected site conditions as described in the PSA are present in the treatment areas. Over time, the continued relevance of the PSA will be considered by the project proponent in consideration of potentially changed conditions or circumstances. Where the project proponent determines the PSA is no longer sufficiently relevant to the on the ground conditions, the project proponent or sponsor will determine whether a new PSA or other environmental analysis is warranted.

Geographic Scope

- ☐ The treatment area is entirely within the CalVTP treatable landscape
- ☒ The treatment area is NOT entirely within the CalVTP treatable landscape

The CalVTP Treatable Landscape boundary was digitally developed at a large scale, which did not allow for high resolution mapping. As a result, areas were dis-included from the treatable landscape, even though the vegetation is very similar to the surrounding vegetation within the treatable landscapes. The scattered acres outside of the CalVTP treatable landscape is due to the method by which the CalVTP treatable landscape was digitally developed and the resultant degree of mapping resolution. For this project, the surrounding areas that appear to be excluded from the treatable landscape due to the method by which they were grouped and excluded from the treatable landscape essentially have the same habitat types as those within the treatable landscapes. It is a logical conclusion that the environmental analysis in the PEIR areas need treatment, as they provide fuel ignition and transfer fire to the "treatable landscapes." Additionally, the entire project area is within the SRA and the vegetation is not a wet meadow, estuary, or other non-fire prone area excluded from the treatable landscape. Therefore, the environmental analysis in the PEIR is applicable to the entire project area due to the similarities of the areas within and outside of the treatable landscape.

Use of the PSA for Treatment Maintenance

Maintenance or retreatment of areas treated under the proposed project may involve the same methods and activities used in the initial treatments, including WUI fuel reduction, shaded fuel breaks, prescribed burning, mechanical treatments and manual treatments. Retreatment intervals, ranging from 5 to 10 years, will depend on regrowth conditions and vary by location. Before implementing maintenance treatments, the project proponent will confirm that the expected site conditions, as detailed in the PSA/Addendum, are present. As conditions change over time, the relevance of the PSA/Addendum will be reassessed. If environmental conditions or project approaches change significantly, potentially resulting in new or more severe impacts, the project proponent will evaluate the need for a new PSA/Addendum or additional environmental analysis.

7. Regional Setting and Surrounding Land Uses: (Briefly describe the project's surroundings)

Physical

The *Tenmile Creek Watershed Forest Health Project* is located in unincorporated Mendocino County near Laytonville, CA. Within the project site are a variety of private rangeland, remote residential, agricultural, and forest lands.

Vegetation

Forested portions of the project consist of Montane Hardwood Conifer, Douglas-Fir, and Montane Riparian CWHR habitat types. Tree species present within the project include tanoak, Douglas-fir (*Pseudotsuga menziesii*), Pacific madrone (*Arbutus menziesii*), California bay laurel (*Umbellularia californica*), canyon live oak (*Quercus chrysolepis*), ponderosa pine (*Pinus ponderosa*), California black oak (*Quercus kelloggii*), Oregon white oak (*Quercus garryana*), bigleaf maple (*Acer macrophyllum*), white alder (*Alnus rhombifolia*), and Oregon ash (*Fraxinus latifolia*). Species present within the shrub and herbaceous layer include poison oak (*Toxicodendron diversilobum*), evergreen huckleberry (*Vaccinium ovatum*), blue blossom (*Ceanothus thyrsiflorus*), whitethorne

(*Ceanothus incanus*), red-flowering currant (*Ribes sanguineum*), sword fern (*Polystichum munitum*), and California blackberry (*Rubus ursinus*). Forested areas are generally dominated by dense stands of tanoak and Douglas-fir, with intermittent Pacific madrone.

8. Other Public Agencies Whose Approval is Required: (e.g., permits)

A qualified Burn Boss will prepare a smoke management plan will for the Mendocino County Air Quality Management District. The Burn Boss will also obtain permits from the California Department of Forestry and Fire Protection regional office.

Coastal Act Compliance

- ☒ The proposed project is NOT within the Coastal Zone
- ☐ The proposed project is within the Coastal Zone (*check one of the following boxes*)
 - ☐ A coastal development permit been applied for or obtained from the local Coastal Commission district office or local government with a certified Local Coastal Plan, as applicable
 - ☐ The local Coastal Commission district office or local government with a certified Local Coastal Plan (in consultation with the local Coastal Commission district office) has determined that a coastal development permit is not required

9. Native American Consultation. *For treatment projects that are within the scope of the CalVTP PEIR, AB 52 consultation for AB 52 compliance has been completed. The Board of Forestry and Fire Protection conducted consultation pursuant to Public Resources Code section 21080.3.1 during preparation of the PEIR. For treatment projects with impacts not within the scope of the PEIR, pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, project proponents preparing a new negative declaration, mitigated negative declaration, or EIR must notify any California Native American tribe who has submitted written request for notification of a project in the area of the treatment site. Upon written request for consultation by a tribe, the project proponent must begin consultation before the release of the environmental document and must follow the requirements of the cited PRC sections.*

Consistent with SPR CUL-2, Roscoe and Associates Cultural Resources Consultants (RA) obtained an updated Native American contact list from the Native American Heritage Commission (NAHC) on January 24, 2024. On February 05, 2024, letters inviting consultation regarding the proposed project were emailed or sent via the United States Postal Service to the 19 tribal representatives indicated by NAHC. Responses were received from the Sherwood Valley Tribe and the Cahto Tribe. On February 05, 2024, Tribal Historic Preservation Officer (THPO) Valarie Stanley for the Sherwood Valley Tribe sent an email stating that the Tribe would not be formally responding as the project is not within their traditional territory. THPO Stanly also stated that the Cahto Tribe contact is more relevant to the project. Representatives of the Cahto Tribe are working closely with BBW Associates, ERRP and RA. James Roscoe of RA met with the Cahto Tribal Council on November 17, 2023, to discuss the proposed project, and cultural resource investigation strategies. Vernon Wilson, Tribal Monitor for the Cahto Tribe agreed to participate in the cultural study and guide the field survey. ERRP has an excellent cooperative working relationship with the Cahto Tribe as evidenced by their participation in the project and they will guide ERRP and its contractors, should cultural artifacts be encountered during forest health activities.

DETERMINATION

On the basis of this PSA and the substantial evidence supporting it:

- ☒ I find that all of the effects of the proposed project (a) have been covered in the CalVTP PEIR, and (b) all applicable Standard Project Requirements and mitigation measures identified in the CalVTP PEIR will be implemented. The proposed project within the CalVTP treatable landscape is, therefore, **WITHIN THE SCOPE** of the CalVTP PEIR. For the proposed project areas outside of the CalVTP treatable landscape, no new circumstances have occurred, nor has any new information been identified requiring new analysis or verification. Project changes would not result in any new or substantially more severe significant impacts. **NO ADDITIONAL CEQA DOCUMENTATION** beyond this PSA and Addendum to the PEIR is required.
- ☒ I find that treatments in proposed project areas outside the CalVTP treatable landscape do not result in substantial changes in the project, no substantial changes in circumstances have occurred, and no new information of substantial importance has been identified. The inclusion of project areas outside the CalVTP treatable landscape will not result in any new or substantially more severe significant impacts. None of the conditions described in State CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR have occurred; therefore, this **ADDENDUM** is adopted to address the project areas outside geographic extent presented in the PEIR.
- ☐ I find that the proposed project will have effects that were not covered in the CalVTP PEIR. These effects are less than significant without any mitigation beyond what is already required pursuant to the CalVTP PEIR. A **NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project will have effects that were not covered in the CalVTP PEIR or will have effects that are substantially more severe than those covered in the CalVTP PEIR. Although these effects may be significant in the absence of additional mitigation beyond the CalVTP PEIR's measures, revisions to the proposed project or additional mitigation measures have been agreed to by the project proponent that would avoid or reduce the effects so that clearly no significant effects would occur. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project will have significant environmental effects that are (a) new and were not covered in the CalVTP PEIR and/or (b) substantially more severe than those covered in the CalVTP PEIR. Because one or more effects may be significant and cannot be clearly mitigated to less than significant, an **ENVIRONMENTAL IMPACT REPORT** will be prepared.

Signature_____

Date _____ 2024

Printed Name_____

Title_____

Mendocino County Resource Conservation District

Agency

4.0 PROJECT-SPECIFIC ANALYSIS/ADDENDUM

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for each Impact, Standard Project Requirement (SPR) and Mitigation Measure (MM) identified in the Project-Specific Analysis Checklist (PSA Checklist). The information provides clarity for review and/or provides direction to the field staff that will implement the project utilizing the checklist (persons familiar with the project and preparation of the document may be different through the lifespan of the document). Answers should consider whether the proposed project would result in new or more substantial environmental effects than described in the CalVTP PEIR, after incorporation of applicable SPRs and MM required by the CalVTP PEIR.
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and short-term as well as long-term impacts. Refer to the applicable resource analysis section in the CalVTP PEIR for each environmental topic found at the following website: <https://bof.fire.ca.gov/projects-and-programs/calvtp/calvtp-programmatic-eir/>.
3. Once the project proponent has evaluated the environmental effect that may occur, then the checklist answers must indicate whether the impact is:

(Definitions located in Chapter 3 – “Environmental Settings, Impacts, and Mitigation Measures, 3.1.4 – Terminology Used In the PEIR”)

- **Less Than Significant (LTS)** - An impact either on its own or with incorporation of SPRs, does not exceed the defined thresholds of significance (no mitigation required), or that is potentially significant and can be reduced to less than significant through implementation of feasible mitigation measures.
- **Less Than Significant with Mitigation (LTSM)** - An impact was identified within the PEIR which was viewed in totality as potentially significant and/or significantly unavoidable and the mitigation measures and SPRs and MMs provided in the PEIR will be implemented mitigating to a point of less than significance.
- **Potential Significant (PS)** - An impact treated as if it were a significant impact. “Potentially” is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR.
- **Potentially Significant and unavoidable (PSU)** - An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level. “Potentially” is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR
- **Significantly Unavoidable (SU)** - An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level.
- Not applicable (N/A)

If the impact is equal to or less than the impact identified in the PEIR, the PEIR can be utilized without a Negative Declaration, Mitigated Negative Declaration or EIR. If there are one or more entries where the impact is evaluated to be greater than the impact in the PEIR, additional documentation is required.

4. Where a Negative Declaration, Mitigated Negative Declaration is required, the environmental review would be guided by the directions for use of the PEIR with later activities in Section 15168. Where an EIR is required, the environmental review would be guided by Sections 15162 and 15163. When preparing any environmental document, the environmental analysis may incorporate by reference the analysis from the CalVTP PEIR and focus the environmental analysis solely on issues that were not addressed in the CalVTP PEIR.
5. Project proponents should incorporate into the PSA checklist references to information sources for potential impacts. Include a list of references cited in the PSA and make copies of such references available to the public upon request.
6. Standard Project Requirements (SPR) and Mitigations Measures (MM).
 - **Applicable (Yes/No).** Document whether the SPR or mitigation measure is applicable to the project (Yes or No). The applicability should be substantiated in the Environmental Checklist Discussion.
 - **Implementing Entity.** The implementing entity is the individual or organization responsible for carrying out the requirement. This could include the project proponent's project manager, a technical specialist (e.g., archeologist or biologist), a vegetation management contractor, a partner agency or organization, or other entities that are primarily responsible for carrying out each project requirement.
 - **Verifying/Monitoring Entity.** The verifying/monitoring entity is the individual or organization responsible for ensuring that the requirement is implemented. The verifying/monitoring entity may be different from the implementing entity.

NOTE: the cited SPRs and MMs are summarized to manage the template's size. Refer to the approved CalVTP language in attached *Maintenance and Monitoring Plan* (Appendix A) for the full list of requirements.

4.1 EC-Aesthetics and Visual Resources

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AES-1: Result in Short-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from Treatment Activities	LTS	Impact AES-1, pp. 3.2-16 – 3.2-19	Yes	AD-3 AD-4 AES-1 AES-2 AES-3 AQ-2 AQ-3	NA	LTS	No	Yes
Impact AES-2: Result in Long-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from WUI Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types	LTS	Impact AES-2, pp. 3.2-20 – 3.2-25	Yes	AD-3 AD-4 AES-1 AES-3	NA	LTS	No	Yes
Impact AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type	SU	Impact AES-3, pp. 3.2-25 – 3.2-27	Yes	AD-3 AES-1 AES-3	NA	LTS	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Aesthetic and Visual Resource Impacts: Would the treatment result in other impacts to aesthetics and visual resources that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Impact AES-1

Initial and maintenance treatments would include manual, mechanical, and prescribed burning treatments. The potential for these treatments to result in short-term, substantial degradation of scenic vista or visual character of the landscape is examined in the PEIR (CalVTP PEIR Volume II Section 3.2.3, p. 16-19).

The treatment activities and potential impacts for this project are within the scope of the PEIR because they are consistent with the activities and impacts addressed in the PEIR. SPRs AD-3 and 4, AES-1 through 3, and AQ-2 and 3 are all applicable to this project. The project area is located on private property within the Tenmile Creek Watershed near Laytonville, California in Mendocino County. Several treatment sites are located near US 101 and are within the viewshed of US 101, which is not a designated state scenic highway (California Department of Transportation, 2022). Mendocino County does not have designated scenic vistas (County of Mendocino, 2009). Smoke from prescribed burns would not result in substantial short-term aesthetic impacts, because burning would be temporary, and the requirement to prepare and adhere to a smoke management plan (SMP) (SPR AQ-2) and a Burn Plan (SPR AQ-3) which prescribe the conditions under which prescribed burning can occur to reduce the generation and visibility of smoke. By adhering to local plans, the proposed project will promote regrowth with native vegetation and will be similar in appearance to nearby meadow and forested areas. Therefore, the potential for the project to result in short-term substantial degradation of a scenic vista, visual character, or damage to scenic resources would be less than significant.

The inclusion of land in the proposed treatment area that is outside of the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing scenic resources are essentially the same within and outside of the treatable landscape; therefore, the short-term aesthetic impact is also less than significant. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact AES-2

Initial and maintenance treatments would include manual, mechanical, and prescribed burning treatments for ecological restoration and fuel break treatment types. The potential for these treatments to result in long-term degradation of the visual character of the landscape was examined in PEIR (CalVTP PEIR Volume II Section 3.2.3, pages 20-22). The project area spans the Tenmile Creek Watershed within Mendocino County. SPR AES-1 through 3 and AD-4 are all applicable to this project.

As analyzed in Impact AES-1, the aesthetic impacts will be temporary and short-term because native plants will regenerate shortly after the treatments are implemented and will resemble conditions on surrounding hillsides. No forest land will be converted to other use and the aesthetic value will not be degraded. Because ecological restoration would be designed to improve habitat quality and create a landscape appearance closer to native conditions, it would result in long-term beneficial visual impacts. Based on the implementation of the applicable SPR's and the nature of the treatment types, the potential for this project to result in long-term substantial degradation of the visual character of the project area or damage to scenic resources would be less than significant.

The inclusion of land in the proposed treatment area that is outside of the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing scenic resources are essentially the same within and outside of the treatable landscape; therefore, the long-term aesthetic impact is also temporary and less than significant. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact AES-3

This impact does not apply to the proposed project because non-shaded fuel breaks are not proposed. Only shaded-fuel breaks are proposed for this project. The potential for non-shaded fuel break treatments to result in long-term, substantial degradation of scenic resources or the visual character of the landscape was assessed in the PEIR (CalVTP Final PEIR Volume II Section 3.2.3, pages 25-27).

New Aesthetic and Visual Resource Impacts

The proposed treatment within the treatable landscape is consistent with the treatment types and activities analyzed in the CalVTP PEIR. The project proponent has evaluated and considered the site-specific characteristics to determine that the project treatments are consistent with the CalVTP PEIR's environmental and regulatory settings (CalVTP Final PEIR Volume II Sections 3.2.1 and 3.2.2). No changed circumstances would lead to new significant impacts not addressed in the CalVTP PEIR. Therefore, no new impact related to aesthetics and visual resources would occur that is not covered in the PEIR.

The inclusion of land in the proposed treatment area that is outside of the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are also consistent with those considered in the PEIR. No new impact related to aesthetics and visual resources would occur that is not covered in the PEIR.

4.2 EC-Agriculture and Forestry Resources

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AG-1: Directly Result in the Loss of Forest Land or Conversion of Forest Land to a Non-Forest Use or Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Forest Land to Non-Forest Use	LTS	Impact AG-1, pp. 3.3-7 – 3.3-8	Yes	NA	NA	LTS	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Agriculture and Forestry Resource Impacts: Would the treatment result in other impacts to agriculture and forestry resources that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Impact AG-1

Initial and maintenance treatments would include manual, mechanical, and prescribed burning treatments for ecological restoration and fuel break treatment types. The potential for the proposed treatments to result in a loss of forested land was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.3.3 page 7-8).

The project's proposed vegetation removal would be primarily on private lands, many of which have historically been used for timber production and undergone a resulting change in vegetation. As described in the project description, the project does not propose to remove trees for commercial purposes, and generally will target the removal of understory trees, <16 inches DBH. Thinning and the removal of small-diameter conifers and tanoak would occur. In the longer term, marketable trees would experience better growth conditions than at present due to the proposed thinning. Other than some expansion of the meadows due to removal of young, smaller trees that have encroached on former meadows, no timber lands would be converted in the long term. Stand-replacing fires could adversely impact agricultural and forestry management by converting stands, displacing people and disrupting harvest schedules. Although treatment activities would alter forest land through vegetation removal, the treatment activities proposed for this project would not reduce forest land, as defined in CA PRC Section 12220(g), to less than 10% native tree cover of any species. The implementation of

the plan may enhance agricultural and forestry resources by reducing the potential for more disruptive stand-replacing fires originating at these private parcels or passing through them. Based on the treatment activities and beneficial results of the proposed project, no forestland, timberland, or farmland will be converted, thus any impact would be less than significant.

The inclusion of land in the proposed treatment area that is outside of the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing agricultural resources are essentially the same within and outside of the treatable landscape; therefore, the potential for the treatments to directly result in loss of forest land or conversion of forest land to non-forest use is less than significant, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Agriculture and Forestry Resource Impacts

The proposed project treatment is consistent with the treatment and activities that are considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed project and determined that they are consistent with the environmental and regulatory settings stated in the CalVTP PEIR (CalVTP Final PEIR, Volume II, 3.3.1 and 3.3.2). There have been no changed circumstances that would lead to new significant impacts not addressed in the PEIR.

The inclusion of land in the proposed treatment area that is outside of the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are also consistent with those considered in the PEIR.

No new impact related to agriculture and forestry resources would occur that is not covered in the PEIR.

4.3 EC-Air Quality

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS	PSU	Table 3.4-1; Impact AQ-1, pp. 3.4-26 – 3.4-32; Appendix AQ-1	Yes	AQ-1 AQ-2 AQ-3	AQ-1	PSU	No	Yes
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	LTS	Table 3.4-6; Impact AQ-2 pp. 3.4-33 – 3.4-34; Appendix AQ-1	Yes	AQ-1 HAZ-1 NOI-4 NOI-5	NA	LTS	No	Yes
Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	LTS	Section 3.4.2; Impact AQ-3, pp. 3.4-34 – 3.4-35	Yes	AQ-4 AQ-5	NA	LTS	No	Yes
Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk	PSU	Section 3.4.2; Impact AQ-4, pp. 3.4-35 – 3.4-37	Yes	AQ-2 AQ-3 AQ-6 AD-4	NA	PSU	No	Yes
Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust	LTS	Impact AQ-5, pp. 3.4-37 – 3.4-38	Yes	AQ-1 HAZ-1 NOI-4 NOI-5	NA	LTS	No	Yes
Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning	PSU	Section 2.5.2; Impact AQ-6; pp. 3.4-38	Yes	AQ-1 AQ-2 AQ-3 AQ-6 AD-3 AD-4	NA	SU	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Air Quality Impacts: Would the treatment result in other impacts to air quality that are not evaluated in the CalVTP PEIR?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

Impact AQ-1

The proposed treatment types include mechanical, manual, and prescribed burning application. The use of vehicles, mechanical equipment, and prescribed burning during treatments would result in emissions of criteria pollutants that could exceed California ambient air quality standards (CAAQS), the national ambient air quality standards (NAAQS), or Mendocino County Air Quality Management District (MCAQMD) rules and regulations. Most notable air pollutants for vehicle and fossil fuel-powered equipment usage are ozone precursors – reactive organic gasses (ROG) and nitrogen oxides (NOx), particulate matter in two regulated size categories (PM10 and PM2.5), carbon monoxide (CO) and sulfur dioxide (SO₂ (California Emissions Estimator Model, 2022)). Smoke from the combustion of vegetation during the project's prescribed burn phases also contains substantial amounts of criteria air pollutants, especially ozone precursors and particulates. The potential for emissions of criteria pollutants to exceed CAAQS or NAAQS thresholds was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, pages 26-33). The proposed treatments, treatment equipment, and equipment use duration are consistent with the scope of the PEIR.

SPRs AQ-1 through 3 are all applicable to this project. As described in the PEIR, due to multiple variables quantifying the reduction of emissions, the impact would remain potentially significant and unavoidable. The determination is consistent with the PEIR and would not constitute a substantially more severe impact than identified in the PEIR.

Mitigation Measure AQ-1 would reduce the mass emissions of criteria air pollutants and precursors generated by use of on-road vehicles and off-road equipment during treatment activities.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the air quality conditions present and air basin in the areas outside the treatable landscape area essentially the same as those within the treatable landscape; therefore, the air quality impact remains potentially significant and unavoidable, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact AQ-2

Use of vehicle and mechanical equipment during initial and maintenance treatments has the potential to expose people to diesel particulate matter emissions. The potential to expose people to diesel particulate matter emissions was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, page 33-34). Diesel particulate matter emissions from the proposed treatments are within the scope of the PEIR because the exposure potential is the same as analyzed in the PEIR, and the types and amount of equipment that would be used, as well as the duration of use, during proposed treatments are consistent with those analyzed in the PEIR. The project area spans the Tenmile Creek Watershed near Laytonville, California. SPRs AQ-1, HAZ-1, NOI-4, and NOI-5 are all applicable to this project.

Diesel particulate matter generated by treatment activities would not take place near any single sensitive receptor for an extended period. In addition, diesel particulate matter dissipates rapidly from the source, and exposure concentrations would decline with distance from these activities. In accordance with SPR HAZ-1, all

diesel and gasoline-powered equipment will be properly maintained to comply with all state and federal emissions requirements, which would prevent excessive emissions of diesel particulate matter due to poorly functioning equipment. Also, SPR NOI-4 will keep vegetation treatment activities and staging areas located as far as possible from human receptors and SPR NOI-5 restricts equipment idling time. Diesel exhaust emissions would be temporary, would not be generated at any one location for an extended period, and would dissipate rapidly from the source with an increase in distance. Implementation of these SPRs reduce the impact to less than significant. The determination is consistent with the PEIR and would not constitute a substantially more severe impact than identified in the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the air quality conditions and sensitive receptors (i.e., exposure potential) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact is also less than significant, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact AQ-3

Use of vehicles, mechanical equipment, and prescribed burning during treatments would involve ground disturbing activities. The potential to expose people to naturally occurring asbestos (NOA)-containing fugitive dust emissions was examined in the Program EIR (CalVTP Final PEIR Volume II Section 3.4.3, page 34-35). Portions of the project are located in soil types where Naturally Occurring Asbestos (NOA) has the potential to be present according to MCAQMD NOA mapping (Mendocino County Air Quality Management District, 2024). Potential NOA exposure from the proposed treatments is within the scope of the activities and impacts addressed in the Program EIR because the exposure potential is essentially the same within and outside the treatable landscape and avoidance of treatments in NOA-containing areas is consistent with the impacts analyzed in the Program EIR. SPRs AQ-4 and 5 are applicable to this project.

SPR AQ-4 would minimize dust including NOA-containing fugitive dust. In accordance with SPR AQ-5, no treatments would occur in these areas unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by MCAQMD. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the Program EIR. However, within the boundary of the project area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact is also the same, as described above.

Impact AQ-4

Prescribed burning in the form of pile and/or broadcast burning during initial and maintenance treatments has the potential to expose people to toxic air contaminants, which was examined in the PEIR. The duration and parameters of prescribed burning are within the scope of activities analyzed in the PEIR and will be consistent with parameters imposed by the Bay Area Air Quality Management District, Mendocino County Air Quality Management District Interim CEQA Criteria and GHG Pollutant Thresholds, and for those impacts analyzed in the PEIR for Mendocino County. Therefore, the potential for exposure to toxic air contaminants is also within the scope of the PEIR. SPRs AQ-2, AQ-3, AQ-6, and AD-4 are all applicable to this project.

The project proponent would apply AD-4, which directs for public notifications before prescribed burning. AQ-2 requires submitting a smoke management plan to MCAQMD. An approved smoke management plan limits prescribed burning to permissible burn days. All feasible measures to prevent and minimize smoke emissions as

well as exposure to smoke are included in SPRs. No additional mitigation measures are feasible, and this impact would remain potentially significant and unavoidable, as explained in the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the air quality conditions present and air basin in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact is also significant and unavoidable, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR

Impact AQ-5

The use of vehicles and mechanical equipment during initial and maintenance treatments has the potential to expose people to odors from diesel exhaust. The potential to expose human receptors to diesel exhaust was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, page 37-38). The potential impacts associated with the release of objectionable odors from diesel exhaust during maintenance treatments is within the scope of the PEIR because treatment activities are consistent with those analyzed in the PEIR. SPRs AQ-1, HAZ-1, NOI-4 and NOI-5 are all applicable to this project.

Most of the local residential and other odor-sensitive receptors are located in and near the city of Laytonville with most of the treatment areas more than a mile away. The project removal/restoration work would not occur over the entire project area for the entire project period, but sequentially on the many project parcels one or two at a time. Thus, the source of project odor from diesel-powered equipment exhaust would not be in any one place for an extended time and on average the source would be located relatively distant from Laytonville's odor-sensitive areas.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the air quality conditions, and sensitive receptors present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact is also less than significant, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was analyzed in the PEIR.

Impact AQ-6

Prescribed burning in the form of pile and broadcast burning during initial and maintenance treatments has the potential to expose people to objectionable odors, as described in the PEIR (CalVTP Final PEIR Volume II 3.4.3, page 38-39). The duration and parameters of the prescribed burn operations and the exposure potential are consistent with the activities analyzed in the PEIR. For this reason, the potential for exposure to objectionable odors from smoke is also within the scope of impacts covered in the PEIR. SPRs: AQ-1, AQ-2, AQ-3, AQ-6, and AD-4 are all applicable to this project.

Prescribed burn treatments could expose people to objectionable odors. Prescribed burning would be conducted in accordance with local air district regulations and the Smoke Management Plan as required in SPR AQ-1 and AQ-2. Treatments are located in less populated areas. Additionally, exposure to smoke would be short duration and occur infrequently. The duration and parameters of the prescribed burn treatments are within the scope of the activities addressed in the PEIR therefore, the resultant potential for exposure to objectionable odors from smoke is also within the scope of impacts covered in the PEIR. All feasible measures to prevent and minimize smoke odors as well as exposure to smoke odors are included in SPRs.

The inclusion of land in the proposed treatment area that is outside of the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the air quality conditions and sensitive receptors in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact is also potentially

significant and unavoidable, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was analyzed in the PEIR

New Air Quality Impacts

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (CalVTP Final PEIR Volume II Sections 3.4.1 and 3.4.2). No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impact. Therefore, no new impact related to air quality would occur.

The project proponent has also determined that the inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to air quality that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same. The impacts associated with the proposed treatment project are consistent with those covered in the PEIR. There are no changed circumstances present that would lead to new significant impacts not addressed in the CalVTP PEIR. Therefore, no new impact related to air quality would occur.

4.4 EC-Archaeological, Historical, and Tribal Cultural Resources

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact CUL-1: Cause a Substantial Adverse Change in the Significance of Built Historical Resources	LTS	Impact CUL-1, pp. 3.5-14 – 3.5-15	Yes	CUL-1 CUL-7 CUL-8	NA	LTS	No	Yes
Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources	SU	Impact CUL-2, pp. 3.5-15 – 3.5-16	Yes	CUL-1 CUL-2 CUL-3 CUL-4 CUL-5 CUL-8	CUL-2	SU	No	Yes
Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource	LTS	Impact CUL-3, p. 3.5-17	Yes	CUL-1 CUL-2 CUL-3 CUL-4 CUL-5 CUL-6 CUL-8	NA	LTS	No	Yes
Impact CUL-4: Disturb Human Remains	LTS	Impact CUL-4, p. 3.5-18	No	NA	NA	NA	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Archaeological, Historical, and Tribal Cultural Resource Impacts: Would the treatment result in other impacts to archaeological, historical, and tribal cultural resources that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Roscoe and Associates Cultural Resources Consultants (RA) is currently working to complete a cultural resources investigation for the non-federal private lands portion of the project area (1,908 acres). This portion of the project is split into two categories, Phase 1 implementation parcels and Phase 2 planning parcels. As part of the cultural resources investigation and consistent with SPR CUL-1, RA conducted a records search of the Phase 1 implementation parcels and Phase 2 planning parcels at the Northwest Information Center (NWIC) in Rohnert Park California, on December 14, 2023 (NWIC File No. 22-0822) and January 18, 2024 (NWIC File No. 23-0956). The record search however did not include a portion of the Cahto Creek Ranch Phase 2 planning parcels, as the areas to the west, east and south of the Varnhagen parcel (APN 014-411-009) were added to the Cahto Creek Ranch portion of the planning project after January 2024. Prior to the implementation of the project within the Cahto Creek Ranch, an addendum record search will be performed at the NWIC. The NWIC records search revealed four previously recorded archaeological sites and historic-era features within the Phase 1 parcels and

two archaeological sites within the Phase 2 planning parcels. Sites identified within the Phase 1 parcels include one built-environment historic-era feature, one Native American archaeological site, one Native American isolated artifact and one multi-component archaeological site. The built-environment historic-era feature is a rock wall. Two Native American archaeological sites have been previously identified within the Phase 2 planning parcels. None of these resources have been evaluated for eligibility listing in the California Register of Historical Resources (CRHR). One is an isolated artifact which are generally not eligible for listing in the CRHR. Isolated artifacts are defined as one or two artifacts occurring by themselves and not associated with an archaeological site, and therefore have no historical context in which to evaluate against significance criteria.

Consistent with SPR CUL-2, RA obtained an updated Native American contact list from the Native American Heritage Commission (NAHC) on January 24, 2024. On February 05, 2024, letters inviting consultation regarding the proposed project were emailed or sent via the United States Postal Service to the 19 tribal representatives indicated by NAHC. Responses were received from the Sherwood Valley Tribe and the Cahto Tribe. On February 05, 2024, Valerie Stanley THPO for the Sherwood Valley Tribe sent an email stating that the Tribe would not be formally responding as the project is not within their traditional territory. THPO Stanly also stated that the Cahto Tribe contact is more relevant to the project. Representatives of the Cahto Tribe are working closely with BBW associates and RA. James Roscoe met with the Cahto Tribal Council on November 17, 2023, to discuss the proposed project, and cultural resource investigation strategies. Verne Wilson, Tribal Monitor for the Cahto Tribe agreed to participate in the cultural study and guide the field survey.

Impact CUL-1

Proposed treatment activities include mechanical treatments and prescribed burning, which could damage historical resources. The NWIC records search revealed one historic-era feature, a rock wall, is documented within the West Ten Mile project location (APN 013-570-059). This structure has not been evaluated for CRHR eligibility. Structures (i.e., buildings, bridges, roadways) over 50 years old that have not been recorded or evaluated for historical significance may be present in the project area; these structures will be identified and avoided pursuant to SPR CUL- 7. The potential for these treatment activities to result in disturbance, damage, or destruction of built-environment structures that have not yet been evaluated for historical significance was examined in the PEIR. This impact is within the scope of the PEIR, because treatment activities and the intensity of ground disturbance of the treatment project are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the potential to encounter built-environment structures that have not yet been evaluated for historical significance in areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact to historical resources is also the same, as described above. SPRs applicable to this impact are CUL-1, CUL-7, and CUL-8. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact CUL-2

Vegetation treatment would include mechanical work using heavy equipment that could churn up the surface of the ground as vegetation is removed; this may result in damage to known or previously unknown archaeological resources. The NWIC records search revealed two archaeological sites and one isolated artifact within the Phase 1 parcels and two archaeological sites within the Phase 2 planning parcels. None of these resources, however, have been evaluated for eligibility for listing in the CRHR. Therefore, it is not known whether these sites are considered resources under CEQA. A survey will be conducted before treatment pursuant to SPR CUL-4 to identify any previously unrecorded archeological resources and identified resources will be avoided according to the provisions of SPR CUL-5. The potential for these treatment activities to result in inadvertent discovery and subsequent damage of unique archaeological resources or subsurface historical resources during vegetation treatment was examined in the PEIR. This impact was identified as significant and unavoidable in the PEIR because of the large geographic extent of the treatable landscape and the possibility that there could be

some rare instances where inadvertent damage of unknown resources may be extensive. For the Tenmile Creek Watershed Forest Health Project (CALFIRE #8GG22660), SPRs and Mitigation Measure CUL-2 would require identification and protection of resources, and it is reasonably expected that implementation of these measures would avoid a substantial adverse change in the significance of any unique archaeological resources or subsurface historical resources. However, given the large geographic extent of the project area and uncertainty regarding the potential extent of damage during inadvertent excavation of an unknown resource, if it occurred, this impact would remain significant and unavoidable, as explained in the PEIR. This impact is within the scope of the PEIR, because treatment activities and intensity of ground disturbance of the treatment project are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the potential for discovery of archaeological resources is essentially the same within and outside the treatable landscape; therefore, the potential impact to unique archaeological resources or subsurface historical resources is also the same, as described above. SPRs applicable to this impact are CUL-1 through CUL-5 and CUL-8. Mitigation Measure CUL-2 would also apply to this treatment to protect any inadvertent discovery. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact CUL-3

RA contacted the Native American Heritage Commission (NAHC), in a letter on January 15, 2024, to request the results of a Sacred Lands File records (SLF) search and a list of Native American tribal representatives and interested individuals who should be contacted for more information. The NAHC responded on January 25, 2024, stating that the results of the SLF records search were negative, however, this does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites. The NAHC attached a list of Native American tribal representatives and individuals who may also have knowledge of cultural resources in the project area.

This list included Tasheena Sloan, Vice Chairperson, Cahto Tribe; Kendra Campbell, Secretary-Treasurer, Cahto Tribe; Mary Norris, Chairperson, Cahto Tribe; Richard Campbell, Acting Chairperson, Coyote Valley Band of Pomo Indians; Michael Derry, Historian, Guidiville Rancheria of California; Bunny Tarin, Tribal Administrator Guidiville Rancheria of California; Sonny Elliott, Chairperson, Hopland Band of Pomo Indians; Ramon Billy, THPO Hopland Band of Pomo Indians; Priscilla Hunter, Chairwoman, Intertribal Sinkyone Wilderness Council; Jaime Cobarrubia, Chairperson, Manchester Band of Pomo Indians of the Manchester Rancheria; Noyo River Indian Community; Leona Williams, Chairperson, Pinoleville Pomo Nation; Erica Carson, THPO, Pinoleville Pomo Nation; Salvador Rosales, Chairperson, Potter Valley Tribe; Debra Ramirez, Chairperson Redwood Valley or Little River Band of Pomo Indians; Beniakem Cromwell, Chairperson, Robinson Rancheria of Pomo Indians; James Russ, President, Round Valley Reservation/ Covelo Indian Community; Valerie Stanley, THPO, Sherwood Valley Band of Pomo Indians; Yokayo Tribe, Chairperson.

Research Associate Melinda Salisbury sent letters to these representatives on behalf of Mr. Roscoe on February 5, 2024. These letters included a description of the activities used (e.g., mastication, chipping) and associated acreages, a map of the treatment area at a sufficient scale to indicate the spatial extent of activities, a request for information regarding potential impacts to cultural resources from the proposed treatment and a description of the expected depth of ground disturbance. All Tribal notifications also included the information that representatives of the Cahto Tribe's Laytonville Rancheria are participating in the investigation and a tribal member is working with RA during the field surveys.

The potential for the proposed treatment activities to cause a substantial adverse change in the significance of a tribal cultural resource during implementation of vegetation treatment was examined in the PEIR. This impact is within the scope of the PEIR, because the intensity of ground disturbance of the treatment project is consistent with that analyzed in the PEIR. As explained in the PEIR, while tribal cultural resources may be identified within

the treatable landscape during development of later treatment projects, implementation of SPRs would avoid any substantial adverse change to any tribal cultural resource. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the tribal cultural affiliations present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact to tribal cultural resources is also the same, as described above. SPRs applicable to this impact are CUL-1 through CUL-6 and CUL-8. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact CUL-4

Vegetation treatment activities would include mechanical treatments using heavy equipment; these treatments may use excavators and masticators, which could uncover human remains. The NWIC records search did not reveal any burials or sites containing human remains. The potential for treatment activities to uncover human remains was examined in the PEIR. This impact is within the scope of the PEIR, because the treatment activities and intensity of ground disturbance are consistent with those analyzed in the PEIR. Additionally, consistent with the PEIR, the project would comply with California Health and Safety Code Section 7050.5 and PRC Section 5097 in the event of a discovery. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the potential for uncovering human remains during implementation of the treatment project is essentially the same within and outside the treatable landscape and treatment activities; therefore, the impact related to disturbance of human remains is also the same, as described above. No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Archaeological, Historical, and Tribal Cultural Resource Impacts

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP Program EIR. The site-specific characteristics of the proposed treatment project are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.5.1, "Environmental Setting," and Section 3.5.2, "Regulatory Setting," in Volume II of the Final Program EIR). Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the Program EIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to archaeological, historical, or tribal cultural resources that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are also consistent with those covered in the Program EIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to archaeological, historical, or tribal cultural resources would occur.

4.5 EC-Biological Resources

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications	LTS	Impact BIO-1, pp 3.6-132–3.6.138	Yes	AD-2 AQ-3 AQ-4 BIO-1 BIO-2 BIO-7 BIO-9 GEO-1 GEO-3 GEO-4 GEO-5 GEO-7 HYD-4	BIO-1a BIO-1b	LTSM	No	Yes
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	LTS	Impact BIO-2, pp 3.6-139–3.6-187	Yes	AD-2 AD-5 AQ-2 AQ-3 BIO-1 BIO-2 BIO-7 BIO-10 BIO-12 GEO-1 GEO-3 GEO-4 GEO-5 GEO-7 HYD-1 HYD-4	BIO-2a BIO-2b BIO-2c BIO-2e	LTSM	No	Yes
Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function	LTS	Impact BIO-3, pp 3.6-186–3.6-192	Yes	AD-2 BIO-1 BIO-2 BIO-3 BIO-4 BIO-6 BIO-9 HYD-4	BIO-3a BIO-3b BIO-3c	LTSM	No	Yes

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	LTS	Impact BIO-4, pp 3.6-192–3.6-193	Yes	AD-2 BIO-1 BIO-2 GEO-1 GEO-3 GEO-4 GEO-5 GEO-7 HAZ-1 HYD-1 HYD-4	BIO-4	LTSM	No	Yes
Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	LTS	Impact BIO-5, pp 3.6-193–3.6-197	Yes	AD-2 BIO-1 BIO-2 BIO-4 BIO-10 GEO-1 GEO-3 GEO-4 GEO-5 GEO-7 HAZ-1 HYD-1 HYD-4	BIO-5	LTSM	No	Yes
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	LTS	Impact BIO-6, pp 3.6-197–3.6-199	Yes	AD-2 AD-5 BIO-1 BIO-2 BIO-3 BIO-4 BIO-12	NA	LTS	No	Yes
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	No Impact	Impact BIO-7, pp 3.6-199	Yes	AD-3	NA	NA	NA	NA
Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation	No Impact	Impact BIO-8, pp 3.6-199–3.6-200	No	NA	NA	NA	NA	NA

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Plan, Habitat Conservation Plan, or Other Approved Habitat Plan								

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Biological Resources Impacts: Would the treatment result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?				<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
				Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
No new impacts to report.				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

In accordance with SPR BIO-1, a reconnaissance level survey of the Project Area was conducted in March 2024 by Stillwater biologists. Habitats within the Project Area were qualitatively evaluated for potential to support special-status species—including plants, fish, and wildlife—based on habitat types, habitat elements, and visual observation of species present. Vegetation types were classified using the California Wildlife Habitat Relationship (CWHR) habitat classification scheme (CDFW 2021). The Project Area is dominated by forested habitats with developed areas and open grasslands mixed throughout (Table 4). Maps and representative photographs of existing conditions are provided in Appendix B.

Table 4: California Wildlife Habitat Relationship types in the Project Area.

CWHR Type	Acres	Percent of Project Area	Habitat Description
Montane Hardwood-Conifer	1561.6	43.4%	The Montane Hardwood-Conifer habitat type was dominated by a mixture of Ponderosa pine (<i>Pinus ponderosa</i>), Douglas fir (<i>Pseudotsuga menziesii</i>), black oak (<i>Quercus kelloggii</i>), and madrone (<i>Arbutus menziesii</i>). Within the Project Area, this forest habitat type was most often observed lacking a substantial understory shrub layer.
Annual Grassland	862.4	24.0%	The Annual Grassland habitat type was characterized by open grasslands which were seasonally dormant at the time of the site assessment (March). Dominant species include primarily nonnative annual grass such as wild oats (<i>Avena</i> sp.) and various bromes (<i>Bromus</i> sp.).

CWHR Type	Acres	Percent of Project Area	Habitat Description
Montane Hardwood	784.4	21.8%	The Montane Hardwood habitat type was dominated by madrone and oaks. Stands of black oak and madrone were mixed in size and age and were found to have some understory composed of nonnative grasses, bracken fern (<i>Pteridium aquilinum</i> var. <i>pubescens</i>), and California blackberry (<i>Rubus ursinus</i>).
Mixed Chaparral	149.8	4.2%	The Mixed Chaparral habitat type was composed almost entirely of dense, monotypic stands of manzanita shrubs (<i>Arctostaphylos manzanita</i> ssp. <i>manzanita</i>). These stands were found exclusively growing in open clearings with no overstory and had little to no herbaceous understory.
Douglas Fir	141.6	3.9%	The Douglas Fir habitat type was primarily composed of Douglas fir with low diameter at breast height growing closely together and forming a dense canopy layer. The understory was heavily shaded with occasional tanoak (<i>Notholithocarpus densiflorus</i> var. <i>densiflorus</i>) and sword fern (<i>Polystichum munitum</i>).
Montane Riparian	11.6	0.3%	The Montane Riparian habitat type was dominated by riparian hardwood trees such as bigleaf maple (<i>Acer macrophyllum</i>), alder (<i>Alnus spp.</i>), and willow (<i>Salix spp.</i>). Much of the vegetation in this habitat type was seasonally dormant at the time of the site assessment (March).
Developed/Active Channel/Water	86.4	2.4%	--
Total	3,597.8	100.0%	--

Preliminary lists of special-status plant, wildlife, and fish species with the potential to occur in the Project Area were developed through a query of the following resources:

- U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) portal (USFWS 2024a);
- National Marine Fisheries Service's (NMFS), West Coast Region, California Species List Tool (NMFS 2016);
- California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB) (CDFW 2024); and
- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2024a).

The database queries were based on the U.S. Geological Survey 7.5-minute quadrangles in which the Project is located (Cahto Peak and Tan Oak Park) and the surrounding ten quadrangles (Laytonville, Lincoln Ridge, Leggett, Iron Peak, Dutchmans Knoll, Sherwood Peak, Longvale, Updegraff Ridge, Bell Springs, and Noble Butte), collectively referred to as the Project Vicinity. The USFWS IPaC query was based on the spatial extent of the Project Area.

The following resources were also reviewed to gain further information regarding species' potential to occur within the Project Area:

- Google Earth aerial imagery (Google Earth 2024).
- Soils data (NRCS 2024); and
- Wetlands and riparian data, including the National Wetland Inventory (USFWS 2024b).
- eBird (eBird 2024);
- North American Bat Acoustic Monitoring Portal (BatAMP) (Conservation Biology Institute and USFS 2024)

The preliminary lists of special-status plant, wildlife, and fish species were evaluated to determine the likelihood for each species' occurrence within the Project Area based on their habitat requirements and known distributions, field assessments of habitat within the Project Area, elevations (1,250–2,900 feet) in the Project Area, location and date of last recorded observation, and professional judgment. The likelihood of occurrence was rated as *high*, *moderate*, *low*, or *none* based on available information and professional judgment. If a species on the preliminary list requires habitat that is lacking within the Project Area (e.g., coastal dunes) or occurs outside the elevation range of the Project Area, the species' likelihood of occurrence was considered to be none.

Special-status plants

Of the 68 special-status plant species previously documented in the Project Vicinity, 12 species were determined to have no potential to occur in the Project Area due to lack of suitable habitat (i.e., no serpentine soil); the remaining 56 special-status plant species have low, moderate, or high potential to occur within the Project Area (Table 3 of Appendix B).

In accordance with SPR BIO-7, Protocol-level special-status plant surveys were conducted within the implementation areas of the Lower Tenmile, Vassar, Gravier, and West Tenmile portions of the Project Area by Salix Natural Resource Management in April, May, June, and July 2024. These areas all have work planned for the first year of implementation. No special-status species were identified within the survey area during the 2024 surveys. A comprehensive list of all plant species documented during the special-status plant surveys is provided in Appendix B.

Special-status wildlife

Of the 30 special-status fish and wildlife species that were identified from the database queries conducted for the Project, 11 have a high potential to occur within the Project Area, 11 have a moderate potential, five have a low potential, and three have no potential to occur. Table 5 provides the likelihood for these special-status fish and wildlife species to occur, and for the 22 species with a moderate to high potential to occur, their sensitive life history timing, and an analysis of potential Project effects on individuals and their habitat are also provided.

Table 5: Special-status wildlife evaluated with the potential to occur within the Project Area and potential Project effects.

Common Name <i>Scientific Name</i>	Query Sources	Status ^a Federal/ State	Distribution in California	Habitat Association	Likelihood to Occur within Project Area	Sensitive Life History Timing ^b	Potential Project-related Effects on the Species and Habitat
<i>Invertebrates</i>							
Monarch butterfly (California overwintering population) <i>Danaus plexippus</i>	USFWS	FC/-	Range includes most of California; it breeds throughout California and overwinters in suitable groves along the California coast	Adults forage on a variety of flowering plants during breeding and migration; larva (caterpillars) require milkweed (<i>Asclepias</i> spp.) as a host plant. Overwinter roosts include eucalyptus (<i>Eucalyptus</i> sp.), Monterey pines (<i>Pinus radiata</i>), and Monterey cypress (<i>Hesperocyparis macrocarpa</i>) trees or groves.	High: Monarch butterflies have the potential to breed in the Project Area because <i>Asclepias cordifolia</i> (purple milkweed) was documented in the Lower Tenmile area during the 2024 special-status plant surveys (Appendix B). Also, flowering plants for which adults can forage for nectar are present in the Project Area. Monarch adults have been observed within 1.5 miles of the Project Area (Lower Tenmile) and larvae have been observed on <i>Asclepias</i> spp. within 4.5 miles of the Cahto Ranch (2013) (Western Monarch Milkweed Occurrence Database 2024). No critical habitat has been designated for this species.	Breeding season: March through October; purple milkweed blooms from March through July, while vegetative parts can be present one to two months before and after this period Overwintering season: November through February	Forest management activities can affect breeding habitat (milkweed) if it is removed or disturbed, and larvae may directly be harmed or killed if milkweed is disturbed during the breeding season.
Western bumble bee <i>Bombus occidentalis</i>	CDFW	-/SCE	Current range includes northern California and northern Sierra Nevada Mountains	Forages on flowering plants in chaparral, scrub, mountain meadows, forested openings, open grassy areas, and urban parks and gardens. Host plant genera include, but are not limited to, <i>Ceanothus</i> , <i>Centaurea</i> , <i>Chrysothamnus</i> , <i>Cirsium</i> , <i>Eriogonum</i> , <i>Geranium</i> , <i>Grindellia</i> , <i>Lupinus</i> , <i>Melilotus</i> , <i>Monardella</i> , <i>Rubus</i> , <i>Solidago</i> , and	Low: While foraging habitat and potential nesting sites occur within the Project Area, the species is generally rare in the southern portion of the range. Observations within the vicinity include two observations within two miles of Lower Tenmile (1981 and 1984) and one observation within ten miles of Vassar (1968) (CDFW 2024). The closest occurrence in the Bumble Bee Watch database	Colony active period: March through October Overwintering period: November through February	Forest management activities are not expected to disturb nesting or foraging habitat because treatment activities will be restricted to forested areas, a habitat that western bumblebees generally do not forage or nest in.

Common Name <i>Scientific Name</i>	Query Sources	Status ^a Federal/ State	Distribution in California	Habitat Association	Likelihood to Occur within Project Area	Sensitive Life History Timing ^b	Potential Project-related Effects on the Species and Habitat
				Trifolium. Nests underground in pre-existing cavities (abandoned small mammal burrows) but can also nest above ground in thatched grass, brush piles, fallen logs, and human-made structures.	is over 60 miles away (Xerces Society 2024).		
Crotch's bumble bee <i>Bombus crotchii</i>	CDFW	–/SCE	Range includes the southern Pacific Coast, Great Basin, Mojave Desert, Sonoran Desert, Central Valley, and adjacent foothills through most of southwestern California; recent observations mainly in southwestern and central California.	Forages on flowering plants in open grassland and scrub habitats. Host plant genera include, but are not limited to, Antirrhinum, Asclepias, Chaenactis, Clarkia, Dendromecon, Eschscholzia, Eriogonum, Lupinus, Medicago, Phacelia, Salvia, and Phacelia. Nests are often located underground, in pre-existing cavities (abandoned small mammal burrows), but can may also nest aboveground in thatched grass, brush piles, fallen logs, and human-made structures.	Low: Potential foraging habitat and nesting sites occur within the Project Area. The most recent occurrence is about 35 miles from Cahto Trail in 2022 (Xerces Society 2024), and the nearest CNDDDB observation is about 1.5 miles from Lower Tenmile in 1978 (CDFW 2024).	Colony active period: March through September, while may occur as early as February or as late as October Overwintering period: September through March	Forest management activities are not expected to disturb nesting or foraging habitat because treatment activities will be restricted to forested areas, a habitat that Crotch's bumblebees generally do not forage or nest in.

Common Name <i>Scientific Name</i>	Query Sources	Status ^a Federal/ State	Distribution in California	Habitat Association	Likelihood to Occur within Project Area	Sensitive Life History Timing ^b	Potential Project-related Effects on the Species and Habitat
<i>Fish</i>							
Coho salmon, Southern Oregon/Northern California Coast Evolutionary Significant Unit (ESU) Oncorhynchus kisutch	NMFS, CDFW	FT/ST	Range includes Punta Gorda north to the Oregon border	Low-gradient portions of coastal draining streams with sufficiently cool water temperatures. Adult spawning: fine to coarse gravel in pool tailouts or low-gradient riffles with nearby cover or deep pools. Juvenile rearing: instream pool habitats often associated with large wood or off-channel features that provide low-velocity protection from high flows and cover from predation and water temperatures less than approximately 17°C.	High: Present in waterways (e.g., Cahto Creek and Tenmile) within or adjacent to the Project. Juvenile coho salmon have been documented in Cahto Creek (Higgins 2023), a tributary to Tenmile Creek. Critical habitat is located on creeks (e.g., Cahto Creek, Tenmile Creek) within the Project Area.	Adult migration: fall and winter Spawning: few weeks following migration (December–February) Fry emergence: 3–4 months after spawning Juvenile rearing: year round Emigration from streams to mainstem: March–May Outmigration: April and May, peak in early May	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and embeddedness of spawning gravel and affect the survival of eggs and health of juveniles and adults.
Steelhead, northern California distinct population segment (DPS) winter-run Oncorhynchus mykiss irideus	NMFS, CDFW	FT/–	Range includes Coastal streams from the Russian River (exclusive) north to Redwood Creek (Humboldt County)	Rivers and streams with cold water, clean gravel of appropriate size for spawning, and suitable rearing habitat. Adult spawning: medium to coarse gravel in pool tails or low-gradient riffles with nearby cover or deep pools. Juvenile rearing: pool or deep run habitats with instream cover from winter flows and predation, often associated with large cobble, boulders, or large wood in water temperatures less than approximately 22°C. Juveniles typically rear in fresh water for 1 or more years before migrating to the ocean.	High: Present in waterways (e.g., Cahto Creek and Tenmile) within or adjacent to the Project. Stillwater Sciences surveys in June 2023 and CDFW surveys in July 2009 observed steelhead/rainbow trout in Cahto Creek (Stillwater Sciences 2023, CDFG 2009). CNDDDB occurrence from 2022 include Tenmile Creek and tributaries (e.g., Peterson Creek) (CDFW 2024). Designated critical habitat is located on creeks (e.g., Chato Creek and Tenmile Creek) within the Project Area.	Adult migration: October through March Spawning: late February through April Fry emergence: 6 weeks following hatching (April–June) Juvenile rearing: year-round Outmigration: late-winter and spring (February–June [peak in March and April] and October–November)	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and embeddedness of spawning gravel affect the survival of eggs and health of fry, juveniles, and adults.

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Steelhead, northern California DPS summer-run Oncorhynchus mykiss irideus	NMFS, CDFW	FT/SE	Range includes portions of Redwood Creek (Humboldt County) and the Mad, Eel, and Mattole River basins	Rivers and streams with cold water, clean gravel of appropriate size for spawning, and suitable rearing habitat; juveniles typically rear in fresh water for 1 or more years before migrating to the ocean. Adults require suitable pools for holding prior to spawning and tend to spawn in smaller, higher-gradient streams than winter-run steelhead. Adults are capable of spawning upstream of partial barriers to movement, which are only passable at intermediate stream flows.	None: Outside known distribution. CNDDDB location in area notes that the population is extirpated (CDFW 2024). Not known to occur in the Tenmile Creek watershed. Designated critical habitat is not present within the Project Area.	Not applicable	Not applicable
Tidewater goby Eucyclogobius newberryi	CDFW, USFWS	FE/-	Range includes San Diego County north to the mouth of the Smith River in Del Norte County	Typically lives in shallow waters of coastal lagoons and the uppermost zone of brackish large estuaries; prefer sandy substrate for spawning, but can be found on silt, mud, or rocky substrates; typically in shallow water, but can occur in water up to 15 feet in lagoons and within a wide range of salinity (0–42 ppt).	None: Outside the range and no suitable habitat present. The nearest CNDDDB occurrence is from 1997 about 14 miles from the Project Area (CDFW 2024). Critical habitat has been designated for this species and is not present within the Project Area.	Not applicable	Not applicable
Pacific lamprey Entosphenus tridentatus	CDFW	-/SSC	Most coastal flowing watersheds between Mexico and Oregon.	Anadromous species that spawns and rears in freshwater before emigrating to the ocean to feed and grow. Generally distributed wherever salmon and steelhead occur. Adult spawning: coarse	High: Present in waterways within or adjacent to the Project. Holding adults documented in Cahto Creek in 2012 (Stillwater Sciences 2014). The nearest CNDDDB occurrence is 13 miles from the Project Area in 1996	Adult migration: late winter to early summer Spawning: March through July Egg hatching: 15 days after eggs deposited into the redd Emergence: 15 days following	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and embeddedness of spawning gravel affect the survival of eggs and

Common Name <i>Scientific Name</i>	Query Sources	Status ^a Federal/ State	Distribution in California	Habitat Association	Likelihood to Occur within Project Area	Sensitive Life History Timing ^b	Potential Project-related Effects on the Species and Habitat
				gravel or small cobble in pool tails or low-gradient riffles. Larval rearing: low-velocity areas where they burrow into fine silt and sand substrates that often contain organic matter. Water temperatures less than approximately 22°C.	(CDFW 2024).	hatching Juvenile rearing: 4–10 years Outmigration: fall to spring Ocean period: 18–40 months	health of fry, juveniles, and adults.

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<i>Reptile</i>							
Northwestern pond turtle <i>Actinemys marmorata</i>	USFWS, CDFW	FPT/SSC	Range is from the Oregon border along the coast ranges to the Mexican border, and west of the crest of the Cascades and Sierras	Permanent, slow-moving fresh or brackish water with available basking sites and adjacent open habitats or forest for nesting	Moderate: Tenmile and Cahto Creek provide suitable aquatic habitat, while the extent of basking and breeding habitat has not been assessed. Northwest pond turtles have been observed within the Project Area (Vassar) in Tenmile Creek (1988) (CDFW 2024). Surveys conducted near Holland Reservoir in 2023 documented two individuals in off-channel pond habitat about 0.5 mile upstream of Cahto Ranch (Stillwater Sciences 2023). Additional observations include a CNDDDB occurrence in a pond three miles south of Cahto Ranch (2017) and about eight miles from West Tenmile, Gravier, and Cahto	General active period: February through November Mating: April–May Nesting: April–August Egg incubation: while unknown, laboratory hatching occurred in 73–81 days Hatchling emergence: late-summer or fall, but some may overwinter and emerge the following spring Hibernation: winter in either aquatic or terrestrial habitat Estivation: summer in aquatic habitat	While no in-water work would occur, upland ground disturbance could directly affect upland nesting and hibernating habitat, which can cause mortality to incubating eggs and individuals.

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					Trail (2004) (CDFW 2024). Critical habitat has not been designated for this species.		

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Amphibians

Pacific tailed frog (also known as coastal-tailed frog) <i>Ascaphus truei</i>	CDFW	-/SSC	Coastal Mendocino County north to the Oregon border, with an isolated population in Shasta region	Occurs in montane hardwood-conifer, redwood, Douglas-fir and ponderosa pine habitats. Restricted to perennial montane streams. In and adjacent to cold, clear, moderate- to fast-flowing, perennial montane streams. Tadpoles require water below 15°C.	Low: In 2023, Stillwater Sciences biologists measured water temperatures in the mainstem of Cahto Creek and the southern Cahto Creek tributary to be 12.5–13.5°C, which is suitable for tadpole development. However, these temperatures were recorded in early summer following a wet water year, and temperatures during a normal late-summer/fall (during tadpole development) likely exceed 15°C. It is anticipated that other creeks within the Project Area are also too warm based on these recordings. Most CNDDb occurrences are near the coast or more than 20 years old. The nearest occurrence is from 1999 about 1.5 miles from Lower Tenmile in Elder Creek and from 1996 about 7 miles of Cahto Ranch in the Middle Fork Tenmile River (CDFW 2024).	Not applicable	No Project effects are anticipated
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Northern red- legged frog <i>Rana aurora</i>	CDFW	–/SSC	Ranges from Mills Creek in Mendocino County to Oregon border	Breeds in still or slow- moving water with emergent and overhanging vegetation, including wetlands, wet meadows, ponds, lakes, and low- gradient, slow moving stream reaches with permanent pools; uses adjacent uplands for dispersal and summer retreat	High: Suitable aquatic habitat for breeding and terrestrial habitat for cover and dispersal is present within the Project Area. Two occurrences about seven miles west of Lower Tenmile near Huckleberry Creek (2006, 2012). Several occurrences about ten miles south of Cahto Ranch (CDFW 2024).	Active period: year-round Egg laying: late November to April Egg hatching: about 4 weeks following egg laying Tadpole metamorphosis: 4–7 months following hatching Upland dispersal period: post- tadpole metamorphosis	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and the survival of eggs and health of tadpoles, juveniles, and adults. Forest management activities in upland habitats, including use of vehicles and/or mechanized equipment, may result in direct injury or mortality of dispersing juveniles and adults.
Foothill yellow- legged frog, North Coast clade <i>Rana boylei</i>	CDFW	–/SSC	North of San Francisco Bay through the Coast Range and Klamath Mountains	Shallow tributaries and mainstems of perennial streams and rivers, typically associated with cobble or boulder substrate	High: Suitable aquatic habitat is present in Tenmile Creek, Cahto Creek, and the southern and northern Cahto Creek tributaries. Many occurrences within the Project Area and in the Project vicinity, which include one occurrence within the Project Area (Lower Tenmile) along Fox Creek in 2018, another 2018 occurrence within one mile of Black Oak Ranch and West Tenmile along Big Rock Creek, and several observations within five miles of Lower Tenmile in McKinley Creek, Elder Creek, Tenmile Creek, and South Fork Eel River (CDFW 2024).	Active period: year-round Mating and egg-laying: occurs exclusively in streams and rivers from April until early July, after streams have slowed from winter runoff. Egg hatching: about four weeks following egg laying Tadpole metamorphosis: July to October Upland dispersal: post- tadpole metamorphosis	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and the survival of eggs and health of tadpoles, juveniles, and adults. Forest management activities in upland habitats, including use of vehicles and/or mechanized equipment, may result in direct injury or mortality of juveniles and adults.

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Southern torrent salamander <i>Rhyacotriton variegatus</i>	CDFW	–/SSC	Coastal drainages from near Point Arena in Mendocino County to the Oregon border	In and adjacent to cold, permanent, well-shaded mountain springs, waterfalls, and seeps with rocky substrate	Moderate: Tributaries within the Project Area likely provide suitable aquatic habitat with adjacent terrestrial refuge for cover. The most recent occurrence (2012) is about 1.5 mi southwest of Lower Tenmile in Skunk Creek, with several more historic occurrences (1985) within two miles of the Project Area (Lower Tenmile) in McKinley Creek, Elder Creek, and Tenmile Creek (CDFW 2024).	Breeding: may occur year-round, while peak oviposition period is in August and September Egg hatching: about 8 months following egg laying; peak egg hatching occurs in the spring Larval metamorphosis: 2–2.5 years following hatching	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and the survival of eggs and health of developing larvae, juveniles, and adults.
Red-bellied newt <i>Taricha rivularis</i>	CDFW	–/SSC	Along the coast from near Bodega, Sonoma County, to near Honeydew, Humboldt County, and inland to Lower Lake and Kelsey Creek, Lake County	Breeding and larval development habitat includes rapid-flowing, permanent streams or rivers with rocky substrate in proximity to redwood forests and other coastal woodlands. Adult terrestrial habitat primarily includes redwood forests but also found within mixed conifer, valley-foothill woodland, montane hardwood and hardwood-conifer habitats.	Moderate: Tributaries within the Project Area likely provide suitable breeding habitat with adjacent coniferous forest (primarily composed of Montane Hardwood Conifer CWHR habitat) for adults. The majority of occurrences are south of the Project Area (east of Fort Bragg), and a few occurrences have been documented about 7.5 miles east of Lower Tenmile (2004) and ten miles southeast of Cahto Ranch (2014) (CDFW 2024).	Breeding and egg laying: February–April Egg hatching: 16–34 days following egg laying, depending on temperature Larval metamorphosis: late summer to early fall Adult aestivation: summer months (terrestrial habitat)	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and the survival of eggs and health of developing larvae, juveniles, and adults. Forest management activities in upland habitats, including use of vehicles and/or mechanized equipment, may result in direct injury or mortality of juveniles and adults.

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Birds							
American goshawk <i>Accipiter atricapillus</i>	CDFW	-/SSC	Nests in North Coast Ranges through Sierra Nevada, Klamath, Cascade, and Warner Mountains, in Mount Pinos and San Jacinto, San Bernardino, and White Mountains; winters along north coast, throughout foothills, and in northern deserts	Mature and old-growth stands of coniferous forest, and while found over a large range, they are more commonly found in middle and higher elevations (1,000–10,800 ft); nests in dense part of stands (> 60% canopy cover) near an opening	Moderate: May nest within coniferous forest stands within the Project Area, which primarily consists of second growth Montane Hardwood-Conifer habitat, with a mixture of Ponderosa pine (<i>Pinus ponderosa</i>), Douglas fir (<i>Pseudotsuga menziesii</i>), black oak (<i>Quercus kelloggii</i>), and madrone (<i>Arbutus menziesii</i>) that lacks a substantial shrub layer. Older- more-suitable nesting stands may be present in adjacent non-private lands. Foraging habitat present. Recent sightings of goshawks have occurred at the Angelo Coast Range Reserve, located about 3.5 miles from the Project (2012, 2015, 2019) (eBird 2024) The most recent CNDDB occurrence is 8.5 miles north of Lower Tenmile in the Hollow Tree Creek watershed (1997) (CDFW 2024).	General breeding season: February through August Nesting initiated: March or early-April Egg laying: late-April to early May Incubation period: 28–32 days following egg laying Nestling period: 34–35 days following hatching	Noise from vehicles and/or mechanized equipment or burning may affect breeding individuals, if nesting nearby, which could result in mortality of young if adults leave the nest. Due to the Project removing younger trees and brush, it is not anticipated that nests within large trees will be removed. The Project is to remove understory trees and brush, which is anticipated to ultimately enhance foraging opportunities and habitat (more open flyways within a forest structure and access to prey).
Golden eagle <i>Aquila chrysaetos</i>	USFWS	BGECP/FP	Species is an uncommon permanent resident and migrant throughout California, except center of Central Valley	Open woodlands and oak savannahs, grasslands, chaparral, sagebrush flats; nests on steep cliffs or medium to tall trees	Moderate: While cliffs appear absent from the Project Area, individuals may be nesting in forests within or adjacent to the Project Area. Suitable foraging habitat is present in grasslands within the Project Area. Numerous observations within 10 miles of the Project Area including several occurrences within the Project Area at Black Oak Ranch (2016, 2017), one	General breeding season: late January through August Nesting initiated: late January Egg laying: typically, in March, while may occur 1–3 months after nest is constructed	If breeding is occurring within or near the treatment areas, noise from equipment (e.g., chainsaws) or burning may disturb eagles during the breeding season, which could result in indirect mortality to individuals. Since the Project is intended to remove younger trees and understory brush, no removal of nest trees is anticipated.

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					observation about one mile from West Tenmile and Gravier (2024), and another observation about 3 miles south of Cahto Ranch (2015) (eBird 2024). Nearest CNDDDB occurrence is about 25 miles away (1975) (CDFW 2024).	Incubation period: 41–45 days following egg laying Nestling period: 45–81 days following hatching	
Marbled murrelet <i>Brachyramphus marmoratus</i>	USFWS, CDFW	FT/SE	Nesting birds mostly concentrated near coastal waters in Del Norte and Humboldt counties, and in lesser numbers near San Mateo and Santa Cruz counties; species winters throughout the nesting range and in small numbers in southern California	Most time spent on the ocean; nests inland in large areas of old-growth conifers with suitable platforms, especially redwood or Douglas-fir forests near coastal areas	Moderate: Due to the densely forested habitat within the Project Area, which primarily consists of second growth CWHR Montane Hardwood-Conifer habitat, and the proximity of critical habitat being within and adjacent to the Project Area, there is a moderate potential that individuals may be roosting within or adjacent to the Project Area (especially in the Lower Tenmile parcel which is within and adjacent to critical habitat). There is a high potential for individuals to be flying over the Project Area during daily migrations to forage at the ocean. A single CNDDDB record from 1995 is about 4.5 miles west of the Project Area (CDFW 2024). Critical habitat has been designated for this species. Designated critical habitat borders a small portion of the Project Area (Lower Tenmile). No Project activities will occur within critical habitat. All other treatment parcels within the Project Area are located within three miles of critical habitat (USFWS 2024c).	Nesting initiated: May, while as late as July Egg laying: variable occurring between March through August Incubation period: 28–30 days following egg laying Nestling period: 30 days following hatching	If nesting is occurring within or near the treatment areas, noise from equipment (e.g., chainsaws) or burning may disturb marbled murrelets during the breeding season, which could result in indirect mortality to individuals. Since the Project is intended to remove younger trees and understory brush, no removal of nest trees is anticipated.

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Western snowy plover <i>Charadrius alexandrinus nivosus</i>	USFWS	FT/SSC	Species nests in locations along the California coast, including the Eel River in Humboldt County; nests in the interior of the state in the Central Valley, Klamath Basin, Modoc Plateau, and Great Basin, Mojave, and Colorado deserts; winters primarily along coast	Barren to sparsely vegetated beaches, barrier beaches, salt-evaporation pond levees, and shores of alkali lakes; also nests on gravel bars in rivers with wide flood plains; needs sandy, gravelly, or friable soils for nesting	None: Outside the range and no suitable habitat present. Documented occurrences are from distances more than 15 miles from the Project (eBird, CDFW 2024). Designated critical habitat is not present within the Project Area.	Not applicable	No Project effects are anticipated.
Yellow-billed cuckoo <i>Coccyzus americanus</i>	USFWS	FT/SE	Species breeds in limited portions of the Sacramento River and the South Fork Kern River; small populations may nest in Butte, Yuba, Sutter, San Bernardino, Riverside, Inyo, Los Angeles, and Imperial counties	Summer resident of valley foothill and desert riparian habitats; nests in open woodland with clearings and low, dense, scrubby vegetation	Low: Suitable riparian habitat may be present along creeks within the Project Area, while the cuckoo is not likely to occur as the closest known occurrence is more than 30 miles away (CDFW 2024, eBird 2024). Critical habitat is not present within the Project Area and is located about 75 miles east of the Project Area.	Not applicable	No Project effects are anticipated.
Bald eagle <i>Haliaeetus leucocephalus</i>	USFWS	BGECP/SE	Species is a permanent resident and uncommon winter migrant, found nesting primarily in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity counties	Large bodies of water or rivers with abundant fish, uses snags or other perches; nests in advanced-successional conifer forest near open water	Moderate: Suitable nesting trees may be present within the Project Area. Eagles typically nest near foraging habitat, and the most suitable foraging habitat in the area is Holland Reservoir and the Eel River, which is about 0.4 miles and 2 miles from the Project Area, respectively. Observations of eagles have occurred along the Eel River and have also been observed annually since 2018 at the Angelo Coast Range Reserve (eBird	Breeding season: February through August Nest building: typically 1 to 3 months before egg-laying	If breeding is occurring within or near the treatment areas, noise from equipment (e.g., chainsaws) or burning may disturb bald eagles during the breeding season, which could result in indirect mortality to individuals. Since the Project is intended to remove younger trees and understory brush, no removal of nest trees is anticipated. Project-related noise disturbance could result in temporary displacement of

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					2024), which is about 3.5 miles from the Project.		individuals flying in the vicinity of the nearby Holland Reservoir, where they may be present foraging.
Purple martin <i>Progne subis</i>	CDFW, USFWS	-/SSC	Summer resident and migrant; most densely populated in central and northern coastal conifer forests and smaller and more localized areas in the Sierra Nevada, interior foothills, and southern California	Conifer, valley-foothill, montane-hardwood forests with large snags in open areas; most nest sites located in upper slopes of hilly terrain; also may nest in human-made structures with cavities	High: Two occurrences within the Project Area (Black Oak Ranch in 2022 and Cahto Ranch in 2017). Numerous occurrences within five miles of the Project Area (eBird 2024). The nearest CNDDDB occurrence is an observation of a breeding pair about ten miles west of the Project Area in 1994 (CDFW 2024).	Nesting bird season: February – August	Removing vegetation could result in direct mortality to nesting individuals, including eggs and young, if present and loss of nesting habitat.
Northern spotted owl <i>Strix occidentalis caurina</i>	USFWS, CDFW	FT/SSC	Range includes Northwestern California south to Marin County, and southeast to the Pit River area of Shasta County	Typically found in older forested habitats; nests in complex stands dominated by conifers, especially coastal redwood, with hardwood understories; some open areas are important for foraging.	Moderate: Suitable nesting, roosting, and/or foraging habitat is likely present within, or adjacent to, the Project Area. The forest structure within the Project Area, primarily consists of second growth Montane Hardwood-Conifer habitat, with a mixture of Ponderosa pine, Douglas fir, black oak, and madrone that lack a substantial shrub layer. . Habitat adjacent to the Project Area appears to consist of dense coniferous forest and mixed hardwood/conifer forest, which may support older more suitable nesting stands on non-private lands. The closest nesting owl location (activity center) (MEN0228) is about 0.7 miles south of the Project Area (Cahto Ranch) and was last documented in 1995. Another nearby activity center	Breeding season: March 1 through September 30 Critical breeding season: March 1–July 15 Late-breeding season is July 16–September 30	Chainsaw noise disturbance and burning activities will not occur within 0.25 miles of known activity centers; therefore, no effects from these activities are anticipated on known activity centers. If breeding owls are present within 0.25 miles, then noise from chainsaws may disturb owls during the breeding season, and if chainsaw use occurs within 195 feet during the critical breeding season then owls may be disrupted to the point that breeding activities may be affected. Similarly, if burning occurs within 0.25 miles of an activity center during the breeding season, activity centers may be disturbed and if burning occurs within 0.25 miles during the critical breeding

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					(MEN0012) is 1.15 miles west of Lower Tenmile and was last documented in 1998. Twelve other activity centers are within 7 miles of the Project Area. (CDFW 2024). Critical habitat is not present within the Project Area and is located about 2.5 miles west of the Project Area.		season, then breeding activities may be affected. Vegetation removal will occur within the home range (1.2 miles) of 2 known activity centers. While the goal of the Project is to remove understory trees and brush, the ultimate benefit will likely enhance foraging opportunities and habitat (more open flyways within a forest structure and access to prey).
Numerous other species, including but not limited to, Allen's hummingbird, chestnut-backed chickadee, western screech owl	USFWS	MBTA	Range encompasses California	Variable including, but not limited to, grasses, shrubs, and trees	High: Birds protected under the MBTA have been documented within the Project Area (e.g., Allen's hummingbird in 2017; chestnut-backed chickadee, oak titmouse, and wrentit in 2022; and rufous hummingbird in 2024) and within 5 miles of the Project Area (e.g., olive-sided flycatcher in 2022, and western screech owl in 2023) (eBird 2024).	Nesting bird season: February through August	Removing vegetation could result in direct mortality to nesting individuals, including eggs and young, if present and loss of nesting habitat.

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<i>Mammals</i>							
Pallid bat <i>Antrozous pallidus</i>	CDFW	-/SSC	Throughout California except for elevations greater than 3,000 m in the Sierra Nevada	Roosts in rock crevices, cavities in live or dead trees hollows, mines, caves, and a variety of vacant and occupied buildings; feeds in a variety of open woodland habitats and most frequently in riparian zone, in open oak savannah, and open mixed deciduous forest.	High: Trees with cavities may provide roosting habitat. Bats may also roost in buildings on the parcels. Upland foraging habitat present. No known mines or caves are present. Species documented acoustically about two miles from the Project Area in 2020 (Conservation Biology Institute and USFS 2024). The nearest CNDDDB occurrence is within eight miles of the Project Area (2004). The most recent CNDDDB occurrence is from 2016 and is 17 miles north of the Project Area (CDFW 2024).	Maternity season: May 1 through August 31 Hibernating season: November 1 through March 31	Removing trees with cavities (roosting habitat), may result in mortality to bats, including non-volant young (young not able to fly), during the maternity season and to adults during the hibernating season. Any bats roosting in buildings would not likely be affected as no treatment activities will occur within 100 feet of any structure.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	CDFW	-/SSC	Throughout California, found in all but subalpine and alpine habitats, details of distribution not well known	Roosts in cavities, most often in tunnels, caves, mines, and buildings, but also rock shelters, preferentially close to water. Most abundant in mesic habitats, also found in oak woodlands, desert, vegetated drainages, caves or cave-like structures (including basal hollows in large trees, mines, tunnels, and buildings).	High: Roosting habitat may be present in any caves or mines and buildings in the Project Area, if present. Roosting may also occur in trees with large basal hollows for roosting, if present. Suitable foraging habitat present throughout the Project Area. No known mines or caves are present. Species documented acoustically about two miles from the Project in 2020 (Conservation Biology Institute and USFS 2024). The nearest CNDDDB occurrence is from 1990 within one mile of the Project Area (Lower Tenmile), while more recent occurrences include 2017 and 2015, which are about 14 and 20 miles from the Project Area, respectively (CDFW 2024).	Maternity season: May 1 through August 31 Hibernating season: November 1 through March 31	Noise- and smoke-generating activities have the potential to disturb roosting bats in caves/mines and trees with large basal hollows, which could cause roost abandonment, which may also result in mortality to non-volant young (young unable to fly), depending on proximity to the source of the disturbance. Any bats roosting in buildings would not likely be affected as no treatment activities will occur within 100 feet of any structure.
Western red bat <i>Lasiurus frantzii</i>	CDFW	-/SSC	Near the Pacific Coast, Central Valley, and	Roosts on foliage in forests and woodlands, and primarily in riparian trees such as	Moderate: Riparian trees along creeks within the Project Area may provide roosting habitat; suitable	Maternity season: May 1 through August 31	Removing riparian trees with foliage (roosting habitat), may result in mortality to bats,

Common Name <i>Scientific Name</i>	Query Sources	Status ^a Federal/ State	Distribution in California	Habitat Association	Likelihood to Occur within Project Area	Sensitive Life History Timing ^b	Potential Project-related Effects on the Species and Habitat
			the Sierra Nevada	sycamores and cottonwoods, while less in shrubs; feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Hibernates under leaves in forests.	foraging habitat present throughout the Project Area. Species documented acoustically about two miles from the Project in 2020 (Conservation Biology Institute and USFS 2024). The only CNDDDB occurrence in the Project Vicinity is from 1998 and is 13 miles east of the Project Area (CDFW 2024).	Hibernating season: November 1 through March 31	including non-volant young (young not able to fly). If individuals are present during the winter season, ground disturbance may result in injury or mortality to individuals roosting under leaves.
Sonoma tree vole <i>Arborimus pomo</i>	CDFW	-/SSC	Along the North Coast from Sonoma County north to the Oregon border, generally along the fog belt	Primarily nests in old-growth or partially harvested old-growth stands, while also present in young stands. Associated with Douglas-fir, redwood, grand fir, and montane hardwood-conifer habitats in the fog belt. Feeds almost exclusively on Douglas fir needles.	Moderate: The existing forest structure of a mixed aged stand of Douglas-fir trees and redwoods may provide suitable nesting and foraging habitat. While rare to uncommon throughout its range, the species was documented (six nests) within the Project Area (Lower Tenmile) in 1984, and numerous observations of nests have occurred within five miles of the Project Area (CDFW 2024).	Breeding season: year-round, mainly February through September	Removing trees may result in direct mortality to individuals. The Project will ultimately enhance forest health by providing opportunities for trees to grow larger in stature, which would be beneficial to the vole.
Fisher, Northern California/Southern Oregon DPS <i>Pekania pekanti</i>	CDFW	-/SSC	The northern Coast Range, including the Trinity and Klamath forests	Dense (greater than 50% canopy cover), advanced-successional conifer forests, with complex forest structure; den in hollow trees and snags.	Moderate: Suitable habitat within the Project Area includes denning features such as hollow snags within dense conifer forests. The Project Area may also be used as a corridor to adjacent forests outside of the Project Area, which may provide higher-quality later-successional forests. While suitable habitat may be present in the area and the Project is within the range of the fisher, most occurrences within Project vicinity are over 100 years old, including one occurrence within the Project Area (Cahto Ranch) from 1889. The most recent occurrence is from 2012, about 23 miles southeast of	Mating season: March and April Embryo development: approximately 10 months following breeding Gestation period: approximately 40 days, so kits are born between March and April (one year after mating and just before the new mating season begins).	Removing trees with snags (denning habitat), especially between spring and fall, may result in harm or mortality to individuals. If breeding is occurring within or near the treatment areas, noise from equipment (e.g., chainsaws) or burning may disturb fishers during the breeding season, which could result in indirect mortality to individuals.

Common Name <i>Scientific Name</i>	Query Sources	Status ^a Federal/ State	Distribution in California	Habitat Association	Likelihood to Occur within Project Area	Sensitive Life History Timing ^b	Potential Project-related Effects on the Species and Habitat
					the Project Area (CDFW 2024). The lack of observations may be due to the species being elusive.	Weaning: 6–8 weeks following birth Dispersal period: fall	
American badger <i>Taxidea taxus</i>	CDFW	–/SSC	Throughout the state except in the humid coastal forests of Del Norte County and the northwest portion of Humboldt County	Shrubland, open grasslands, fields, and alpine meadows with friable soils	Low: While suitable habitat (open grasslands) is present in the Project Area, the species is rare with only two historical CNDDDB occurrences from 1945 and 1916, 2 and 15 miles from the Project Area, respectively (CDFW 2024).	Not applicable	No Project effects are anticipated.

Notes: CDFW = California Department Fish and Wildlife; CNDDDB = California Natural Diversity Database; ppt = parts per thousand; USFWS = U.S. Fish and Wildlife Service

^a Status codes:

Federal

FE Listed as endangered under the federal Endangered Species Act
 FT Listed as threatened under the federal Endangered Species Act
 FC Federal candidate species
 FPT Federally proposed for listing as threatened
 BGECP Protected under the Bald and Golden Eagle Protection Act
 MBTA Protected under the Migratory Bird Treaty Act

State

SE Listed as Endangered under the California Endangered Species Act
 ST Listed as Threatened under the California Endangered Species Act
 SCE State Candidate Endangered
 SSC CDFW Species of Special Concern
 FP Fully protected
 – No state status

^b Sensitive life history timing was identified for species with a moderate to high potential to occur within the Project Area.

Impact BIO-1

The proposed Project could result in direct or indirect adverse effects on the 56 special-status plant species that have the potential to occur in the Project Area.

The potential for adverse effects on special-status plants is within the scope of the activities and impacts addressed in the PEIR because the activities and level of disturbance planned for this Project are consistent with those analyzed in the PEIR. As discussed in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, pages 133-134), prescribed burning has the potential to directly burn or scorch special-status plants, mechanical treatments may directly disturb special-status plants through masticating, tilling or grubbing, and manual treatments may impact special-status plants through trampling by ground workers. However, the removal of dense understory plants and invasive species through manual, mechanical, and burning treatments, as well as increase in canopy gaps produced by removal of codominant trees will promote regeneration of native species that supports a healthier residual ecosystem.

In accordance with SPR BIO-7, protocol level surveys will be conducted for special-status plant species with the potential to be affected by Project treatment activities prior to initiation of treatment. Where special-status plants are identified during protocol-level surveys, Mitigation Measures BIO-1a or BIO-1b, depending upon species status, would be implemented to avoid loss of identified special-status plants. Per Mitigation Measures BIO-1a and BIO-1b, if special status plants are identified during protocol level surveys, a no disturbance buffer of at least 50 feet would be established around the area occupied by these species within which Project activities would not occur unless qualified RPF or biologist determines based on substantial evidence, that the species would benefit from treatment in the occupied habitat area. In the case of plants listed pursuant to CESA or ESA, the determination of beneficial effects would need to be made in consultation with the California Department of Fish and Wildlife (CDFW) and/or USFWS, depending on species status. If treatments are determined to be beneficial and would be implemented in areas occupied by special status plants, under specific conditions described under Mitigation Measures BIO-1a and BIO-1b, additional impact minimization and avoidance measures or design alternatives to reduce impacts would be identified. An evaluation of the appropriate treatment design and frequency to maintain habitat function for special-status plants will be conducted by a qualified RPF or botanist. Project activities would be designed to maintain habitat function for special-status plants species present.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project Area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact on special-status plants is also the same, as described above. Biological resource SPRs that apply to Project impacts under Impact BIO-1 are SPR AD-2, SPR AQ-3, SPR AQ-4, SPR BIO-1, SPR BIO-2, SPR BIO-7, SPR BIO-9, SPR GEO-1, SPR GEO-3, SPR GEO-4, SPR GEO-5, SPR GEO-7, and SPR HYD-4. Biological resource mitigation measures that apply to Project impacts under Impact BIO-1 are Mitigation Measure BIO-1a and Mitigation Measure BIO-1b. With the implementation of the above listed SPRs and Mitigation Measures, it is likely that this Project will result in a less than significant impact on special-status plant species. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-2

The proposed Project could result in direct or indirect adverse effects on special-status wildlife species and habitat suitable for these species within the treatment area, as described in the following sections. The potential for adverse effects on special-status wildlife species is within the scope of the activities and impacts addressed in the PEIR because the activities and level of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the treatment area, general habitat characteristics are essentially the same within and

outside the treatable landscape; therefore, the potential impact on special-status wildlife is also the same as described above.

Invertebrates

Three special-status invertebrate species have the potential to occur in the Project Area (Table 5). Forest management activities are not anticipated to disturb nesting or foraging habitat of western bumblebee or Crotch's bumblebee because treatment activities will be restricted to forested areas, a habitat that western bumblebees generally do not use for foraging or nesting. Forest management activities could potentially have adverse impacts on monarch butterfly breeding habitat (milkweed) if it is removed or disturbed, and larvae may directly be harmed or killed if milkweed is disturbed during the breeding season.

The potential for treatment activities and maintenance treatments to result in adverse effects on special-status invertebrate species was examined in the PEIR. In accordance with SPR BIO-7 and SPR BIO 10, protocol-level special-status plant surveys and focused surveys for wildlife nursery sites will be conducted prior to initiation of vegetation treatment activities. If active nest sites or breeding habitat (milkweed) is identified in the vegetation treatment area, Mitigation Measures BIO-2b and BIO-2c will be implemented. No disturbance buffers will be placed around any active nest sites or breeding habitat (milkweed). All active or potentially active will be marked for avoidance. Physical avoidance markers will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the nesting habitat. The avoidance area buffer size will be determined by the qualified RPF or biologist using the most current, commonly accepted science and in coordination with USFWS. Buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed.

In addition, in accordance with SPR BIO-2, all crew members and contractors will receive training from a qualified RPF or biologist prior to implementing vegetation management activities. The training will include the identification, relevant life history information, and avoidance measures for special-status invertebrates, impact minimization procedures, and reporting requirements.

These measures would minimize any potential impacts so that the Project would have no effect on special-status invertebrates. The potential adverse impacts on special-status invertebrates from Project activities is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Fish

Four special-status fish species have the potential to occur in the Project Area (Table 5). While no in-water work would occur during Project activities, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and embeddedness of spawning gravel and affect the survival of eggs and health of juveniles and adult fish. The potential for treatment activities and maintenance treatments to result in adverse effects on special-status fish species was examined in the PEIR. In accordance with SPR HYD-4 and Project treatment specifications, no vegetation treatment work will take place within 100 feet of a Class I or II watercourse (including Tenmile Creek), within 30 feet of a Class III watercourse, or within 50 feet of a wetland. Implementation of SPR GEO-1, SPR GEO-3, SPR GEO-4, SPR GEO-5, SPR GEO-7, SPR HAZ-1, and SPR HYD-1 will protect water quality and minimize impacts on special-status fish and their habitat from erosion and increased sediment delivery to streams during precipitation events. The potential adverse impacts on special-status fish from Project activities is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Reptiles and Amphibians

One special-status reptile and four special-status amphibian species have the potential to occur in the Project Area (Table 5). While no in-water work would occur during Project activities, mobilization of sediment, as a

result of ground disturbance near waterways, could affect water quality and the survival of eggs and health of tadpoles, juveniles, and adults. Forest management activities in upland habitats, including use of vehicles and/or mechanized equipment, may result in direct injury or mortality of dispersing juveniles and adult amphibians. Upland ground disturbance could also directly affect upland nesting and hibernating habitat of northwestern pond turtle, which can cause mortality to incubating eggs and individuals.

The potential for treatment activities and maintenance treatments to result in adverse effects on special-status reptile and amphibian species was examined in the PEIR. In accordance with SPR HYD-4 and Project treatment specifications, no vegetation treatment work will take place within 100 feet of a Class I or II watercourse (including Tenmile Creek), within 30 feet of a Class III watercourse, or within 50 feet of a wetland. Implementation of SPR GEO-1, SPR GEO-3, SPR GEO-4, SPR GEO-5, SPR GEO-7, SPR HAZ-1, and SPR HYD-1 will protect water quality and minimize impacts on aquatic life stages of special-status amphibians and their habitat from erosion and increased sediment delivery to streams during precipitation events.

Northwestern pond turtle, northern red-legged frog, foothill yellow-legged frog, and red-bellied newt spend portions of their life in upland habitats and can travel far from water. Forest management activities in upland habitats, including use of vehicles and/or mechanized equipment, may result in direct injury or mortality of juveniles and adult amphibians and could directly affect northwestern pond turtle upland nesting and hibernating habitat, which can cause mortality to incubating eggs and individuals.

In accordance with SPR BIO-10, focused visual encounter surveys for northern red-legged frog, foothill yellow-legged frog, and red-bellied newt, and northwestern pond turtle and for potentially suitable northwestern pond turtle burrows or nesting sites with potential to be directly or indirectly affected by a treatment activities will be conducted by a qualified RPF or biologist within habitat areas suitable for the species within approximately 1,500 feet of aquatic habitat (i.e., streams, ponds) and within any potential migration corridors (e.g., between freshwater ponds and creeks). The surveys will be conducted no more than 14 days prior to the beginning of treatment activities.

If active sites (including nests, dens, burrows, etc. are identified during focused surveys, Mitigation Measure BIO-2b and BIO-2c will be implemented. No disturbance buffers will be placed around any active sites. All active or potentially active will be marked for avoidance. Physical avoidance markers will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the nesting habitat. The avoidance area buffer size will be determined by the qualified RPF or biologist using the most current, commonly accepted science and in coordination with USFWS. Buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed.

In addition, in accordance with SPR BIO-2, all crew members and contractors will receive training from a qualified RPF or biologist prior to implementing vegetation management activities. The training will include the identification, relevant life history information, and avoidance measures for northern red-legged frog, foothill yellow-legged frog, and red-bellied newt, and northwestern pond turtle, impact minimization procedures, and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF or biologist.

These measures would minimize any potential impacts so that the Project would have no effect on special-status reptiles and amphibians. The potential adverse impacts on special-status reptiles and amphibians from Project activities is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Birds

Seven special-status bird species as well as numerous other species protected under the Migratory Bird Treaty Act have the potential to occur in the Project Area (Table 5). Treatment activities, including mechanical treatments, manual treatments, and prescribed burning conducted during the nesting bird season (February 1–August 31) could result in direct mortality to nesting individuals, including eggs and young and loss of nesting habitat if trees or shrubs containing nests are removed or burned. Noise from vehicles and/or mechanized equipment may affect breeding individuals. Potential Project-related effects on specific bird species and their habitats are described in Table 5.

The potential for treatment activities to result in adverse effects on special-status birds was examined in the PEIR. In accordance with SPR BIO-1, if it is determined that adverse effects on habitat suitable for nesting special-status birds can be clearly avoided by physically avoiding habitat suitable for the species or conducting treatments outside of nesting bird season (February 1–August 31), then no mitigation would be required. If some treatments cannot be conducted outside of the nesting bird season, then focused nesting bird surveys would be conducted prior to implementation of treatment activities (SPR BIO-10). If no active bird nests are observed during focused surveys, then additional avoidance measures for these species would not be required. If active special-status bird nests are observed during focused surveys, then Mitigation Measures BIO-2a and BIO-2b would be implemented and no-disturbance buffers would be established around the nests and no treatment activities would occur within this buffer until the chicks have fledged as determined by a qualified biologist. Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance; however, buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed. For example, under Mitigation Measure BIO-2a, a no disturbance buffer of 0.5 mile would be established around active golden eagle nests and a 0.25 mile would be established around active northern spotted owl nests. Additionally, trees containing golden eagle nests would not be removed pursuant to the Bald and Golden Eagle Protection Act. Habitat function for special-status birds would be maintained because treatment activities would not result in removal of trees or snags greater than 12 inches DBH. Furthermore, the removal of understory trees and brush is anticipated to encourage the growth of larger trees in the stand as well as enhance foraging opportunities and habitat for some species (more open flyways within a forest structure and access to prey). The potential adverse impacts on birds from Project activities is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Mammals

Six special-status mammal species have the potential to occur in the Project Area (Table 5). Removing trees may result in direct mortality to Sonoma tree vole individuals and removing trees with snags (denning habitat), especially between spring and fall, may result in harm or mortality to fisher individuals. Removing trees with cavities (roosting habitat), may result in mortality to bats, including non-volant young (young not able to fly), during the maternity season and to adults during the hibernating season. Noise- and smoke-generating activities may disturb roosting bats and fishers during the breeding season which could result in direct or indirect mortality of individuals. If western red bat individuals are present during the winter season, ground disturbance may result in injury or mortality to individuals roosting under leaves.

The potential for treatment activities and maintenance treatments to result in adverse effects on special-status mammal species was examined in the PEIR. In accordance with SPR HYD-4 and Project treatment specifications, no vegetation treatment work will take place within 100 feet of a Class I or II watercourse (including Tenmile Creek), within 30 feet of a Class III watercourse, or within 50 feet of a wetland. This will minimize impacts on western red bats that live in riparian trees along creeks (Table xx). Per SPR BIO-1, if it is determined that adverse effects on special-status bats can be clearly avoided by conducting treatments outside of the season of sensitivity (i.e., maternity season), then mitigation would not be required. Adverse effects on special-status bat maternity roosts would be clearly avoided by conducting initial and maintenance treatments outside of the bat maternity season (April 1–August 31).

In accordance with SPR BIO-10, focused visual encounter surveys will be conducted by a qualified RPF or biologist within habitat areas suitable for special-status mammal species and potential denning, roosting, or hibernating habitat within the Project implementation area. The surveys will be conducted no more than 14 days prior to the beginning of treatment activities. If active sites (including nests, dens, burrows, etc. are identified during focused surveys, Mitigation Measure BIO-2b and BIO-2c will be implemented. All active or potentially active will be marked for avoidance and no-disturbance buffers will be placed around any active sites. Physical avoidance markers will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the nesting habitat. The avoidance area buffer size will be determined by the qualified RPF or biologist using the most current, commonly accepted science and in coordination with USFWS. Buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed.

In addition, in accordance with SPR BIO-2, all crew members and contractors will receive training from a qualified RPF or biologist prior to implementing vegetation management activities. The training will include the identification, relevant life history information, and avoidance measures for special-status mammals, impact minimization procedures, and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF or biologist.

The potential for treatment activities to result in adverse effects on special-status wildlife was examined in the PEIR. As discussed in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, pages 139-187), The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project Area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact on special-status wildlife is also the same, as described above.

Treatment activities implemented under the proposed CalVTP, including prescribed burning, mechanical treatment, and manual treatment, could result in direct or indirect adverse effects to special-status wildlife species. Biological resource SPRs that apply to Project impacts under Impact BIO-2 are SPR AD-2, SPR AD-5, SPR AQ-2, SPR AQ-3, SPR BIO-1, SPR BIO-2, SPR BIO-7, SPR BIO-10, SPR BIO-12, SPR GEO-1, SPR GEO-3, SPR GEO-4, SPR GEO-5, SPR GEO-7, SPR HYD-1, and SPR HYD-4. Biological resource mitigation measures that apply to Project impacts under Impact BIO-2 are Mitigation Measure BIO-2a, Mitigation Measure BIO-2b, Mitigation Measure BIO-2c, and Mitigation Measure BIO-2e. With the implementation of the above listed SPRs and Mitigation Measures, it is likely that this Project will result in a less than significant impact on special-status wildlife species. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-3

Based on the reconnaissance-level surveys conducted for the Project, the geographic range, habitat, and occurrence data (CNPS 2024b) nineteen sensitive natural communities we identified to have the potential to occur within the Project Area (Table 2 in Appendix B). Riparian habitat is present within the Project Area adjacent to streams, lakes, and ponds.

The potential for treatment activities to result in adverse effects on riparian habitat or other sensitive natural communities is within the scope of the activities and impacts addressed in the PEIR because the activities and level of disturbance planned for this Project are consistent with those analyzed in the PEIR. As discussed in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, pages 187-192), prescribed burning has the potential to directly burn or scorch vegetation that characterizes sensitive natural communities or sensitive habitats, mechanical treatments may directly disturb vegetation in sensitive natural communities through masticating, tilling or

grubbing, and manual treatments may impact non-target vegetation including species that characterize sensitive natural communities or habitats.

The potential for Project activities to result in adverse effects on riparian habitat or other sensitive natural communities was examined in the PEIR. In accordance with SPR BIO-1 and SPR BIO-3, protocol level surveys will be conducted for sensitive natural communities or sensitive habitats with the potential to be affected by Project treatment activities prior to initiation of treatment and those resources will be avoided to the extent possible. If sensitive natural communities are present in the Project implementation area, Mitigation Measures BIO-3a, BIO-3b, or BIO-3c will be implemented to avoid potential impacts on sensitive natural communities and compensate for loss of riparian habitat and sensitive natural communities if adverse effects can no be avoided. In accordance with SPR HYD-4 and Project treatment specifications, no vegetation treatment work will take place within 100 feet of a Class I or II watercourse (including Tenmile Creek), within 30 feet of a Class III watercourse, or within 50 feet of a wetland. Per SPR BIO-2, crew members and contractors are required to receive training regarding biological resources from a qualified RPF or biologist so crews are aware of potential sensitive natural communities and sensitive habitats in the treatment area and measures to reduce adverse effects. Implementation of SPR BIO-4 will design Project vegetation treatments to avoid adverse effects in riparian areas and will ensure that best management practices are utilized to avoid spreading plant pathogens that could impact sensitive natural communities. These measures would minimize any potential impacts so that the Project would have no effect on riparian habitat or other sensitive natural communities.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project Area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact on riparian habitat or other sensitive natural communities is also the same, as described above. Biological resource SPRs that apply to Project impacts under Impact BIO-3 are SPR AD-2, SPR BIO-1, SPR BIO-2, SPR BIO-4, SPR BIO-6, SPR BIO-9, and SPR HYD-4. Biological resource mitigation measures that apply to Project impacts under Impact BIO-3 are Mitigation Measure BIO-3a, Mitigation Measure BIO-3b, and Mitigation Measure BIO-3c. With the implementation of the above listed SPRs and Mitigation Measures, it is likely that this Project will result in a less than significant impact on riparian habitat or other sensitive natural communities. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-4

Based on the reconnaissance-level surveys conducted for the Project and the USFWS National Wetland Inventory (USFWS 2024b), wetlands and waters including Tenmile Creek and its tributaries (Cahto Creek, Mud Springs Creek, Spring Creek, Peterson Creek, and other unnamed tributaries) as well as emergent wetlands and freshwater ponds are present in the Project Area (Appendix B).

The potential for treatment activities to result in adverse effects on state or federally protected wetlands is within the scope of the activities and impacts addressed in the PEIR because the activities and level of disturbance planned for this Project are consistent with those analyzed in the PEIR. As discussed in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, pages 192–193), vegetation treatment activities including prescribed burning have the potential to alter wetland hydrology or topography or remove wetland vegetation resulting in a loss or degradation of wetland function.

In accordance with SPR BIO-1 and SPR HYD-4, potential wetlands will be identified and marked for avoidance prior to implementing treatment. Per SPR HYD-4 and Project treatment specifications, no vegetation treatment work will take place within 100 feet of a Class I or II watercourse (including Tenmile Creek), within 30 feet of a Class III watercourse, or within 50 feet of a wetland. Implementation of SPR GEO-1, SPR GEO-3, SPR GEO-4, SPR GEO-5, GEO-7, SPR HAZ-1, and SPR HYD-1 will protect water quality and minimize impacts on wetland habitats from erosion and increased sediment delivery to streams during precipitation events. Under Mitigation

Measures BIO-4, a qualified RPF or biologist will delineate the boundaries of wetlands that are potentially federally- or state-protected and mark them for avoidance. A no disturbance buffer of at least 25 feet would be established around all wetland features but may be larger if deemed necessary by the qualified RPF or biologist. Wetland boundary markers will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). Per SPR BIO-2, crew members and contractors will receive training regarding biological resources from a qualified RPF or biologist so crews are aware of potential wetland habitats in the treatment area and measures to reduce adverse effects.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project Area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact on state or federally protected wetlands is also the same, as described above. Biological resource SPRs that apply to Project impacts under Impact BIO-4 are SPR AD-2, SPR BIO-1, SPR BIO-2, SPR BIO-3, SPR BIO-4, SPR BIO-6, SPR BIO-9, and SPR HYD-4. The biological resource mitigation measure that applies to Project impacts under Impact BIO-4 is Mitigation Measure BIO-4. With the implementation of the above listed SPRs and Mitigation Measure, it is likely that this Project will result in a less than significant impact on state or federally protected wetlands. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-5

Based on the review of biological resources conducted under SPR BIO-1 and the reconnaissance-level surveys conducted for the Project, the Project area has the potential to be used as wildlife movement corridors or nurseries. Riparian habitat is present in the Project Area adjacent to streams, lakes, and ponds; Tenmile Creek flows through many of the different Project regions and they are all part of the same watershed. Anadromous fish species in Tenmile Creek and its tributaries have the potential to be impacted by Project activities. While no in-water work would occur during Project activities, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and embeddedness of spawning gravel and affect the survival of eggs and health of juveniles and adult fish.

The potential for treatment activities to result in adverse effects on wildlife movement corridors or nurseries is within the scope of the activities and impacts addressed in the PEIR because the activities and level of disturbance planned for this Project are consistent with those analyzed in the PEIR. As discussed in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, pages 193–197), Project activities have the potential to temporarily shift wildlife movements to avoid or navigate around active treatment sites and nursery sites could be removed, degraded, or disturbed. Noise or visual disturbance due to the presence of equipment, personnel, or fire could cause resident or migratory wildlife to temporarily avoid or move out of the areas immediately surrounding treatment areas. Project activities could modify, degrade, or remove important habitat features of a nursery site including large trees nesting, hollow trees for bat maternity roosts, and milkweed patches for monarch overwintering.

The potential for Project activities to result in adverse effects on riparian habitat or other sensitive natural communities was examined in the PEIR. In accordance with SPR HYD-4 and Project treatment specifications, no vegetation treatment work will take place within 100 feet of a Class I or II watercourse (including Tenmile Creek), within 30 feet of a Class III watercourse, or within 50 feet of a wetland protecting riparian areas. Implementation of SPR GEO-1, SPR GEO-3, SPR GEO-4, SPR GEO-5, SPR GEO-7, SPR HAZ-1, and SPR HYD-1 will protect water quality and minimize impacts on special-status fish and their habitat from erosion and increased sediment delivery to streams during precipitation events. Per SPR BIO-10, a qualified RPF or biologist will conduct focused surveys for nursery sites with potential to be directly or indirectly affected by Project activities. Unless otherwise specified in a protocol, the surveys will be conducted no more than 14 days prior to the beginning of treatment activities. If any potentially active nursery sites are identified, Mitigation Measure BIO-5 will be implemented, and

these features will be marked for avoidance and retention during Project treatment activities. A qualified RPF or biologist will establish a non-disturbance buffer around the nursery site if Project activities will take place while the nursery site is active/occupied.

Implementation of SPR BIO-4 will design Project vegetation treatments to avoid adverse effects in riparian areas and will ensure that best management practices are utilized to avoid spreading plant pathogens that could impact sensitive natural communities. Per SPR BIO-2, crew members and contractors are required to receive training regarding biological resources from a qualified RPF or biologist so crews are aware of potential sensitive natural communities and sensitive habitats in the treatment area and measures to reduce adverse effects. These measures would minimize any potential impacts so that the Project would have no effect on riparian habitat or **other sensitive natural communities**.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project Area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact on wildlife movement corridors or nurseries is also the same, as described above. Biological resource SPRs that apply to Project impacts under Impact BIO-5 are SPR AD-2, SPR BIO-1, [SPR BIO-2](#), SPR BIO-4, SPR BIO-10, SPR GEO-1, SPR GEO-3, SPR GEO-4, SPR GEO-5, SPR GEO-7, SPR HYD-1, and SPR HYD-4. The biological resource mitigation measure that applies to Project impacts under Impact BIO-5 is Mitigation Measure BIO-5. With the implementation of the above listed SPRs and Mitigation Measure, it is likely that this Project will result in a less than significant impact on wildlife movement corridors or nurseries. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-6

Project activities would occur in habitats that support common native bird, mammal, reptile, amphibian, and invertebrate species. The potential for treatment activities to result in adverse effects on common wildlife species, including nesting birds is within the scope of the activities and impacts addressed in the PEIR because the activities and level of disturbance planned for this Project are consistent with those analyzed in the PEIR. As discussed in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, pages 197–199), Project activities have the potential to disturb breeding; remove or damage active nests, dens, and other breeding sites; kill or injure individuals; and temporarily reduce breeding productivity of these species.

The potential for treatment activities to result in adverse effects on common wildlife species, including nesting birds was examined in the PEIR. In accordance with SPR BIO-2, all crew members and contractors will receive training regarding minimizing disturbances to wildlife. Additionally, SPRs designed to identify special-status species habitat (SPR BIO-1) and sensitive natural communities (SPR BIO-3) and retain the habitat function and value of riparian habitat (SPR BIO-4), as well as compliance with protective statutes (e.g., California Fish and Game Code sections 3503 and 3503.5 and the federal MBTA), would reduce the likelihood of impacts to common species using these important habitats. In accordance with SPR BIO-12, Project treatment activities would be scheduled to avoid the active nesting season of common native bird species, including raptors that could be present within or adjacent to the treatment site if feasible. If a treatment must occur during the nesting season of common native bird species, including raptors, SPR BIO-12 would require nesting bird surveys prior to treatment activities and implementation of feasible impact avoidance strategies (e.g., protective buffers, treatment modifications, raptor nest monitoring).

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project Area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact on common wildlife species, including nesting birds is also the same, as described above. Biological resource SPRs that apply to Project impacts under

Impact BIO-6 are SPR AD-2, SPR AD-5, SPR BIO-1, SPR BIO-2, SPR BIO-3, SPR BIO-4, and SPR BIO-12. No mitigation measures were identified in the PEIR for Impact BIO-7. With the implementation of the above listed SPRs it is likely that this Project will result in a less than significant impact on common wildlife species, including nesting birds. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-7

The potential for Project activities to result in conflict with local policies or ordinances was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, page 199). The potential for the proposed Project to conflict with local policies or ordinances is within the scope of the activities and impacts addressed in the PEIR because the treatment Projects implemented under the CalVTP are required to comply with any applicable county, city, or other local policies, ordinances, and permitting procedures (SPR AD-3) and are consistent with those analyzed in the PEIR. The Department of Planning & Building was contacted during the planning phase of this Project to ensure compliance with applicable local ordinances and policies. The County responded on March 12, 2024, and stated that the Project is exempt from the County's local permitting. There are no other applicable local ordinances.

The potential for the proposed treatments to conflict with local policies is within the scope of the PEIR because vegetation treatment locations, types, and activities are consistent with those analyzed in the PEIR. The inclusion of land in the proposed Project Area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the Project Area boundary, the existing regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential for conflicts with local policies or ordinances is also the same, as described above. The SPRs that applies to Project impacts under Impact BIO-7 is SPR AD-3. No mitigation measures were identified in the PEIR for Impact BIO-7. This impact of the proposed Project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-8

The Project Area is not located within a habitat conservation plan (HCP), a natural community conservation plan (NCCP), or other approved habitat plan area. The inclusion of land in the proposed Project Area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the areas outside the CalVTP treatable landscape are also not located within a HCP, NCCP, or other approved habitat plan area. This impact is within the scope of the PEIR because conflict with an HCP or NCCP was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed Project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

4.6 EC-Geology, Soils, Paleontology, and Mineral Resources

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil	LTS	Impact GEO-1, pp. 3.7-26 – 3.7-29	Yes	GEO-1 through GEO-8 AQ-3 AQ-4 HYD-4	NA	-	No	Yes
Impact GEO-2: Increase Risk of Landslide	LTS	Impact GEO-2, pp. 3.7-29 – 3.7-30	Yes	AQ-3 GEO-1 GEO-3 GEO-4 GEO-7 GEO-8	NA	-	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Geology, Soils, Paleontology, and Mineral Resource Impacts: Would the treatment result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion	
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

The geological and geographic context of the area is defined by the California Coast Ranges, a mountain range within the larger Pacific Mountain System (CGS 2002). The Laytonville Valley was formed by geologic faults and is subject to erosion and continued fault movements. The underlying geology is mostly Franciscan base sandstone, conglomerate, mudstone, siltstone, claystone, shale chert, serpentine and schist. Forest soils in the project area are generally deep with moderate drainage. Erosion hazard ratings range from Low-High depending upon slope.

The Coast Range is mapped as Mesozoic sedimentary and meta-sedimentary rocks primarily of the Franciscan Complex which dates to the Cretaceous and Jurassic periods containing sandstone with small amounts of shale, chert, limestone, conglomerate, and serpentinites with blue schist, or eclogite scattered above it (Jennings, Strand, Boylan, Moar, & Switzer, 1977)). Rocks in the Eel River basin are soft sedimentary formations deposited during the Tertiary Era with landslides contributing a great deal to the river's sediment load. Landslides are also prominent in the Coast Range as evidenced by wrinkled and rumpled surfaces in grassy slopes. Landslides in this area are caused by the deep soils and closely fractured rocks, particularly the serpentinites, which cover the slopes (Alt & Hyndman, 2000).

Impact GEO-1

Unstable areas within this part of Mendocino County are characterized by the mass movement of soil and an accompanying layer of vegetation. Specific soil types containing high concentrations of sand or gravel are defined as unstable in their characteristics. They can be identified in the field by observing hummocky (bumpy) topography, tension cracks, slope scarps, headwall scarps, lateral scarps, and irregular bowl-shaped slopes that indicate historical slope failures. Leaning or "J"-shaped trees are another indicator of active slope instability. Unstable soils combined with springs and seeps will create slope instability that can lead to landslides. The California Geological Survey (CGS) produced a series of maps showing landslides and relative slope stability based on soil type, topography, and aerial photographs. These maps are especially useful in determining the appropriateness of using heavy equipment in the project area. Field reviews are used to determine current conditions and suitability. The CGS Report 120 (Davies and Spittler 1999) identifies potential landslides and land instability in parts of Mendocino County. Mapped unstable areas in the project area may be inactive or incompletely mapped. ERRP uses LIDAR imagery that can confirm areas of instability, but no equipment operation will take place on slopes of greater than 30% and hand crew activity is not likely to trigger instability.. If unstable areas are discovered, avoidance measures defined in the Standard Project Requirements will be implemented. Consultation with a CGS geologist will take place if there is any geologic risk.

The entire project has soils with an Erosion Hazard Rating (EHR) of Low to High depending upon the slope angle (NRCS, 2024). The majority of the project areas are Moderate in terms of Erosion Hazard Rating (NRCS, 2024). Erosion Hazard Rating means the rating derived from the procedure specified in the California Forest Practice Rules 14 CCR § 912.5 [932.5, 952.5], which are designed to evaluate the susceptibility of the soil within a given location to erosion.

Vegetation treatments would include ecological restoration, fuel reduction, and shaded fuel breaks through the use of pile burning, broadcast burning, mechanical treatment and manual treatment. These activities could result in varying levels of soil disturbance and have the potential to increase the rates of erosion and loss of topsoil. The potential for these treatment activities to cause substantial erosion or loss of topsoil was examined in the PEIR. Mechanical treatments using heavy machinery are the most likely to cause soil disturbance that could lead to substantial erosion or loss of topsoil, especially in areas that contain steep slopes, or in areas that previously experienced fire. This impact is within the scope of the PEIR because the soil characteristics of the project area are essentially the same within and outside the CalVTP treatable landscape, and the use and type of equipment, extent of vegetation removal, and intensity of prescribed burning are consistent with those analyzed in the PEIR. As described above under Section 1.2, "CEQA and Document Purpose," MCRCD and ERRP propose to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates developed by the California State-Certified Burn Boss curriculum development committee, or equivalent). Burn plans prepared by Eel River Recovery Project would include all of the requirements of CAL FIRE burn plans. Further, prior to implementing broadcast burning activities, MCRCD and ERRP would minimize soil burn severity to reduce the potential for runoff and soil erosion, by following the guidelines outlined in SPR AQ-3.

For these reasons, proposed revisions to SPR AQ-3 would not result in greater soil erosion, and revisions to SPR AQ- 3, specifically for prescribed burning treatment activities, would not result in a substantially more significant effect related to soil erosion than what was covered in the PEIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental conditions present in the areas outside of the treatable landscape are essentially the same within and outside the treatable landscape; therefore, the potential impact related to soil erosion is the same, as described above. SPRs applicable to this impact are GEO-1 through GEO-8, AQ-3, AQ-4, and HYD-4. As explained above, impacts related to soil erosion resulting from the proposed project, including proposed revisions to the project description, compared to the PEIR program description, would not constitute new or substantially more severe significant impact than what was covered in the PEIR.

Initial and maintenance treatments include manual, mechanical, and prescribed burning treatments activities, which have the potential to result in vegetation removal and soil disturbance, which may result in increased rates of erosion and loss of topsoil. The potential for these treatment activities to cause substantial erosion or loss of topsoil were examined in the PEIR (CalVTP Final PEIR Volume II Section 3.7.3, pages 26-29).

Treatment activities would include pile burning, broadcast burning, mechanical treatment and manual treatment. No areas with known active landslide activity are identified within the project area (USGS 2022). However, given the variable topography in some of the treatment areas, the remoteness of the area, steep terrain, and wet winter conditions, there is the potential for landslides in the project area. The potential for treatment activities to increase landslide risk was examined in the PEIR. This impact is within the scope of the PEIR because the extent of vegetation removal, intensity of prescribed burning, and characteristics of the geographical terrain are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. As described above under Section 1.2, "CEQA and Document Purpose," Mendocino County RCD proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates developed by the California State-Certified Burn Boss curriculum development committee, or equivalent). Burn plans prepared by Eel River Recovery Project would include all of the requirements of CAL FIRE burn plans. Further, prior to implementing broadcast burning activities, MCRCD and ERRP would minimize soil burn severity to reduce the potential for runoff and soil erosion, by following the guidelines outlined in SPR AQ-3.

For these reasons, proposed revisions to SPR AQ-3 would not result in an increased risk of landslide by removing root systems that stabilize slopes, and revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more significant effect related to landslide risk than what was covered in the PEIR.

Impact GEO-2

Treatment activities would include thinning, pile burning, broadcast burning, mechanical treatment and manual treatment in areas with steep slopes, which could decrease the stability of slopes and increase the risk of landslides. Review of the California Geological Survey landslide inventory shows that most of the landslides are mapped out near the Vassar property. These areas do not appear to be active. The potential for treatment activities to increase landslide risk was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.7.3, pages 29-30). Given the variable topography in some of the treatment areas, the remoteness of the area, steep terrain, and wet winter conditions, there is the potential for landslides in the project area. The potential for treatment activities to increase landslide risk was examined in the PEIR. This impact is within the scope of the PEIR because the extent of vegetation removal, intensity of prescribed burning, and characteristics of the geographical terrain are consistent with those analyzed in the PEIR.

New Geology, Soils, Paleontology, and Mineral Resource Impacts

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatment area and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.7.1, "Environmental Setting," and Section 3.7.2, "Regulatory Setting," in Volume II of the Final PEIR).

Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR, but existing environmental and regulatory conditions pertinent to geology and soils that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. Therefore, the impacts of the proposed treatments are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to geology, soils, paleontology, or mineral resources would occur that are not covered in the PEIR.

SPRs applicable to this impact are GEO-1, GEO-3, GEO-4, GEO-7, GEO-8, and AQ-3. As explained above, impacts related to landslide risk resulting from the proposed project, including proposed revisions to the project description, compared to the PEIR program description, would not constitute new or substantially more severe significant impact than what was covered in the PEIR.

4.7 EC-Greenhouse Gases Emissions

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact GHG-1: Conflict with Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of GHGs	LTS	Impact GHG-1, pp. 3.8-10 – 3.8-11	Yes	GHG-1	NA	LTS	No	Yes
Impact GHG-2: Generate GHG Emissions through Treatment Activities	PSU	Impact GHG-2, pp. 3.8-11 – 3.8-17	Yes	AQ-3	GHG-2	PSU	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Greenhouse Gases Emissions Impacts: Would the treatment result in other impacts to GHG emissions that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Impact GHG-1

Use of vehicles and mechanical equipment and prescribed burning during initial and maintenance treatments would result in greenhouse gas (GHG) emissions. Consistency of treatments under the CalVTP with applicable plans, policies, and regulations aimed at reducing GHG emissions was examined in the PEIR. This impact is within the scope of the PEIR because the proposed activities, as well as the associated equipment, duration of use, and resultant GHG emissions, are consistent with those analyzed in the PEIR. Actions will be consistent with the California Air Resources Control Board (CARB 2017) strategy for controlling greenhouse gasses. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the same plans, policies, and regulations adopted to reduce GHG emissions apply in the areas outside the treatable landscape, as well as areas within the treatable landscape; therefore, the GHG impact is also the same, as described above. SPR GHG-1 is not applicable to the proposed project; ERRP and MCRDD are not subject to the requirement to provide information to inform reporting under the Board of Forestry and Fire Protection's Assembly Bill 1504 Carbon Inventory Process, because this project is not a registered offset project. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR. All forest workers are local and have a small carbon footprint in terms of travel to the job site.

Impact GHG-2

Use of vehicles and mechanical equipment and prescribed burning during initial and maintenance treatments would result in GHG emissions. The potential for these treatments to generate GHG emissions were analyzed in

the PEIR (CalVTP Final PEIR volume II Section 3.8.3, pages 11-17). This impact is within the scope of the PEIR because the proposed activities, as well as the associated equipment and duration of use, and the intent of the treatments to reduce wildfire risk and GHG emissions related to wildfire are consistent with those analyzed in the PEIR. Mitigation Measure GHG-2 would be implemented and would reduce GHG emissions associated with the prescribed burning. However, emissions generated by the treatment would still contribute to the annual emissions generated by the CalVTP, and this impact would remain significant and unavoidable, consistent with, and for the same reasons described in the PEIR. SPR AQ-3 is also applicable to this treatment and will contain the description of feasible GHG reduction techniques implemented per Mitigation Measure GHG-2.

As described above under Section 1.2, "CEQA and Document Purpose, the MCRCD and ERRP propose to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates developed by the California State-Certified Burn Boss curriculum development committee, or equivalent). Burn plans will be prepared by a certified Burn Boss and will include Smoke Management Plans and other elements that would meet the same standards as required under CAL FIRE burn plans and the CAL VTP PEIR.

For these reasons, proposed revisions to SPR AQ-3 would not result in greater generation of GHG emissions, and revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more significant effect on GHG emissions than what was covered in the PEIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the climate conditions present in the areas outside of the treatable landscape are essentially the same within and outside the treatable landscape; therefore, the GHG impact is also the same, as described above. The SPR applicable to this treatment project is AQ-3. As explained above, impacts on GHG emissions resulting from the proposed project, including proposed revisions to the project description, compared to the PEIR program description, would not constitute a new or substantially more severe significant impact than what was covered in the PEIR.

Combustion of vegetation during the project's prescribed burn phases would also produce substantial amounts of GHG. The PEIR provides the rates of GHG emissions based on past vegetation treatment projects conducted in California associated with each treatment activity (i.e., mechanical treatment, manual treatment, and prescribed burning) and predominant fuel type (i.e., tree, shrub, and grass).

The cover types within the project area for Phase 1 treatment areas range from montane hardwood to annual grassland. Project vegetation treatments through equipment/vehicle use and prescribed burns would result in GHG emissions. The general potential for vegetation treatments to generate GHG emissions was examined in the PEIR. Consistent with the PEIR, project treatment activities would result in GHG emissions from fossil-fueled off-road equipment, hand tools (e.g., chain saws), and prescribed burns. This project impact would be significant, especially due to prescribed burning, even with the implementation of Mitigation Measure GHG-2. No other feasible and effective mitigation exists to substantially reduce GHG emissions to a less-than-significant level. This impact is within the scope of the PEIR because the proposed project activities, as well as the associated equipment use and duration of use, are consistent with those analyzed in the PEIR.

The mechanical, manual, and prescribed burn treatments will reduce slash and combustible fuels available for fire consumption. This, in turn, reduces the potential for uncharacteristic high intensity wildfires, restores ecology that was historically fire-adapted, puts fire back on the landscape where it was historically present, and creates a more stable natural carbon storage. Therefore, the benefits to net GHG emissions resulting from the project outweigh the short-term carbon emissions. GHG generation was examined in the PEIR. Mitigation Measure GHG-2 would be implemented and would reduce GHG emissions associated with the prescribed burning. However, emissions generated by the treatment would still contribute to the annual emissions generated by the CalVTP, and this impact would remain significant and unavoidable, consistent with, and for the same reasons described in, the PEIR. SPR AQ-3 is also applicable to this treatment and will contain the description of feasible

GHG reduction techniques implemented per Mitigation Measure GHG-2. Therefore, this impact would remain potentially significant and unavoidable, as determined in the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the climate conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the GHG impact is also potentially significant and unavoidable, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Impacts Related to GHG Emissions

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (CalVTP Final PEIR Volume II Section 3.8.1 and 3.8.2).

Including land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing environmental conditions pertinent to the climate conditions that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to GHG emissions would occur.

4.8 EC-Energy Resources

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy	LTS	Impact ENG-1, pp. 3.9-7 – 3.9-8	Yes	NA	NA	LTS	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Energy Resource Impacts: Would the treatment result in other impacts to energy resources that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Impact ENG-1

Initial and maintenance treatments will require the consumption of energy through the use of fossil fuels for chainsaws, mechanical equipment, other mechanized hand tools, and transporting personnel to and from the work site. The potential for impacts to result in wasteful, inefficient, or unnecessary consumption of energy and the use of fossil fuels was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.9.3, pages 7-8). The consumption of energy during implementation of the treatment project is within the scope of the PEIR because the types of activities, as well as the associated equipment and duration of proposed use, are consistent with those analyzed in the PEIR. There are no SPRs applicable to this impact.

The inclusion of land in the proposed treatment area that is outside of the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing energy consumption is essentially the same within and outside the treatable landscape; therefore, the energy impact is also less than significant, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

New Energy Resource Impacts

The project proponent has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable regulatory and environmental setting conditions developed in the PEIR (CalVTP Final PEIR Volume II Section 3.9.1 and 3.9.2). The circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to energy use would occur that is not covered in the PEIR.

The project proponent has also determined that the inclusion of land outside the treatable landscape in the proposed treatment area constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions present in the areas

outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment activities are also consistent with those analyzed in the PEIR. There are no changes in circumstances that would lead to significant impacts not addressed in the PEIR. Therefore, no new impact to energy resources would occur that is not covered in the PEIR.

4.9 EC-Hazardous Materials, Public Health and Safety

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials	LTS	Impact HAZ-1, pp. 3.10-14 – 3.10-15	Yes	HAZ-1 HAZ-2 HAZ-3 HAZ-4 HAZ-5	NA	LTS	No	Yes
Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides	LTS	Impact HAZ-2, pp. 3.10-15 – 3.10-18	No	NA	NA	NA	No	Yes
Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	LTSM	Impact HAZ-3, pp. 3.10-18 – 3.10-19	No	NA	HAZ-3	LTSM	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Hazardous Materials, Public Health and Safety Impacts:: Would the treatment result in other impacts related to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
			Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
No new impacts to report.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact HAZ-1

Initial and maintenance treatments would include the use of manual, mechanical, and prescribed fire treatment activities, all of which require the use of hazardous material. These activities would require the transportation, use, filling (into equipment), and storage of petroleum products (fuels, oils, and lubricants). The potential for treatment activities to create a significant health hazard from the use of hazardous materials was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.10.3, pages 14-15). SPRs HAZ-1 through 5 are all applicable to this project. All equipment associated with the proposed project will comply with SPR HAZ-1 to ensure proper maintenance and minimize leaks. SPR HAZ-2 requires mechanized hand tools to have spark arrestors and will be implemented to minimize the risk of potential ignitions. Based on the proper storage and transportation of fuels and oils, the use of PPE, and the implementation of the applicable SPR's, the potential for this project to result in significant health hazards from the use of hazardous materials is less-than-significant. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR. Mendocino County (2020) has a multi-jurisdictional hazard mitigation plan and this Project is in conformance..

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the exposure potential and regulatory conditions are essentially the same within and outside the treatable landscape; therefore, the hazard material

impact is also less than significant, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HAZ-2

This impact does not apply to the proposed project because herbicide use is not proposed.

Impact HAZ-3

Initial and maintenance treatments proposed under this project include mechanical and prescribed burning treatment activities, which have the potential to disturb soils and expose workers, the public, or the environment to hazardous material if a contaminated site is present within the project area. The potential for the treatment activities to disturb or encounter contaminated sites that could expose workers, the public, or the environment to hazardous materials was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.10.3, page 18-19). No SPRs are applicable to this impact. As directed by Mitigation Measure HAZ-3, database searches for hazardous materials were performed utilizing the Department of Toxic Substances Control (DTSC) Cortese List, as well as DTSC EnviroStor web search. Based upon records searches, there are no known hazardous waste sites identified within the proposed project area. Therefore, this impact is reduced to less than significant.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, a database search for hazardous materials performed utilizing the DTSC Cortese List (CEPA 2023) as well as DTSC EnviroStor web search reveals there are no nearby Known Hazardous Material Sites. Therefore, the potential to encounter hazardous materials and the regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, which is less than significant, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Hazardous Materials, Public Health and Safety Impacts

The initial and maintenance treatments proposed for this project are consistent with the treatment types and activities analyzed in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatments and determined they are consistent with the environmental and regulatory conditions presented in the CalVTP PEIR (CalVTP Final PEIR Volume II Section 3.10.1 and 3.10.2).

No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to hazardous materials, public health, and safety would occur that are not covered in the PEIR.

The project proponent has also determined that the inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to hazardous materials that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to hazardous materials, public health, or safety would occur.

4.10 EC-Hydrology and Water Quality

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact HYD-1: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Prescribed Burning	LTS	Impact HYD-1, pp. 3.11-25 – 3.11-27	Yes	AD-3 AQ-3 BIO-1 BIO-4 BIO-5 GEO-3 GEO-4 GEO-6 HYD-4	NA	LTS	No	Yes
Impact HYD-2: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Manual or Mechanical Treatment Activities	LTS	Impact HYD-2, pp. 3.11-27 – 3.11-29	Yes	AD-3 BIO-1 GEO-1 through GEO-5 GEO-7 GEO-8 HAZ-1 HAZ-5 HYD-1 HYD-4 HYD-5	NA	LTS	No	Yes
Impact HYD-3: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through Prescribed Herbivory	LTS	Impact HYD-3, p. 3.11-29	No	-	-	-	-	-
Impact HYD-4: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan	LTS	Impact HYD-4, pp. 3.11-30 – 3.11-31	No		NA	LTS	No	Yes

Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Through the Ground Application of Herbicides								

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Hydrology and Water Quality Impacts: Would the treatment result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?				<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
				Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
No new impacts to report.				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The project area is located in the following Hydrologic Areas (HA) South Fork Eel (11113) and Cal Water watersheds (as described by the watershed mapping system http://egis.fire.ca.gov/watershed_mapper/#): Streeter Creek 1111.330201; Headwaters Ten Mile Creek 1111.330103; Peterson Creek 1111.330202; Grub Creek 1111.330203; Mill Creek 1111. 330101; Big Rock Creek 1111.330.102 and Steep Gulch 1111.330204. All of the watersheds in the project area drain into the Pacific Ocean and contain habitat for anadromous and other aquatic species.

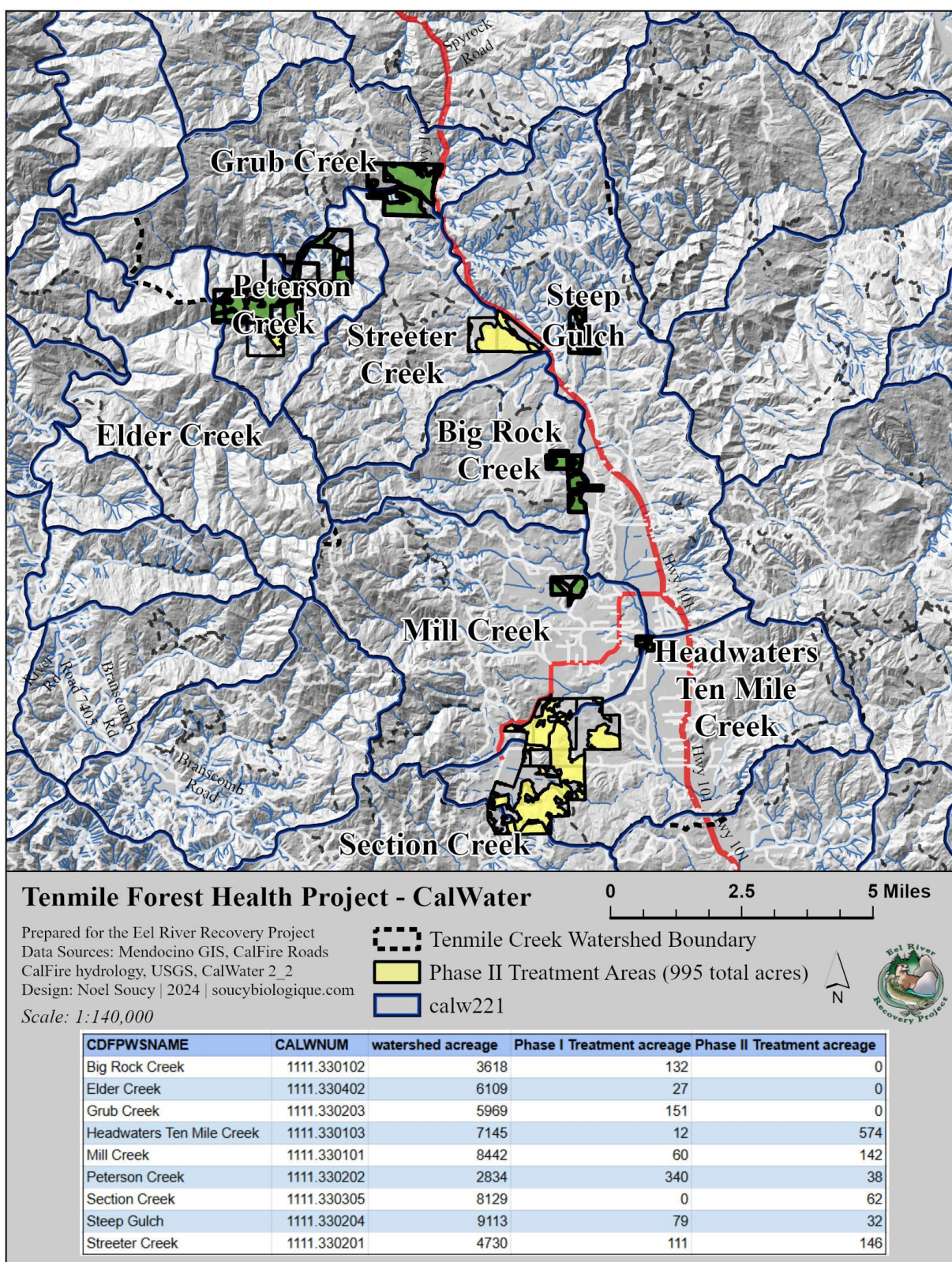


Figure 11: Tenmile Forest Health Project Phase I and Phase II treatment acres by Calwatershed units.

The South Fork Eel River HA is currently listed under Section 303(d) of the Clean Water Act due to impairment and or threat of impairment to water quality by sediment and temperature (California State Water Board North Coast - R1, 2024). The 303(d) listing is regulated at the state level by the Water Quality Control Policy for developing California's Clean Water Act Section 303(d) Listing Policy. Forest health improvement projects that utilize heavy equipment or ground disturbing activities create an opportunity to generate sediment. This project is designed to avoid unnecessary disturbance and further comply with applicable Water Quality waste discharge requirements in the Basin Plan for the North Coast (SPR HYD-1).

Several of the impacts below (i.e., HYD-1 through 4) evaluate compliance with water quality standards or waste discharge requirements. The State Water Resources Control Board is requiring all projects using the CalVTP PEIR to follow the requirements of their Vegetation Treatment General Order, which would meet the requirements of SPR HYD-1. Users of the CalVTP PSA process are automatically enrolled in the General Order and are required to implement all applicable SPRs and mitigation measures from the PEIR. In addition, the General Order requires project proponents to comply with any applicable Basin Plan prohibitions.

As described above under Section 1.2, "CEQA and Document Purpose," ERRP and the MCRCD propose to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates developed by the California State-Certified Burn Boss curriculum development committee, or equivalent). Burn plans prepared by Mendocino County RCD or Eel River Recovery Project would include all of the requirements of CAL FIRE burn plans. Further, prior to implementing broadcast burning activities, Eel River Recovery Project would minimize soil burn severity to reduce the potential for runoff and soil erosion, as outlined in SPR AQ-3.

Impact HYD-1

ERRP and its contractors will conduct vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (WDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In general, WDR and Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. The potential for prescribed burning activities to cause runoff and violate water quality regulations or degrade water quality was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.11.3, pages 25-27).

Impact HYD-2

The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads, including temporary roads.

Impact HYD-3

This impact does not apply to the proposed project because prescribed herbivory is not a proposed treatment activity for this PSA.

Impact HYD-4

All forest treatments will avoid streams and watercourses, with WLPZs protection zones ranging from ranging from 25 to 150 feet (Table 2). The potential for prescribed burning activities to cause runoff and violate water quality regulations or degrade water quality was examined in the PEIR. This impact is within the scope of the PEIR because the use of low-intensity prescribed burns and associated impacts to water quality are consistent with those analyzed in the PEIR.

Impact HYD-5

This impact does not apply to the proposed project because herbicide treatment is not a proposed treatment activity for this PSA

Impact HYD-6

This Project will not interfere with any drainage systems, such as road culverts, or exacerbate any problems in natural drainage systems because there will be no operations in buffer zones of any water course. In fact, the Project will be improving natural drainage systems through placement of woody materials in Class III streams that are covered under an addendum (Appendix 3). The potential for treatment activities to substantially alter the existing drainage pattern of a project site was examined in the PEIR. This impact to site drainage is within the scope of the PEIR because the types of treatments and treatment intensity are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, surface water conditions are essentially the same within and outside the treatable landscape; therefore, the impact related to alteration of site drainage patterns is also the same, as described above. SPRs applicable to this impact are AD-3, GEO-5, HYD-4, and HYD-6. The potential for mechanical treatments to substantially alter existing drainage patterns of the project site was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.11.3, pages 30-31), but mechanical treatments in the Project are restricted to 38 acres and no operation will take place within buffer zones of water courses.

New Hydrology and Water Quality Impacts

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.11.1, "Environmental Setting," and Section 3.11.2, "Regulatory Setting," in Volume II of the Final PEIR).

Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR and revisions to SPRs constitute a revision to the Program. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to hydrology and water quality that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are also consistent with those covered in the PEIR. Impacts resulting from proposed revisions to SPRs and mitigation measures are consistent with the impacts analyzed in the program, as explained under relevant impacts above. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape and revisions to SPRs and mitigation measures would not give rise to any new significant impacts. Therefore, no new impact related to hydrology and water quality would occur.

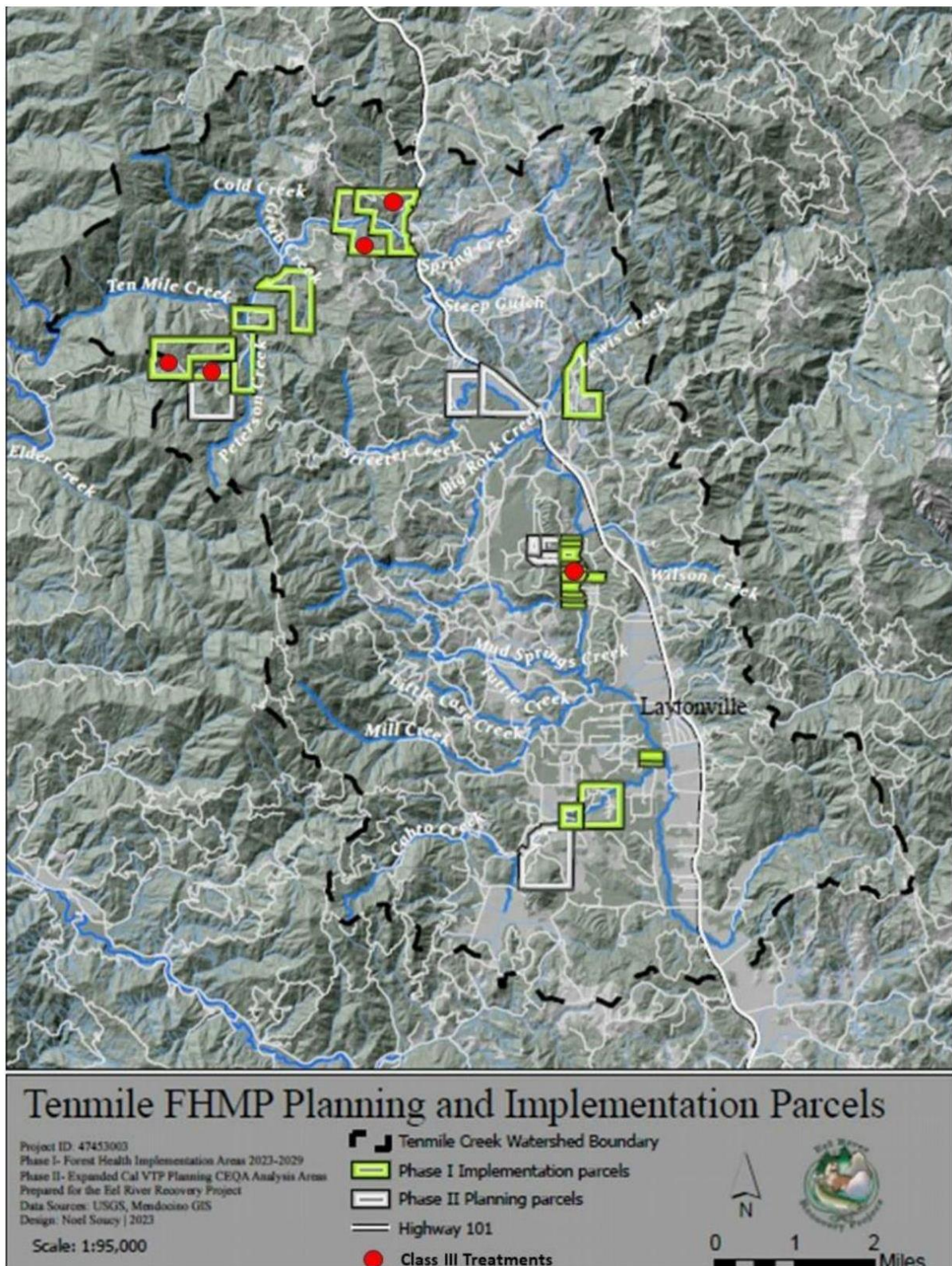


Figure 12: Location of gullies and or Class III watercourse locations for gully stabilization using thinning biomass.

4.11 EC-Land Use and Planning, Population and Housing

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation	LTS	Impact LU-1, pp. 3.12-13 – 3.12-14	Yes	AD-3	NA	LTS	No	Yes
Impact LU-2: Induce Substantial Unplanned Population Growth	LTS	Impact LU-2, pp. 3.12-14 – 3.12-15	Yes	NA	NA	NA	NA	NA

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Land Use and Planning, Population and Housing Impacts: Would the treatment result in other impacts to land use and planning, population and housing that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Impact LU-1

Treatment activities would occur within the project site, which is on a variety of private rangeland, remote residential, agricultural, and forest designated lands in unincorporated Mendocino County. The potential for treatment activities to cause a significant environmental impact due to conflict with a land use plan, policy, or regulation was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.12.3, pages 13-14). SPRs AD-3 is applicable to this project. Several of the parcels involved have existing forest health management plans. No conflicts with a land use plan or policy would occur because the project would adhere to SPR AD-3.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent considered in the PEIR. However, land uses in the project area are essentially the same within and outside the treatable landscape; therefore, the land use impact is also less than significant, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

Impact LU-2

The potential for initial and maintenance treatments to result in substantial population growth as a result of increases in demand for employees was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.12.3, pages 14-15). No SPRs are applicable to this impact.

Crews implementing the proposed project would typically range between 4 to 10 in size, and up to three crews would be working simultaneously to implement the proposed project. Impacts associated with short-term increases in the demand for workers during implementation of the proposed project are within the scope of the PEIR because the number of workers required for implementation of treatments is generally consistent with the crew size analyzed in the PEIR for the types of treatments proposed (i.e., two to 10 workers for mechanical

treatments, and up to 10 workers for manual treatments. Employing local contractors will be encouraged where feasible to minimize the risk of impacting population and housing resources. Based on the consistency with the scope of the PEIR, this impact would remain less than significant.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the population and housing characteristics of the project area are essentially the same within and outside the treatable landscape; therefore, the population and housing impact is also less than significant, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

New Land Use and Planning, Population and Housing Impacts

The proposed project is consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (CalVTP Final PEIR Volume II Section 3.12.1 and 3.12.2).

The MCRCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to land use and planning or population and housing would occur that is not covered in the PEIR.

Including land in the proposed project area that is outside the treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing conditions that are pertinent to land use and planning, population and housing that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to land use and planning, population and housing would occur.

4.12 EC-Noise

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation	LTS	Impact NOI-1, pp. 3.13-9 – 3.13-12; Appendix NOI-1	Yes	AD-3 NOI-1 NOI-2 NOI-3 NOI-4 NOI-5 NOI-6	NA	LTS	No	Yes
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities	LTS	Impact NOI-2, p. 3.13-12	Yes	NOI-1	NA	LTS	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Noise Impacts: Would the treatment result in other noise-related impacts that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Impact NOI-1

Initial and maintenance treatments proposed for this project including manual, mechanical, and prescribed fire treatment activities will require the use of heavy, noise-generating equipment. The potential for substantial short-term increase in ambient noise levels was analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.13.3, pages 9-12).

Manual, mechanical, and prescribed burning treatment activities, as well as chipping/mastication and pile burning occurring adjacent to sensitive land uses, could temporarily expose receptors to noise levels that exceed local standards. The potential for a substantial short-term increase in ambient noise levels from use of heavy equipment was examined in the PEIR. This impact is within the scope of the PEIR because the number and types of equipment proposed, and equipment use being temporary and sporadic, are consistent with the assumptions analyzed in the PEIR. The proposed treatments would not require the use of helicopters, which was the loudest type of equipment evaluated in the PEIR. Mendocino County does not have a noise ordinance or policy restricting the time of day when noise-generating activity can occur. In the absence of standards for construction noise, the County's land use/noise compatibility interior standards would be applied, which limit interior noise to 45 decibels (dB) Ldn (Level day-night) for noise sensitive receptors. Ldn is the day-night average sound level and is used to describe the cumulative noise exposure during an average annual day. As discussed in the PEIR, noise levels generated by individual equipment range from 77 to 87.9 dB at 50 feet from

the noise source, with the loudest type of equipment being a chainsaw. Project operations may employ multiple pieces of equipment simultaneously; however, these would typically be spread out (i.e., usually more than 100 feet apart) rather than operating next to each other. This is particularly true of larger, heavy-duty off-road equipment such as masticators, chippers, bulldozers, skid steers, and excavators. Noise-generating equipment would be used intermittently between 7:00 a.m. and 6:00 p.m. during treatment operations. While there is the potential for some prescribed burning to occur during nighttime and weekend hours, all treatment activities using noise-generating equipment would be limited to 7:00 a.m. to 6:00 p.m. Monday through Friday, which would avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours.

Although operation of equipment would temporarily and intermittently generate elevated noise during daytime hours, the interior noise standard is an average that considers daytime and nighttime noise levels, and when averaged with the noise levels during the quiet nighttime hours, it is reasonably expected that noise generated during treatments would not exceed the local Ldn threshold. In addition, treatments would primarily occur outside of the 100-foot defensible space requirement described in PRC 4291, and therefore, most treatments would not occur within 100 feet of sensitive receptors. The noise levels assessed in the PEIR and discussed above are at 50 feet from the source. Therefore, there would typically be additional attenuation for distance, vegetation, and building materials that would result in interior noise levels being lower than the 77 to 87.9 dB levels estimated for equipment. Treatments would also be dispersed throughout the 1,971-acre project area so that short-term noise increases at any one sensitive receptor would be limited. SPRs AD-3 and NOI-1 through NOI-5 are applicable to this treatment. With implementation of SPR AD-3, noise levels associated with vegetation treatment activities under the CalVTP would not exceed local land use/noise compatibility standards, and noise exposure attributed to vegetation treatment activities under the CalVTP would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of local standards. For any sensitive receptors that are within 1,500 feet of a treatment area, SPR NOI-6 would also apply. There is one school within 1,500 feet of the proposed project area and noise producing work will not occur when school is in session. In addition, there are residences scattered throughout the project area that could be within 1,500 feet of proposed treatments.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the exposure potential to any sensitive receptors present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the noise impact is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR

Impact NOI-2

Initial and maintenance treatments would involve trucks hauling heavy equipment to the project area. These haul trucks would be dispersed on roadways providing access to the project area including, but not limited to, Highways 101 and Branscomb Road. Vehicle traffic on area highways would not generate a noticeable increase in traffic-related noise. Haul truck trips on the local roadways would pass by residential receptors and the event of each truck passing by could increase the single event noise levels. The potential for a substantial short-term increase in single event noise levels was examined in the PEIR. This impact is within the scope of the PEIR because the number and types of equipment proposed are consistent with those analyzed in the PEIR. The haul trips associated with the treatment would occur during daytime hours, which would avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. SPR NOI-1 is applicable to this treatment.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the exposure potential is essentially the same within and outside the treatable landscape; therefore, the noise impact is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Initial and maintenance treatments proposed for this project will require the use of trucks hauling heavy equipment to and from the project site, like masticators, chainsaws, and other noise-generating equipment. These haul truck trips would be dispersed on area roadways providing access to the project area including, but not limited to, Highways 101 and Branscomb Road. Vehicle traffic on area highways would not generate a noticeable increase in traffic-related noise. Although the project site is located in rural Mendocino County, transportation to and from the project site would pass by residential receptors and the event of each truck passing by could increase the single event noise levels. The potential for substantial short-term increase in Single-Event Noise Levels (SENL) was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.13.3, page 12). SPR NOI-1 is applicable to this treatment.

New Noise Impacts

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.13.1, "Environmental Setting," and Section 3.13.2, "Regulatory Setting," in Volume II of the Final PEIR).

Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to noise that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to noise is expected to occur.

4.13 EC-Recreation

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas	LTS	Impact REC-1 pp. 3.14-6 – 3.14-7	Yes	AD-1 AD-3	NA	LTS	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Recreation Impacts: Would the treatment result in other impacts to recreation that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Impact REC-1

The initial and maintenance treatments proposed for this project may result in degradation of views and decreased air quality to nearby recreation areas but as treatment would be on private land, treatment activities would not directly impact recreation. The potential for treatment activities to disrupt recreational activities was analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.14.3, pages 6-7). The temporary disruption of recreational activities during project implementation is within the scope of activities and impacts addressed in the PEIR because the treatments and associated equipment and duration of use is consistent with those analyzed in the PEIR.

Vegetation treatment activities have the potential to disrupt recreational activities within the project area through temporary trail closures during active treatments and by degrading the experience of recreationists through the creation of noise, dust, degradation of scenic views, or increased traffic. The potential for vegetation treatment activities to disrupt recreation activities was examined in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the availability of recreational resources within the project area is essentially the same within and outside the treatable landscape; therefore, the impact to recreation is also the same, as described above. The SPR applicable to this treatment is AD-1. Maintaining consistency with local plans, policies, and ordinances (SPR AD-3) would reduce the risk of indirect disruption to recreational activities near the project area. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

New Recreation Impacts

The proposed project is consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.14.1, "Environmental Setting," and Section 3.14.2, "Regulatory Setting," in Volume II of the Final PEIR). Including land in the proposed project area that is outside the treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental conditions pertinent to recreation that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are also consistent with those covered in the PEIR. The SPRs applicable to this treatment are AD-1 and AD-3. Maintaining consistency with local plans, policies, and ordinances (SPR AD-3) would reduce the risk of indirect disruption to recreational activities near the project area. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to recreation would occur.

4.14 EC-Transportation

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact TRAN-1: Result in Temporary Traffic Operations Impacts by Conflicting with a Program, Plan, Ordinance, or Policy Addressing Roadway Facilities or Prolonged Road Closures	LTS	Section 3.15.2; Impact TRAN-1 pp. 3.15-9 – 3.15-10	Yes	AD-3 HYD-2 TRAN-1	NA	LTS	No	Yes
Impact TRAN-2: Substantially Increase Hazards due to a Design Feature or Incompatible Uses	LTS	Impact TRAN-2 pp. 3.15-10 – 3.15-11	Yes	AD-3 HYD-2 TRAN-1	NA	LTS	No	Yes
Impact TRAN-3: Result in a Net Increase in VMT for the Proposed CalVTP	PSU	Impact TRAN-3 pp. 3.15-11 – 3.15-13	Yes	NA	AQ-1	SU	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Transportation Impacts: Would the treatment result in other impacts to transportation that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Impact TRAN-1

Initial and maintenance treatments have the potential to increase vehicular traffic due to hauling equipment and crew transportation to and from the project site. The potential for a temporary increase in traffic to conflict with a program, plan, or policy addressing roadways facilities or prolonged road closures was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.15.3, pages 9-10). SPRs AD-3, HYD-2, TRAN-1 are all applicable to this project.

The project affects private roads, and a Traffic Management Plan is not necessary for this project (GOPR 2018). The operators will, however, provide signage and traffic control (as needed) during operational hours. This project should not contribute to smoke dispersion onto public roadways (SPR TRAN-1). The project will avoid construction of new roads.

Impact TRAN-2

The potential for smoke to affect visibility along roadways during implementation of treatment activities was examined in the PEIR (CalVTP Final PEIR volume II Section 3.15.3, pages 10-11). This impact is within the scope of

the PEIR because the equipment and methods used for prescribed burning are consistent with those analyzed in the PEIR. SPRs AD-3, HYD-2, TRAN-1 are all applicable to this project.

Impact TRAN-3

Initial and maintenance treatments have the potential to increase vehicle miles traveled (VMT) above baseline conditions because the project area is in a remote location and would require vehicle trips to access treatment locations. The potential for net increase in VMT to occur was analyzed in the PEIR and was identified as potentially significant and unavoidable (CalVTP Final PEIR Volume II Section 3.15.3, pages 11-13). This project is expected to remain below the threshold of 110 trips per day, which is generally assumed to cause less-than-significant transportation impacts, as discussed in the PEIR and the Technical Advisory on Evaluation Transportation Impacts (OPR, 2018). The highest VMT would occur at the beginning and end of project activities and would likely occur on days where broadcast burning is likely to occur. Maximum daily VMT would consist of transportation of fire suppression equipment, hand crews, and heavy machinery to and from the project site, however, the number of trips would remain below 110. Furthermore, hiring local contractors will be encouraged where feasible to reduce the amount of VMT. Temporary increases in VMT are within the scope of the activities and impacts addressed in the PEIR because the number and duration of increased vehicle trips is consistent with those analyzed in the PEIR. Additionally, Mitigation Measure AQ-1 would encourage contractors to carpool or use public transportation when feasible as outlined in the PEIR. This impact would remain potentially significant and unavoidable as determined in the PEIR (CalVTP Final PEIR Volume II Section 3.15.3, page 12-13).

New Transportation Impacts

The proposed treatment is consistent with the treatment types and activities discussed in the PEIR. The project proponent has considered all site-specific characteristics of the proposed treatment project and determined they are consistent with the regulatory and environmental setting conditions presented in the PEIR (CalVTP Final PEIR Volume II 3.15.1 and 3.15.2). In summary, due to an intended decrease in the occurrence and severity of wildfires following achievement of the proposed treatment acreage targets under the CalVTP, implementation of the CalVTP could result in a net reduction in VMT in the long term because wildfire response travel could be reduced, resulting in a less-than-significant impact.

4.15 EC-Public Services, Utilities and Service Systems

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	LTS	Section 3.16.1 pp. 3.16-2 – 3.16-3; Impact UTIL-1 p. 3.16-9	Yes	NA	NA	LTS	No	Yes
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	SU	Section 3.16.1 pp. 3.16-3 – 3.16-5; Impact UTIL-2 pp. 3.16-10 – 3.16-12	Yes	UTIL-1	NA	SU	No	Yes
Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	LTS	Section 3.16.2 pp. 3.16-6 – 3.16-7; Impact UTIL-2 p. 3.16-12	Yes	UTIL-1	NA	LTS	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Public Services, Utilities and Service System Impacts: Would the treatment result in other impacts to public services, utilities and service systems that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Impact UTIL-1

Operators will be responsible for filling required water tenders and/or tanks; outside the project area. Initial and maintenance treatments for this project would include prescribed burning, which may require on-site water supply for fire suppression during burn activities as well as dust control during vegetation removal. If needed, water would be supplied from water trucks, water trailers, or fire engines. The potential increased demand for water was examined in the PEIR (CalVTP Final EIR Volume II Section 3.16.1, page 9). There are no relevant SPRs for this impact.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the water supplies present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the water supply impact is also the same, as described above. No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact UTIL-2

Initial and maintenance treatments would generate biomass as a result of vegetation removal activities within the treatment area. Biomass generated by manual and mechanical treatments will be disposed of primarily through burning on site, chipping, masticating, incineration, or lop and scatter. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the solid waste services present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the solid waste infrastructure impact is also the same as described above. No SPRs are applicable to this impact because all project generated biomass will be disposed of on-site. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact UTIL-3

As discussed above, initial and maintenance treatments would generate biomass. Biomass generated by mechanical and manual treatments would be disposed of with pile burning, mulching, lopping and scattering, or hauling biomass offsite in areas where material cannot safely be burned. If offsite disposal is needed, MCRCD would comply with all federal, state, and local management and reduction goals, statutes, and regulations related to solid waste. Compliance with reduction goals, statutes, and regulations related to solid waste was examined in the PEIR. This impact is within the scope of the activities and impacts addressed in the PEIR because the type and amount of biomass that may need to be hauled off-site are consistent with those analyzed in the PEIR. The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the biomass conditions in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, impacts related to biomass are also the same, as described above. SPR UTIL-1 would be applicable to the proposed treatments if biomass is hauled off-site. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Impacts to Public Services, Utilities and Service Systems

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The site-specific characteristics of the proposed treatments are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.16.1, "Environmental Setting," and Section 3.16.2, "Regulatory Setting," in Volume II of the Final PEIR). Including land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to public services, utilities, and service systems that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to public services, utilities, or service systems would occur.

4.16 EC-Wildfire

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire	LTS	Section 3.17.1; Impact WIL-1 pp. 3.17-14 – 3.17-15	Yes	AD-3 AQ-3 HAZ-2 HAZ-3 HAZ-4	NA	LTS	No	Yes
Impact WIL-2: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides	LTS	Section 3.17.1; Impact WIL-2 pp. 3.17-15 – 3.17-16	Yes	AQ-3 GEO-3 GEO-4 GEO-5 GEO-8 -	NA	LTS	No	Yes

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Wildfire Impacts: Would the treatment result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
No new impacts to report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Impact WIL-1

Proposed vegetation treatment activities are mechanical, manual and prescribed burn treatments. Vegetation treatments involving motorized equipment could pose a risk of accidental ignition. Temporary increases in risk associated with uncontrolled fire from prescribed burns could also occur. As discussed in Section 3.17.1, "Environmental Setting," in Volume II of the Final PEIR, under "Prescribed Burn Planning and Implementation," implementing a prescribed burn requires extensive planning, including the preparation of prescription burn plans, smoke management plans, site-specific weather forecasting, public notifications, safety considerations, and ultimately favorable weather conditions so a burn can occur on a given day. Prior to implementing a broadcast burn, fire containment lines would be established by clearing vegetation surrounding the designated burn area to help prevent the accidental escape of fire. Water containers and safety equipment would be staged on site as necessary.

The potential increase in exposure to wildfire during implementation of treatments was examined in the PEIR. Increased wildfire risk associated with the use of heavy equipment in vegetated areas and with prescribed burns is within the scope of the PEIR because the types of equipment and treatment duration and the types of prescribed burn methods proposed as part of the project are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the

wildfire risk is essentially the same within and outside the treatable landscape; therefore, the wildfire impact is also the same, as described above. SPRs applicable to this impact are AD-3, AQ-3, HAZ-2, HAZ-3, and HAZ-4. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact WIL-2

Vegetation treatment types would include mechanical and manual vegetation treatment, and prescribed burning, which could exacerbate fire risk as described in Impact WIL-1 above. The potential for post-fire landslides and flooding was evaluated in the PEIR. The potential exposure of people or structures to post-fire landslides and flooding are within the scope of the activities and impacts covered in the PEIR because the equipment types and duration of treatments, and methods of prescribed burn implementation are consistent with those analyzed in the PEIR. As described above under Section 1.2, "CEQA and Document Purpose," Mendocino County RCD and Eel River Recovery Project proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates developed by the California State-Certified Burn Boss curriculum development committee, or equivalent). Burn plans prepared by Mendocino County RCD and Eel River Recovery Project would include all of the requirements of CAL FIRE burn plans. Further, prior to implementing broadcast burning activities, Mendocino County RCD and Eel River Recovery Project would minimize soil burn severity to reduce the potential for runoff and soil erosion, as outlined in SPR AQ-3.

For these reasons, proposed revisions to SPR AQ-3 would not result in an increased risk of post-fire landslides and flooding, and revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more significant effect related to post-fire landslide and flooding risk than what was covered in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the wildfire risk of the project area is essentially the same within and outside the treatable landscape; therefore, the wildfire impact is also the same, as described above. SPRs applicable to this impact are AQ-3, GEO-3 through GEO-5, and GEO-8. Although most mechanical treatments would occur from existing roads or skid trails or on flat to moderate slopes, SPR GEO-8 would apply if a treatment area contains steep slopes. Furthermore, because the treatments reduce wildfire risk, they would also decrease post wildfire landslide and flooding risk in areas that could otherwise burn in a high-severity wildfire without treatment. As explained above, impacts related to wildfire risk resulting from the proposed project, including proposed revisions to the project description, compared to the PEIR program description, would not constitute new or substantially more severe significant impact than what was covered in the PEIR.

New Impacts to Wildfire

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.17.1, "Environmental Setting," and Section 3.17.2, "Regulatory Setting," in Volume II of the Final PEIR). Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR and revisions to SPRs constitute a revision to the Program. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to wildfire that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to wildfire would occur that is not covered in the PEIR.

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Appendix A

Mitigation Monitoring and Reporting Program for the Tenmile Creek Forest Health Project

Introduction

The California Environmental Quality Act (CEQA) and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies “to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment.” A Mitigation Monitoring and Reporting Program (MMRP) is required for approval of the proposed project because the Project-Specific Analysis/Addendum (PSA/Addendum) to the California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR) identifies potential significant adverse impacts and all feasible mitigation measures have been adopted. Standard project requirements (SPRs), which are part of the project description, have been incorporated to avoid or minimize adverse effects. Where potentially significant impacts remain after application of SPRs, mitigation measures have been identified to further reduce and/or compensate for those impacts. While only mitigation measures are required to be covered in an MMRP, both SPRs and mitigation are included in this MMRP to assist in implementation of all environmental protection features of later activities consistent with the CalVTP PEIR.

Purpose of Mitigation Monitoring and Reporting Program

This MMRP has been prepared to facilitate the implementation of SPRs and mitigation measures. The attached table presents the text of each SPR and mitigation measure from the CalVTP PEIR that is applicable to the project, the timing of its planned implementation, the implementing entity, and the entity with monitoring responsibility. The numbering of SPRs and mitigation measures follows the numbering used in the PEIR. SPRs and mitigation measures that are referenced more than once in the PSA/Addendum are not duplicated in the MMRP. Instructions for project-specific implementation of certain SPRs and Mitigation Measures have been added to tailor the specific impact avoidance and minimization actions relevant to the proposed treatments, agency standard practices, and the conditions and resources present within each treatment site. In addition, non-substantive clarifying edits to mitigation measures in the PEIR are shown. In all cases, the additional project-specific implementation instruction and clarifying edits to mitigation measures maintain the SPRs and mitigation measures as equivalent or more effective than those presented in the PEIR.

Roles and Responsibilities

This PSA was developed for the MCRCD in collaboration with the ERRP by BBW & Associates, Stillwater Sciences, Salix Natural Resource Management and Planwest Partners, Inc. The MCRCD is the project proponent of the PSA and the lead agency of the PSA/Addendum under CEQA and is responsible for approving and submitting the PSA for inclusion under the CalVTP PEIR, the overall administration of this project specific MMRP, and for ensuring that implementation of the mitigation measures and SPRs occurs in accordance with this MMRP.

Reporting: MCRCD and ERRP shall document and describe the compliance of project treatment work with the required SPRs and Mitigation Measures either by adapting the project-specific MMRP table below or preparing a separate post-project implementation report pursuant to the requirements of SPR AD-7.

Mitigation Monitoring and Reporting Program Table

- ▶ **Applicable (Yes/No).** Document whether the SPR or mitigation measure is applicable to the initial treatment and/or treatment maintenance (Yes or No), and whether it is applicable to initial treatment and/or treatment maintenance. The applicability should be substantiated in the Environmental Checklist Discussion.
- ▶ **Timing.** This column identifies the time frame in which the SPR or mitigation measure will be implemented (e.g., prior to treatment, during treatment, etc.).
- ▶ **Implementing Entity.** The implementing entity is the agency or organization responsible for carrying out the requirement. This could include the project proponent's project manager, a technical specialist (e.g., archeologist or biologist), a vegetation management contractor, a partner agency or organization, or other entities that are primarily responsible for carrying out each project requirement.
- ▶ **Verifying/Monitoring Entity.** The verifying/monitoring entity is the agency or organization responsible for ensuring that the requirement is implemented. The verifying/monitoring entity may be different from the implementing entity.

Qualification Requirements for Biological and Cultural Resource Measures

The biological and cultural resource SPRs and mitigation measures in the attached MMRP table require that qualified individuals implement components of the measures. The CalVTP PEIR requirements listed below will be met to be considered qualified and may be performed by individuals of various titles (including archaeologist, biologist, botanist, ecologist, Registered Professional Forester (RPF), biological technician, or supervised designees working at the direction of a qualified professional) as long as they are qualified for the task at hand.

Archaeologically Trained Resource Professional: To be qualified, an archaeologically-trained resource professional would hold a valid Archaeological Training Certificate issued by CAL FIRE and the Board or equivalent state or local agency training or certification. Work performed by an archaeologically-trained resource professional must be reviewed and approved by a qualified archaeologist.

Qualified Archaeologist: To be qualified, an archaeologist would hold a Prehistoric Archeology, Historic Archeology, Conservation, Cultural Anthropology, or Curation degree from an accredited university and meet the Secretary of Interior's Qualifications Standards (36 CFR Part 61). The project proponent will review the resume and approve the qualifications of the archaeologists.

Qualified RPF or Biological Technician: To be qualified, an RPF or biological technician would 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting biological monitoring of relevant species or resources, and 4) be knowledgeable about state and federal laws regarding the protection of special-status species. The project proponent will review the resume and approve the qualifications of RPFs or biological technicians.

Qualified RPF or Biologist: To be qualified, an RPF or biologist would hold a wildlife biology, botany, ecology, forestry, or other relevant degree from an accredited university and: 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting field surveys of relevant species or resources, 4) be knowledgeable about survey protocols, 5) be

knowledgeable about state and federal laws, including the Coastal Act, regarding the protection of special-status species, communities, and environmentally sensitive habitat, and 6) have experience with CDFW's California Natural Diversity Database (CNDDDB) and Biogeographic Information and Observation System (BIOS). The project proponent will review the resume and approve the qualifications of RPFs or biologists. If species-specific protocol surveys are performed, surveys would be conducted by qualified RPFs or biologists with the minimum qualifications required by the appropriate protocols, including having CDFW or USFWS approval to conduct such surveys, if required by certain protocols.

Qualified RPF or Botanist: To be qualified, an RPF or botanist would 1) be knowledgeable about plant taxonomy, 2) be familiar with plants of the region, including special-status plants and sensitive natural communities, 3) have experience conducting floristic botanical field surveys as described in CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018), or experience conducting such botanical field surveys under the direction of an experienced botanical field surveyor, 4) be familiar with the California Manual of Vegetation (Sawyer et al. 2009 or current version, including updated natural communities data at <http://vegetation.cnps.org/>), and 5) be familiar with federal, state, and local statutes and regulations related to plants and plant collecting. The project proponent will review the resume and approve the qualifications of RPFs or botanists.

Standard Project Requirements and Mitigation Measures Checklist

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Administrative Standard Project Requirements				
SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR AD-2 Delineate Protected Resources: The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR AD-4 Public Notifications for Prescribed Burning: At least three days prior to the commencement of prescribed burning operations, the project proponent will: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will	Initial Treatment: Y	At least three days prior to prescribed burn activities	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	Treatment Maintenance: Y			
Project Specific Implementation: No additional project specific implementation required				
SPR AD-5 Maintain Site Cleanliness: If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to, during, and following treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR AD-6 Public Notifications for Treatment Projects: One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.	Initial Treatment: Y Treatment Maintenance: Y	One to three days prior to the treatment activities	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects: For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism. Information on proposed projects (PSA in progress): ► GIS data that include project location (as a point);	Initial Treatment: Y Treatment Maintenance: Y	Information on the proposed project (PSA and Addendum in progress) was submitted to CAL FIRE on July 23, 2024.	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> ▶ project size (typically acres); ▶ treatment types and activities; and ▶ contact information for a representative of the project proponent. <p>The project proponent will provide information on the proposed project to the Board or CAL FIRE as early as feasible in the planning phase. The project proponent will provide this information to the Board or CAL FIRE with sufficient lead time to allow those agencies to make the information available to the public no later than two weeks prior to project approval. The project proponent may also make information available to the public via other mechanisms (e.g., the proponent's own website).</p> <p>Information on approved projects (PSA complete):</p> <ul style="list-style-type: none"> ▶ A completed PSA Environmental Checklist; ▶ A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist); ▶ GIS data that include a polygon(s) of the project area, showing the extent of each treatment type included in the project (ecological restoration, fuel break, WUI fuel reduction). <p>Information on completed projects:</p> <ul style="list-style-type: none"> ▶ GIS data that include a polygon(s) of the treated area, showing the extent of each treatment type implemented (ecological restoration, fuel break, WUI fuel reduction) ▶ A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes <ul style="list-style-type: none"> ■ Size of treated area (typically acres); ■ Treatment types and activities; ■ Dates of work; ■ A list of the SPRs and mitigation measures that were implemented ■ Any explanations regarding implementation if required by SPRs and mitigation measures (e.g., explanation for feasibility determination required by SPR BIO-12; explanation for reduction of a no-disturbance buffer below the general minimum size described in Mitigation Measures BIO-1a and BIO-2b). 				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
This SPR applies to all treatment activities and all treatment types, including treatment maintenance.				
Project Specific Implementation: No additional project specific implementation required				
SPR AD-8 Request Access for Post-Treatment Assessment: For CAL FIRE projects, during contract development, CAL FIRE will include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period will be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y/N Depending on funding source	Post treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
Aesthetic and Visual Resource Standard Project Requirements				
SPR AES-1 Vegetation Thinning and Edge Feathering: The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During Treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR AES-2 Avoid Staging within Viewsheds: The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR AES-3 Provide Vegetation Screening: The project proponent will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Project Specific Implementation: No additional project specific implementation required				
Air Quality Standard Project Requirements				
SPR AQ-1 Comply with Air Quality Regulations: The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR AQ-2 Submit Smoke Management Plan: The project proponent will submit a smoke management plan for all prescribed burns to the applicable air district, in accordance with 17 CCR Section 80160. Pursuant to this regulation a smoke management plan will not be required for burns less than 10 acres that also will not be conducted near smoke sensitive areas, unless otherwise directed by the air district. Burning will only be conducted in compliance with the burn authorization program of the applicable air district(s) having jurisdiction over the treatment area. Example of a smoke management plan is in Appendix PD-2. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to prescribed burn treatment activities	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR AQ-3 Create Burn Plan: The project proponent will create a burn plan <u>for broadcast burns using a template developed by the California State-Certified Burn Boss curriculum development committee, or equivalent that includes elements required to obtain burn permits, and any additional elements that are needed to using the CAL FIRE burn plan template for all prescribed burns. The burn plan will include a fire behavior model output of First Order Fire Effects Model and BEHAVE or other fire behavior modeling simulation and that is performed by a qualified fire behavior technical specialist that predicts fire behavior, calculates consumption of fuels, tree mortality, predicted emissions, greenhouse gas emissions, and soil heating.</u> design a burn that will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. <u>This may, but is not required to, include outputs from fire behavior modeling programs.</u> The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed	Initial Treatment: Y Treatment Maintenance: Y	Prior to prescribed burn treatment activities	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
burning treatment activities and all treatment types, including treatment maintenance.				
Project Specific Implementation: No additional project specific implementation required				
<p>SPR AQ-4 Minimize Dust: To minimize dust during treatment activities, the project proponent will implement the following measures:</p> <ul style="list-style-type: none"> ▶ Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol. ▶ If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations. ▶ Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113. ▶ Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may “cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property,” per Health and Safety Code Section 41700. <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	During Treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR AQ-5 Avoid Naturally Occurring Asbestos: The project proponent will avoid ground-disturbing treatment activities in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by the air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by the applicable air district will be followed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR AQ-6: Prescribed Burn Safety Procedures: Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). The IAP will include the burn dates; burn hours; weather limitations; the specific burn prescription; a communications plan; a medical plan; a traffic plan; and special instructions such as minimizing smoke impacts to specific local roadways. The IAP will also assign responsibilities for coordination with the appropriate air district, such as conducting onsite briefings, posting notifications, weather monitoring during burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During prescribed burn treatment activities	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements				
SPR CUL-1 Conduct Record Search: An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance with applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Record search of project area and 0.25-mile buffer surrounding project area has been conducted; see PSA/Addendum for a summary of results.	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR CUL-2 Contact Geographically Affiliated Native American Tribes: The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List. Using the appropriate Native Americans Contact List, the project proponent will notify the California Native American Tribes in the counties where the treatment activity is located. The notification will contain the following:	Initial Treatment: Y Treatment Maintenance: Y	Tribes have been contacted and Sacred Lands File (SLF) query completed; see PSA/Addendum for a summary of consultation and SLF results.	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Project Specific Implementation: No additional project specific implementation required				
SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR CUL-6 Treatment of Tribal Cultural Resources: The project proponent, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. The project proponent will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. The project proponent will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities. Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Project Specific Implementation: No additional project specific implementation required				
SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior/During/After	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
Biological Resources Standard Project Requirements				
SPR BIO-1: Review and Survey Project-Specific Biological Resources: The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural communities, wetlands, or wildlife nursery sites or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment Initial data review, and protocol surveys and reconnaissance-level survey have been conducted; see PSA/Addendum for summary of results.	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:</p> <ol style="list-style-type: none"> 1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided. If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment: <ol style="list-style-type: none"> a. by physically avoiding the suitable habitat, or b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites). <p>Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist.</p> 2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, 				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>such as those that are available on the CDFW webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7).</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance. To avoid impacts on northern spotted owl, the following measures will be implemented:</p> <ul style="list-style-type: none"> • To determine whether a documented northern spotted owl nesting occurrence is present within 0.25 mile of the treatment area, a qualified RPF or biologist will review northern spotted owl occurrence data in the CNDDDB and the project proponent will contact CDFW and BLM biologists to obtain any recent survey and occurrence data for northern spotted owl that have not been made publicly available (e.g., in the CNDDDB). • If a documented northern spotted owl nesting occurrences is present, potential impacts from loud and continuous noise on the nesting occurrence will be avoided by implementing a limited operating period within 0.25 mile of the occurrence during the northern spotted owl nesting season (February 1–July 9) or mechanical treatments, manual treatments, and pile burning activities. If the limited operating period is determined to be infeasible, then SPR BIO-10 will be implemented. • If habitat suitable for northern spotted owl is present in a treatment area with no recent record of surveys, northern spotted owl presence would be assumed, and potential impacts will be avoided by implementing a limited operating period within 0.25 mile of this habitat during the northern spotted owl nesting season (February 1–September 15) for mechanical treatments, manual treatments, and pile burning activities, if feasible. If the limited operating period is determined to be infeasible, then SPR BIO-10 will be implemented. • To avoid impacts on special-status bumble bees, a limited operating period for mechanical treatment or prescribed burning in grassy areas from May 15 to August 31 will be implemented, if feasible. If the limited operating period is determined to be infeasible, then SPR BIO-10 will be implemented. 				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> To avoid impacts on fisher, within habitat determined to be suitable for the species by a qualified RPF or biologist, a limited operating period for mechanical treatments and prescribed burning activities from March 1 to June 30 will be implemented, if feasible. If conducting some mechanical and prescribed burning treatments outside of the fisher maternity season (May 1–June 30) is determined to be infeasible for certain treatments, then SPR BIO-10 will be implemented. To avoid impacts on fisher, within habitat determined to be suitable for the species by a qualified RPF or biologist, a limited operating period for mechanical treatments and prescribed burning activities from March 1 to June 30 will be implemented, if feasible. If conducting some mechanical and prescribed burning treatments outside of the fisher maternity season (May 1–June 30) is determined to be infeasible for certain treatments, then SPR BIO-10 will be implemented. To avoid impacts on ringtail, a limited operating period for mechanical treatments and prescribed burning activities from April 15 to June 30 will be implemented, if feasible. If conducting some mechanical and prescribed burning treatments outside of the ringtail maternity season (April 15–June 30) is determined to be infeasible for certain treatments, then SPR BIO-10 will be implemented. To avoid impacts on special-status bat maternity colonies, a limited operating period for mechanical treatments, manual treatments, and prescribed burning from April 1 to August 31 will be implemented, if feasible. If it is infeasible to follow the limited operating period, focused or protocol-level surveys will be required per SPR BIO-10. 				

Project Specific Implementation: Initial data review and reconnaissance-level surveys have been conducted, see section 3.5 EC – Biological Resources in the PSA checklist for additional results.

Biological resource SPRs and mitigation measures require that qualified individuals implement components of the measures. The requirements listed below will be met to be considered qualified and may be performed by individuals of various titles (including biologist, botanist, ecologist, Registered Professional Forester, biological technician, or supervised designees working at the direction of a qualified professional) as long as they are qualified for the task at hand.

Qualified Registered Professional Forester (RPF) or Biologist: To be qualified, an RPF or biologist would hold a wildlife biology, botany, ecology, forestry, or other relevant degree from an accredited university and: 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting field surveys of relevant species or resources, 4) be knowledgeable about survey protocols, 5) be knowledgeable about state and federal laws, including the Coastal Act, regarding the protection of special-status species, communities, and environmentally sensitive habitat, and 6) have experience with CDFW's California Natural Diversity

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Database (CNDDDB) and Biogeographic Information and Observation System (BIOS). The project proponent will review the resume and approve the qualifications of RPFs or biologists. If species-specific protocol surveys are performed, surveys would be conducted by qualified RPFs or biologists with the minimum qualifications required by the appropriate protocols, including having CDFW or USFWS approval to conduct such surveys, if required by certain protocols.</p> <p>Qualified RPF or Botanist: To be qualified, an RPF or botanist would 1) be knowledgeable about plant taxonomy, 2) be familiar with plants of the region, including special-status plants and sensitive natural communities, 3) have experience conducting floristic botanical field surveys as described in CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018), or experience conducting such botanical field surveys under the direction of an experienced botanical field surveyor, 4) be familiar with the <i>California Manual of Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/), and 5) be familiar with federal, state, and local statutes and regulations related to plants and plant collecting. The project proponent will review the resume and approve the qualifications of RPFs or botanists.</p> <p>Qualified RPF or Biological Technician: To be qualified, an RPF or biological technician would 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting biological monitoring of relevant species or resources, and 4) be knowledgeable about state and federal laws regarding the protection of special-status species. The project proponent will review the resume and approve the qualifications of RPFs or biological technicians.</p>				
<p>SPR BIO-2: Require Biological Resource Training for Workers: The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	Prior to treatment	ERRP	ERRP
<p>Project Specific Implementation: No additional project specific implementation required</p> <p>Sensitive Natural Communities and Other Sensitive Habitats</p>				
<p>SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats: If SPR BIO-1 determines that sensitive natural communities or sensitive habitats</p>	Initial Treatment: Y	Prior to and during treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>may be present and adverse effects cannot be avoided, the project proponent will:</p> <ul style="list-style-type: none"> ▶ require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of <i>A Manual of California Vegetation</i> (including updated natural communities data at http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website). ▶ map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area. <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	Treatment Maintenance: Y			
Project Specific Implementation: No additional project specific implementation required				
<p>SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat</p> <p>Function: Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:</p> <ul style="list-style-type: none"> ▶ Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities. ▶ Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species. 	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	Prior to and during treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> ▶ Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements. ▶ Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service). ▶ Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided. ▶ Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints. ▶ The project proponent will notify CDFW when required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate 				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.</p> <p>► In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment goals objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
Project Specific Implementation: No additional project specific implementation required				
<p>SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub: The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed).</p> <p>During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist will identify chaparral and coastal sage scrub vegetation to the alliance</p>	<p>Initial Treatment: Y/N</p> <p>Treatment Maintenance: Y/N</p>	Prior to and during treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area.</p> <p>For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will:</p> <ul style="list-style-type: none"> ▶ Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale. ▶ The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion. <p>These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance.</p> <p>Additional measures will be applied to ecological restoration treatment types:</p> <ul style="list-style-type: none"> ▶ For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types. ▶ Ecological restoration treatments will not be implemented in vegetation types that are within their natural fire return interval (i.e., time since last burn is less than the average time listed as the fire return interval range in Table 3.6-1) unless the project proponent demonstrates with substantial 				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>evidence that the habitat function of chaparral and coastal sage scrub would be improved.</p> <ul style="list-style-type: none"> ▶ A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover can be retained if the project proponent demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential, and site hydrology. ▶ If the stand within the treatment area consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity. <p>These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance.</p> <p>A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion would not occur, as required by SB 1260. The project proponent will determine its criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR.</p>				
Project Specific Implementation: No additional project specific implementation required				
SPR BIO-6: Prevent Spread of Plant Pathogens: When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project	Initial Treatment: Y	Prior to and during treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>species in the same genus as the target species will be assumed to be special-status.</p> <p>If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS.</p> <p>For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys will not be required under the following circumstances:</p> <ul style="list-style-type: none"> ▶ If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys. ▶ If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment. <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
Project Specific Implementation: No additional project specific implementation required				
Environmentally Sensitive Habitat Areas				
SPR BIO-8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs.	Initial Treatment: N Treatment Maintenance: N	NA	NA	NA
Project Specific Implementation: The project is not in the Coastal Zone.				
Invasive Plants and Wildlife				
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife: The project proponent will take the following actions to prevent the	Initial Treatment: Y	Prior to and during treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail):</p> <ul style="list-style-type: none"> ▶ clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife; ▶ for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species; ▶ inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas; ▶ stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area; ▶ identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include manual or mechanical treatments, as well as prescribed burning and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles; ▶ treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive 	Treatment Maintenance: Y			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>plant materials in a closed container or bag to prevent the spread of propagules during transport; and</p> <p>► implement Fire and Fuel Management BMPs outlined in the “Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers” (Cal-IPC 2012, or current version).</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				

Project Specific Implementation: No additional project specific implementation required

Wildlife

<p>SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols.</p> <p>The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol surveys for a special-status species with potential to occur in the treatment area may not be required if presence of the species is assumed.</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>No more than 14 days prior to treatment, unless otherwise specified in a protocol</p>	<p>ERRP</p>	<p>ERRP</p>
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Project Specific Implementation:

- If the 200-foot no-disturbance buffer for foothill yellow-legged frog is determined to be infeasible, to avoid impacts on the species, focused visual encounter surveys for these species will be conducted for the species prior to treatment activities within 200 feet of perennial (i.e., Class I and Class II) streams. If foothill yellow-legged frogs are identified during focused surveys, Mitigation Measure BIO-2a will be implemented.
- If the 20-foot no-disturbance buffer for Red legged frog and Pacific tailed frog is determined to be infeasible, to avoid impacts on the species, focused visual encounter surveys for these species will be conducted for the species prior to treatment activities within 20 feet of perennial (i.e., Class I and Class II) streams, ponds, and wet meadows. If red legged frogs or Pacific tailed frogs are identified during focused surveys, Mitigation Measure BIO-2a (Cascades frog) and BIO-2b.
- Because no-disturbance buffers for western pond turtle are not feasible, to avoid impacts on western pond turtle, focused visual encounter surveys for the species and for potentially suitable burrows will be conducted within habitat areas suitable for the species prior to treatment activities within approximately 1,500 feet of aquatic habitat (i.e., streams, ponds). If burrows potentially suitable for western pond turtle are detected, the RPF or qualified biologist will inspect the burrow to determine

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>whether it is occupied (e.g., using a burrow scope). If western pond turtles are identified during focused surveys, Mitigation Measure BIO-2b for this species will be implemented.</p> <ul style="list-style-type: none"> If the limited operating period for special-status bumble bees is determined to be infeasible, to avoid impacts on the species, SPR BIO-10 will be implemented and focused surveys for special-status bumble bees will be conducted in coordination with the USFWS Arcata office prior to implementing mechanical treatments or prescribed burning in meadows. Survey methods will follow procedures outlined in the rusty-patched bumble bee protocol (USFWS 2018) or any subsequently published protocol for listed bumble bees. Because no-disturbance buffers and limited operating periods for American badgers are not feasible, to avoid impacts on American badgers, a focused survey for the species and for potential dens will be conducted prior to implementing treatments in habitat suitable for the species (i.e., grassland, open woodland). If American Badger dens are detected during focused surveys, Mitigation Measure BIO-2b will be implemented. If the limited operating period for fisher is determined to be infeasible, to avoid impacts on the species, focused surveys for fisher, including non-invasive survey methods (e.g., trail cameras, track plates, hair snares), will be conducted prior to implementing mechanical treatments and prescribed burning during the fisher maternity season (May 1–June 30) within habitat suitable for the species. If presence of fisher is assumed or an active den is identified during focused surveys by a qualified RPF or biologist, Mitigation Measure BIO-2b will be implemented. 				
SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory).	Initial Treatment: N Treatment Maintenance: N	NA	NA	NA
Project Specific Implementation: The project does not include prescribed herbivory treatment.				
<p>SPR BIO-12. Protect Common Nesting Birds, Including Raptors: The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist.</p> <p>If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing records (e.g., CNDDB, eBird database, State Wildlife Action Plan) should be reviewed in advance of the survey to identify the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area will be determined by a qualified RPF or biologist, based on the potential species in the area, location of suitable nesting habitat, and type of treatment.</p>	Initial Treatment: Y Treatment Maintenance: Y	Conduct a survey for common nesting birds (if needed) at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies (typically no more than approximately 14 days before treatment); if an active nest is observed, implement avoidance strategies prior to and	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food).</p> <p>If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, the project proponent will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following:</p> <ul style="list-style-type: none"> ► Establish Buffer. The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities will be implemented outside of the buffer. The buffer location will be determined by a qualified RPF or biologist. Factors to be considered for determining buffer location will include: presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Nests of common birds within the buffer need not be monitored during treatment. However, buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician. ► Modify Treatment. The project proponent will modify the treatment in the vicinity of an active nest to avoid disturbance of active nests (e.g., by implementing manual treatment methods, rather than mechanical treatment methods). Treatment modifications will be determined by the project proponent in coordination with the qualified RPF or biologist. ► Defer Treatment. The project proponent will defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. If 		during treatment		

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>this avoidance strategy is implemented, treatment activity will not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.</p> <p>Feasible actions will be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by the project proponent based on whether implementation of this SPR will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. Considerations may include limitations on the presence of environmental and atmospheric conditions necessary to execute treatment prescriptions (e.g., the limited seasonal windows during which prescribed burning can occur when vegetation moisture, weather, wind, and other physical conditions are suitable). If it is infeasible to avoid loss of common bird nests (not including raptor nests), the project proponent will document the reasons implementation of the avoidance strategies is infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). The following avoidance strategies may also be considered together with or in lieu of other actions for implementation by a project proponent to avoid disturbance to raptor nests:</p> <ul style="list-style-type: none"> ► Monitor Active Raptor Nest During Treatment. A qualified RPF, biologist, or biological technician will monitor an active raptor nest during treatment activities to identify signs of agitation, nest defense, or other behaviors that signal disturbance of the active nest is likely (e.g., standing up from a brooding position, flying off the nest). If breeding raptors are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer, modify treatment or defer treatment) will be implemented or a pause in the treatment activity will occur until the disturbance behavior ceases. ► Retention of Raptor Nest Trees. Trees with visible raptor nests, whether occupied or not, will be retained. <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
Project Specific Implementation: No additional project specific implementation required				
Geology, Soils, and Mineral Resource Standard Project Requirements				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical treatments if the National Weather Service forecast is a “chance” (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During Treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR GEO-2 Limit High Ground Pressure Vehicles: The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR GEO-3 Stabilize Disturbed Soil Areas: The project proponent will stabilize soil disturbed during mechanical and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will	Initial Treatment: Y Treatment Maintenance: Y	During treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.				
Project Specific Implementation: No additional project specific implementation required				
SPR GEO-4 Erosion Monitoring: The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical and prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season; if erosion control measures are not properly implemented, remediate prior to the first rainfall event; inspect for evidence of erosion after the first large storm or rainfall event (i.e., greater than 1.5 inches in 24 hours) as soon as is feasible after the event; any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR GEO-5 Drain Stormwater via Water Breaks: The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During mechanical, manual, and prescribed burn treatment activities	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR GEO-6 Minimize Burn Pile Size: The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment on slopes greater than 50 percent	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR GEO-7 Minimize Erosion: To minimize erosion, the project proponent will: (1) Prohibit use of heavy equipment where any of the following conditions are present: (i) Slopes steeper than 65 percent. (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme. (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake. (2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to: (i) Existing tractor roads that do not require reconstruction, or (ii) New tractor roads flagged by the project proponent prior to the treatment activity..	Initial Treatment: Y Treatment Maintenance: Y	During Treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
This SPR applies to all treatment activities and all treatment types, including treatment maintenance.				
Project Specific Implementation: No additional project specific implementation required				
SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during mechanical treatment and WUI fuel reduction treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
Greenhouse Gas Emissions Standard Project Requirements				
SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process: The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	After	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
Hazardous Material and Public Health and Safety Standard Project Requirements				
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Inspect all equipment for leaks prior to treatment; inspect everyday thereafter until equipment is removed from the site; promptly remove any leaking equipment; maintain all diesel- and gasoline-powered equipment per manufacturer's	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
		specifications and in compliance with all state and federal emissions requirements during treatment		
Project Specific Implementation: No additional project specific implementation required				
SPR HAZ-2 Require Spark Arrestors: The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior/During/After	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR HAZ-3 Require Fire Extinguishers: The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR HAZ-4 Prohibit Smoking in Vegetated Areas: The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR HAZ-5 Spill Prevention and Response Plan:	Initial Treatment: N Treatment Maintenance: N	NA	NA	NA
Project Specific Implementation: The project does not include herbicide treatment.				
SPR HAZ-6 Comply with Herbicide Application Regulations:	Initial Treatment: N	NA	NA	NA

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
	Treatment Maintenance: N			
Project Specific Implementation: The project does not include herbicide treatment.				
SPR HAZ-7 Triple Rinse Herbicide Containers:	Initial Treatment: N Treatment Maintenance:	NA	NA	NA
Project Specific Implementation: The project does not include herbicide treatment.				
SPR HAZ-8 Minimize Herbicide Drift to Public Areas:	Initial Treatment: N Treatment Maintenance: N	NA	NA	NA
Project Specific Implementation: The project does not include herbicide treatment.				
SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas:	Initial Treatment: N Treatment Maintenance: N	NA	NA	NA
Project Specific Implementation: The project does not include herbicide treatment.				
Hydrology and Water Quality Standard Project Requirements				
SPR HYD-1 Comply with Water Quality Regulations: Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (WDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In general, WDR and	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. The specifications for each WDR and Waiver vary by region. Regions 2 (San Francisco Bay), 4 (Los Angeles), 8 (Santa Ana), and 7 (Colorado River) are highly urban or minimally forested and do not offer WDRs or Waivers for fuel reduction or vegetation management activities. The current applicable WDRs and Waivers for timber and vegetation management activities are included in Appendix HYD-1. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Project Specific Implementation: No additional project specific implementation required				
SPR HYD-2 Avoid Construction of New Roads: The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR HYD-3 Water Quality Protections for Prescribed Herbivory:	Initial Treatment: N Treatment Maintenance: N	NA	NA	NA
Project Specific Implementation: The project does not include prescribed herbivory treatment.				
SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version). WLPZ's are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes. Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths	Initial Treatment: Y Treatment Maintenance: Y	Establish WLPZs during design of treatment project; implement WLPZ protections during treatment	ERRP	ERRP
<div>Water Class</div> <div> <div>Class I</div> <div>Class II</div> <div>Class III</div> <div>Class IV</div> </div>				

Standard Project Requirements					Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Water Class Characteristic s or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	1) Fish always or seasonally present offsite within 1000 feet downstrea m and/or 2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high- water flow conditions after completion of timber operations.	Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.				
WLPZ Width (ft) – Distance from top of bank to the edge of WLPZ								
< 30 % Slope	75	50	Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site- specific basis.					
30-50 % Slope	100	75						
> 50 % Slope	150	100						
Source: 14 CCR Section 916.5 [936.5, 956.5] (February 2019 version)								
The following WLPZ protections will be applied for all treatments:								

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> ▶ Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version). ▶ Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry. ▶ Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas. ▶ WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately. ▶ Burn piles will be located outside of WLPZs. ▶ No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs. ▶ Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers. ▶ Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse. 				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> ► Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes. ► Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water. <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
Project Specific Implementation: No additional project specific implementation required				
SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides:	Initial Treatment: N Treatment Maintenance: N	NA	NA	NA
Project Specific Implementation: The project does not include herbicide.				
SPR HYD-6 Protect Existing Drainage Systems: If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Mark existing stormwater drainage infrastructure prior to ground disturbing activities; if a drainage structure or infiltration system is inadvertently disturbed or modified during treatment, coordinate with owner to repair damage and restore pre-project drainage conditions	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
Noise Standard Project Requirements				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours: The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR NOI-2 Equipment Maintenance: The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR NOI-3 Engine Shroud Closure: The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses: The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent	Initial Treatment: Y	During treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Treatment Maintenance: Y			
Project Specific Implementation: No additional project specific implementation required				
SPR NOI-5 Restrict Equipment Idle Time: The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During treatment	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to mechanical treatment activities within 1,500 feet of noise-sensitive receptors	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
Recreation Standard Project Requirements				
SPR REC-1 Notify Recreational Users of Temporary Closures: If a treatment activity would require temporary closure of a public recreation area or facility, the project proponent will coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. Additionally, notification of the treatment activity will be provided to the Administrative Officer (or equivalent official responsible for distribution of public information) of the county(ies) in which the affected recreation area or facility is located. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	ERRP	ERRP
Project Specific Implementation: No public recreational areas or facilities within the Project Area.				
Transportation Standard Project Requirements				
SPR TRAN-1 Implement Traffic Control during Treatments:	Initial Treatment: Y	Prepare TMP prior to treatment and	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. A TMP will be needed if traffic generated by the project would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards along access routes for individual vegetation treatments. If needed, a TMP will be prepared to provide measures to reduce potential traffic obstructions, hazards, and service level degradation along affected roadway facilities. The scope of the TMP will depend on the type, intensity, and duration of the specific treatment activities under the CalVTP. Measures included in the TMP could include (but are not be limited to) construction signage to provide motorists with notification and information when approaching or traveling along the affected roadway facilities, flaggers for lane closures to provide temporary traffic control along affected roadway facilities, treatment schedule restrictions to avoid seasons or time periods of peak vehicle traffic, haul-trip, delivery, and/or commute time restrictions that would be implemented to avoid peak traffic days and times along affected roadway facilities. If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP will be submitted to the agency with jurisdiction over the affected roadways prior to commencement of vegetation treatment projects. This SPR applies to all treatment activities and treatment types, including treatment maintenance. Smoke generated during prescribed burn operations could potentially affect driver visibility and traffic operations along nearby roadways. Direct smoke impacts to roadway visibility and indirect impacts related to driver distraction will be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations will be identified and addressed within the TMP. The TMP will include measures to monitor smoke dispersion onto public roadways, and traffic control operations will be initiated in the event burning operations could affect traffic safety along any roadways. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.</p>	Treatment Maintenance: Y	implement during treatment		
Project Specific Implementation: No additional project specific implementation required				
Public Services and Utilities Standard Project Requirements				
<p>SPR UTIL-1 Solid Organic Waste Disposition Plan: For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to initiating treatment activities. The Solid Organic Waste Disposition Plan will</p>	Initial Treatment: Y	Prepare an Organic Waste Disposition Plan prior to mechanical or manual treatment	ERRP	ERRP

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
include the amount (e.g., tons) of solid organic waste to be managed onsite (i.e., scattering of wood materials, generating unburned piles, and pile burning) and transported offsite for processing (i.e., biomass power plant, wood product processing facility, composting). If the project proponent intends to transport solid organic waste offsite, the Solid Organic Waste Disposition Plan will clearly identify the location and capacity of the intended processing facility, consistent with local and state regulations to demonstrate that adequate capacity exists to accept the treated materials. This SPR applies only to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	Treatment Maintenance: Y	activities; implement plan during mechanical or manual treatment activities		
Project Specific Implementation: No additional project specific implementation required				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Aesthetics and Visual Resources				
<p>Mitigation Measure AES-3 Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks:</p> <p>The project proponent will conduct a visual reconnaissance of the treatment area prior to implementing non-shaded fuel breaks to observe the surrounding landscape and determine if public viewing locations, including scenic vistas, public trails, and state scenic highways, have views of the proposed treatment area. If none are identified, the non-shaded fuel break may be implemented without additional visual mitigation.</p> <p>If the project proponent identifies public viewing points, including heavily used scenic vistas, public trails, recreation areas, and state scenic highways with lengthy views (i.e., longer than a few seconds) of a proposed non-shaded fuel break treatment area, the project proponent will, prior to implementation, attempt to identify any feasible change in location of the fuel break to reduce its visibility from public viewpoints. If no feasible location changes exist that would reduce impacts to public viewers and achieve the intended wildfire risk reduction objectives of the proposed non-shaded fuel break, the project proponent will implement, where feasible, a shaded fuel break rather than a non-shaded fuel break, if the shaded fuel break would achieve the intended wildfire risk reduction objectives. With the shaded fuel break, the project proponent will thin and feather adjacent vegetation to break up the linear edges of the fuel break and strategically preserve vegetation at the edge of the fuel break, as feasible, to</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: /N</p>	NA	NA	NA

<ul style="list-style-type: none"> ▶ Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment. ▶ Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes. ▶ Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO_x and PM. 				
Project Specific Implementation: No additional project specific implementation required				
Archaeological, Historical, and Tribal Cultural Resources				
Mitigation Measure CUL-2 Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources: If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural resource), the archaeologist will work with the project proponent to develop appropriate procedures to protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.	Initial Treatment: Y Treatment Maintenance: Y	During ground disturbing activities	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
Biological Resources				
Mitigation Measure BIO-1a Avoid Loss of Special-Status Plants Listed under ESA or CESA: If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	ERRP	ERRP

the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (nor use of associated accelerants) will occur within 50 feet of listed plants.

For species listed under ESA or CESA, if the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent will implement Mitigation Measure BIO-1c.

The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist, in consultation with CDFW and USFWS, as appropriate depending on species status and location, that the listed plants would benefit from treatment in the occupied habitat area even though some of the listed plants may be lost during treatment activities. For a treatment to be considered beneficial to listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to listed plants, no compensatory mitigation for loss of individuals will be required.

Project Specific Implementation: No additional project specific implementation required

Mitigation Measure BIO-1b Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA:

	Initial Treatment: Y	Prior to and during treatment	ERRP	ERRP

If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat:

- ▶ Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape.
- ▶ Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank.
- ▶ Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation.
- ▶ No fire ignition (nor use of associated accelerants) will occur within the special-status plant buffer.

Treatment
Maintenance: Y

A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented.

The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the special-status plants would benefit from treatment in the occupied habitat area even though some of the non-listed special-status plants may be killed during treatment activities. For a treatment to be considered beneficial to non-listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status plants, no compensatory mitigation will be required.

Project Specific Implementation: No additional project specific implementation required

Mitigation Measure BIO-1c Compensate for Unavoidable Loss of Special-Status Plants:

If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under Mitigation Measures BIO-1a and 1b, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant impacts that require compensatory mitigation and describes the compensatory mitigation strategy being implemented and how unavoidable losses of special-status plants will be compensated. The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. If the special-status plant taxa are listed under ESA or CESA, the

Initial Treatment: Possibly, Not Likely Treatment Maintenance: Possibly, Not likely	Prior to and during potentially ground disturbing activities	ERRP	ERRP	

plan will be submitted to CDFW and/or USFWS (as appropriate) for review and comment.

The first priority for compensatory mitigation will be preserving and enhancing existing populations outside of the treatment area in perpetuity, or if that is not an option because existing populations that can be preserved in perpetuity are not available, one of the following mitigation options will be implemented by the project proponent instead:

- ▶ creating populations on mitigation sites outside of the treatment area through seed collection and dispersal (annual species) or transplantation (perennial species);
- ▶ purchasing mitigation credits from a CDFW- or USFWS-approved conservation or mitigation bank in sufficient quantities to offset the loss of occupied habitat; and
- ▶ If the affected special-status plants are not listed under ESA or CESA, compensatory mitigation may include restoring or enhancing degraded habitats so that they are made suitable to support special-status plant species in the future.

If relocation efforts are part of the Compensatory Mitigation Plan, the plan will include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements. The following performance standards will be applied for relocation:

- ▶ the extent of occupied area will be substantially similar to the affected occupied habitat and will be suitable for self-producing populations. Re-located/re-established populations will be considered suitable for self-producing when:
- ▶ habitat conditions allow for plants to reestablish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and
- ▶ reestablished habitats contain an occupied area comparable to existing occupied habitat areas in similar habitat types in the region.

If preservation of existing populations or creation of new populations is part of the mitigation plan, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands and actions (e.g., the number and type of credits, location of mitigation bank or easement, restoration or enhancement actions), parties responsible for the long-term management of the land, and the legal and funding mechanisms (e.g., holder of conservation easement or fee

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title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.

If mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off site conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, funding assurances, and success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations.

If mitigation includes restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat.

If the loss of occupied habitat cannot be offset (e.g., if preservation of existing populations or creation of new populations through relocation efforts are not available for a certain species), and as a result treatment activities would substantially reduce the number or restrict the range of listed plant species, then the treatment will not qualify as within the scope of this PEIR.

Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.

Project Specific Implementation: No additional project specific implementation required

Mitigation Measure BIO-2a Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities):

If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following.

Avoid Mortality, Injury, or Disturbance of Individuals

The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals:

Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	ERRP	ERRP	

1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR
 2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species.
- ▶ For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c.
 - ▶ Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided.

Maintain Habitat Function

- ▶ The project proponent will design treatment activities to maintain the habitat function, by implementing the following:
 - While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.
 - If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal

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<p>qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause mortality, injury, or disturbance to) the species within the nest, den, burrow, or other occupied site. If a no-disturbance buffer is reduced below 100 feet from an occupied site, a qualified RPF or biologist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).</p> <ul style="list-style-type: none"> ▶ No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species. ▶ For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods. <p><u>Maintain Habitat Function</u></p> <ul style="list-style-type: none"> ▶ For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following: <ul style="list-style-type: none"> ■ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, 				
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<p>shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.</p> <ul style="list-style-type: none"> ■ If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained. ► A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function. <p>A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the non-listed special-status wildlife would benefit from treatment in the occupied habitat area even though</p>				
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<p>some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to non-listed special-status wildlife, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding the determination that a non-listed special-status species would benefit from the treatment.</p>				
Project Specific Implementation: No additional project specific implementation required				
<p>Mitigation Measure BIO-2c Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities):</p> <p>If the provisions of Mitigation Measure BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment.</p> <p>Compensation may include:</p> <ol style="list-style-type: none"> 1. Preserving existing habitat outside of the treatment area in perpetuity; this may entail purchasing mitigation credits and/or lands from a CDFW- or USFWS-approved entity in sufficient quantity to offset the residual significant impacts, generally at a ratio of 1:1 for habitat; and 2. Restoring or enhancing existing habitat within the treatment area or outside of the treatment area (including decommissioning roads, adding perching structures, removing existing perching structures, or removing existing movement barriers or other existing features that are adversely affecting the species). <p>The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior to and during treatment</p>	<p>ERRP</p>	<p>ERRP</p>

<p>► Host plants for federally listed butterflies within the occupied habitat will be marked with high-visibility flagging, fencing, or stakes, and no treatment activities will occur within 10 feet of these plants.</p> <p>► Treatment areas that are not occupied but are within the range of the federally listed butterfly will be divided into as many treatment units as feasible such that the entirety of the habitat is not treated within the same year.</p> <p>► Treatments will be conducted in a patchy pattern to the extent feasible in areas that are not occupied but are within the range of the federally listed butterfly, such that the entirety of the habitat is not burned or removed and untreated portions of suitable habitat are retained.</p> <p>If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of federally listed butterflies or degradation of occupied habitat (host plants) such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>CESA and ESA Listed Species. A qualified RPF or biologist will determine if, after implementation of any feasible impact avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed butterflies or degradation of occupied habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>Other Special-status Species. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA, because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status butterflies would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status butterflies or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and</p>				
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impact minimization measures, then Mitigation Measure BIO-2c will be implemented.

The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly species would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. For a treatment to be considered beneficial to special-status butterfly species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources). If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.

Table 3.6-34 Special-status Butterflies and Associated Host Plants

Butterfly Species	Host Plants
bay checkerspot butterfly	dwarf plantain (<i>Plantago virginica</i>), purple owl's clover (<i>Castilleja exserta</i>)
Behren's silverspot butterfly	blue violet (<i>Viola adunca</i>)
callippe silverspot butterfly	California golden violet (<i>Viola pedunculata</i>)
Carson wandering skipper	salt grass (<i>Distichlis spicata</i>)
El Segundo blue butterfly	seacliff buckwheat (<i>Eriogonum parvifolium</i>)
Hermes copper butterfly	spiny redberry (<i>Rhamnus crocea</i>)
Kern primrose sphinx moth	plains evening-primrose (<i>Camissonia contorta</i>), field primrose (<i>Camissonia campestris</i>)
Laguna Mountains skipper	Cleveland's horkelia (<i>Horkelia clevelandii</i>), sticky cinquefoil (<i>Drymocallis glandulosa</i>)
Lange's metalmark butterfly	naked-stemmed buckwheat (<i>Eriogonum nudum</i>)
lotis blue butterfly	seaside bird's foot trefoil (<i>Hosackia gracilis</i>)
Mission blue butterfly	lupine (<i>Lupinus</i> spp.)

Myrtle's silverspot butterfly	blue violet				
Oregon silverspot butterfly	blue violet				
Palos Verdes blue butterfly	Santa Barbara milkvetch (<i>Astragalus trichopodus</i>), common deerweed (<i>Acmispon glaber</i>)				
San Bruno elfin butterfly	broadleaf stonecrop (<i>Sedum spathulifolium</i>), manzanita (<i>Arctostaphylos</i> spp.), huckleberry (<i>Vaccinium</i> spp.)				
Smith's blue butterfly	seacliff buckwheat, seaside buckwheat (<i>Eriogonum latifolium</i>)				
Quino checkerspot butterfly	dwarf plantain, purple owl's clover				

Project Specific Implementation: Description

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Mitigation Measure BIO-2f Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities): If treatment activities would occur within the limited range of any state or federally listed beetle, fly, grasshopper, or snail, and these species are identified as occurring or having potential to occur due to the presence of potentially suitable habitat during review and surveys for SPR BIO-1 and surveys for SPR BIO-10, then the following measures will be implemented: <ul style="list-style-type: none"> ► If the project proponent cannot implement the measures above to avoid mortality, injury or disturbance to listed beetles, flies, grasshoppers, and snails, or degradation of suitable habitat such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c. 	Initial Treatment: Y Treatment Maintenance: Y	Prior	ERRP	ERRP

Project Specific Implementation: No additional project specific implementation required

Mitigation Measure BIO-2g Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities): If special-status bumble bees are identified as occurring during review and surveys under SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, or if suitable habitat for special-status bumble bees is identified during	Initial Treatment: Y Treatment Maintenance: Y	Prior	ERRP	ERRP
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Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>review and surveys under SPR BIO-1 (e.g., wet meadow, forest meadow, riparian, grassland, or coastal scrub habitat containing sufficient floral resources within the range of the species), then the project proponent will implement the following measures, as feasible:</p> <ul style="list-style-type: none"> ▶ Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season. ▶ Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area. ▶ Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area). <p>CESA and ESA Listed Species. A qualified RPF or biologist will determine if, after implementation of feasible avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance to the species, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed bumble bees (in the event the Candidate listing is confirmed) or degradation of occupied (or assumed to be occupied) habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>Other Special-status Species. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status bumble bees would be less than</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
significant, no further mitigation will be required. If the project proponent determines that the loss of special-status bumble bees or degradation of occupied (or assumed to be occupied) habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee species would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to special-status bumble bee species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.				
Project Specific Implementation: No additional project specific implementation required				
Mitigation Measure BIO-2h Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory):	NA	NA		
Project Specific Implementation: Description: The project does not include prescribed herbivory treatment.				
Mitigation Measure BIO-3a Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands: The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3: ► Reference the <i>Manual of California Vegetation</i> , Appendix 2, Table A2, <i>Fire Characteristics</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined.	Prior to treatment: Y Treatment Maintenance: Y	Prior to treatment	ERRP	ERRP

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>► Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1.</p> <p>A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. For a treatment to be considered beneficial to a sensitive natural community or oak woodland, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the community (or similar community) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.				
Project Specific Implementation: No additional project specific implementation required				
Mitigation Measure BIO-3b Compensate for Loss of Sensitive Natural Communities and Oak Woodlands: If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will implement the following actions: <ul style="list-style-type: none"> ▶ Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by: <ul style="list-style-type: none"> ■ restoring sensitive natural community or oak woodland functions and acreage within the treatment area; ■ restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or ■ preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function. ▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: <ol style="list-style-type: none"> 1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. 2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a 	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	ERRP	ERRP

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.</p> <p>The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan.</p>				
Project Specific Implementation: No additional project specific implementation required				
<p>Mitigation Measure BIO-3c Compensate for Unavoidable Loss of Riparian Habitat:</p> <p>If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following:</p> <ul style="list-style-type: none"> ▶ Compensate for unavoidable losses of riparian habitat acreage and function by: <ul style="list-style-type: none"> ■ restoring riparian habitat functions and acreage within the treatment area; ■ restoring degraded riparian habitat outside of the treatment area; ■ purchasing riparian habitat credits at a CDFW-approved mitigation bank; or ■ preserving existing riparian habitat of equal or better value to the riparian habitat lost through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function and value. ▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on riparian habitat that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: <ol style="list-style-type: none"> 1. For preserving existing riparian habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a 	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior to and during potentially habitat disturbing activities</p>	ERRP	ERRP

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.</p> <p>2. For restoring or enhancing riparian habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.</p> <p>The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.</p>				
Project Specific Implementation: No additional project specific implementation required				
<p>Mitigation Measure BIO-4 Avoid State and Federally Protected Wetlands:</p> <p>Impacts to wetlands will be avoided using the following measures:</p> <ul style="list-style-type: none"> ▶ The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented. ▶ The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures). ▶ A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the 	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior to and during potentially habitat disturbing activities</p>	ERRP	ERRP

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented.</p> <ul style="list-style-type: none"> ▶ A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided. ▶ Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, equipment and vehicle access or staging. ▶ Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that: <ul style="list-style-type: none"> ■ No special-status species are present in the wetland habitat ■ The wetland habitat function would be maintained. ■ The prescribed burn is within the normal fire return interval for the wetland vegetation types present ■ Fire containment lines and pile burning are prohibited within the buffer ■ No fire ignition (nor use of associated accelerants) will occur within the wetland buffer <p>The project proponent will notify CDFW when required by pursuant to California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.</p> <p>In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW. This SPR applies to all treatment activities and treatment types, including treatment maintenance				
Project Specific Implementation: No additional project specific implementation required				
Mitigation Measure BIO-5 Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites: The project proponent will implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10: <ul style="list-style-type: none"> ► Retain Known Nursery Sites. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment ► Establish Avoidance Buffers. The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or biologist, based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors. No treatment activity will commence within the buffer area until a qualified RPF or biologist confirms that the nursery site is no longer active/occupied. Monitoring of the effectiveness of the non-disturbance buffer around the nursery site by a qualified RPF, biologist, or biological technician during and after treatment activities will be required. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to special-status species. 	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during potentially habitat disturbing activities	ERRP	ERRP
Project Specific Implementation: No additional project specific implementation required				
Greenhouse Gas Emissions				
Mitigation Measure GHG-2 Implement GHG Emission Reduction Techniques During Prescribed Burns: When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the National	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during prescribed burn activities	ERRP	ERRP

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire (NWCG 2018):</p> <ul style="list-style-type: none"> ▶ reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned; ▶ reduce the total area burned through mosaic burning; ▶ burn when fuels have a higher fuel moisture content; ▶ reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, and biomass utilization; and ▶ schedule burns before new fuels appear. <p>As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity. The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.</p>				
Project Specific Implementation: No additional project specific implementation required				
Hazardous Materials, Public Health and Safety				
<p>Mitigation Measure HAZ-3 Identify and Avoid Known Hazardous Waste Sites:</p> <p>Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous materials sites could be located within the boundary of a treatment site, the project proponent will conduct a DTSC EnviroStor web search (https://www.envirostor.dtsc.ca.gov/public/) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior to and during mechanical or prescribed burning treatment activities</p>	ERRP	ERRP

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.				
Project Specific Implementation: A 2024 EnviroStor search yielded no such facilities within miles of the project				

Tenmile Creek Watershed Forest Health Project Biological Resources Evaluation



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Cover photos: Top left: montane hardwood-conifer forest; top right: oak woodland; bottom right: *Arctostaphylos* sp. (manzanita); bottom left: montane hardwood-conifer forest , March 2024.

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Appendices

Appendix A. Comprehensive Plant Species List

1 INTRODUCTION

The Eel River Recovery Project and the Mendocino County Resource Conservation District are working with private landowners to implement vegetation treatments on 1,908 acres of privately owned land in Mendocino County in the Tenmile Creek watershed near Laytonville, California as part of the Tenmile Creek Watershed Forest Health Project (Project). Stillwater Sciences (Stillwater) has prepared this Biological Resources Evaluation to characterize biological resources in the 1,908-acre Project Area and assess the Project's potential for adverse effects on sensitive biological resources.

1.1 Project Location

The Tenmile Creek Watershed Forest Health Project is located in Mendocino County near Laytonville, CA (Figure 1). The total Project Area evaluated in this document encompasses 1,908 acres of non-industrial private land. Initial and maintenance treatments are proposed to occur over 921 acres on 24 private and one school district property (Phase I). The remaining 987 acres on three privately-owned parcels are in the planning stages for future forest health treatment implementation (Phase II) and have been evaluated for biological resources and potential impacts. However, treatment will not occur on these areas until funding becomes available. Though Project activities will happen on different timelines and many of the parcels are not contiguous, the entire 1,908 acres are considered one Project Area.

The Project is located within the Cahto Peak, Laytonville, and Tan Oak Park USGS 7.5" quadrangles. It is located in Sections 3, 10, 13, 14, 15, 21, 22 of Township 21 North, Range 15 West; Sections 8, 9, 18, 19, 21, 22, 23, 33, 34 in Township 22 North, Range 15 West; and Sections 14, 15, 21, 22 in Township 22 North, Range 16 West. Elevations in the Project Area range from approximately 1,250 feet to 2,900 feet above mean sea level.

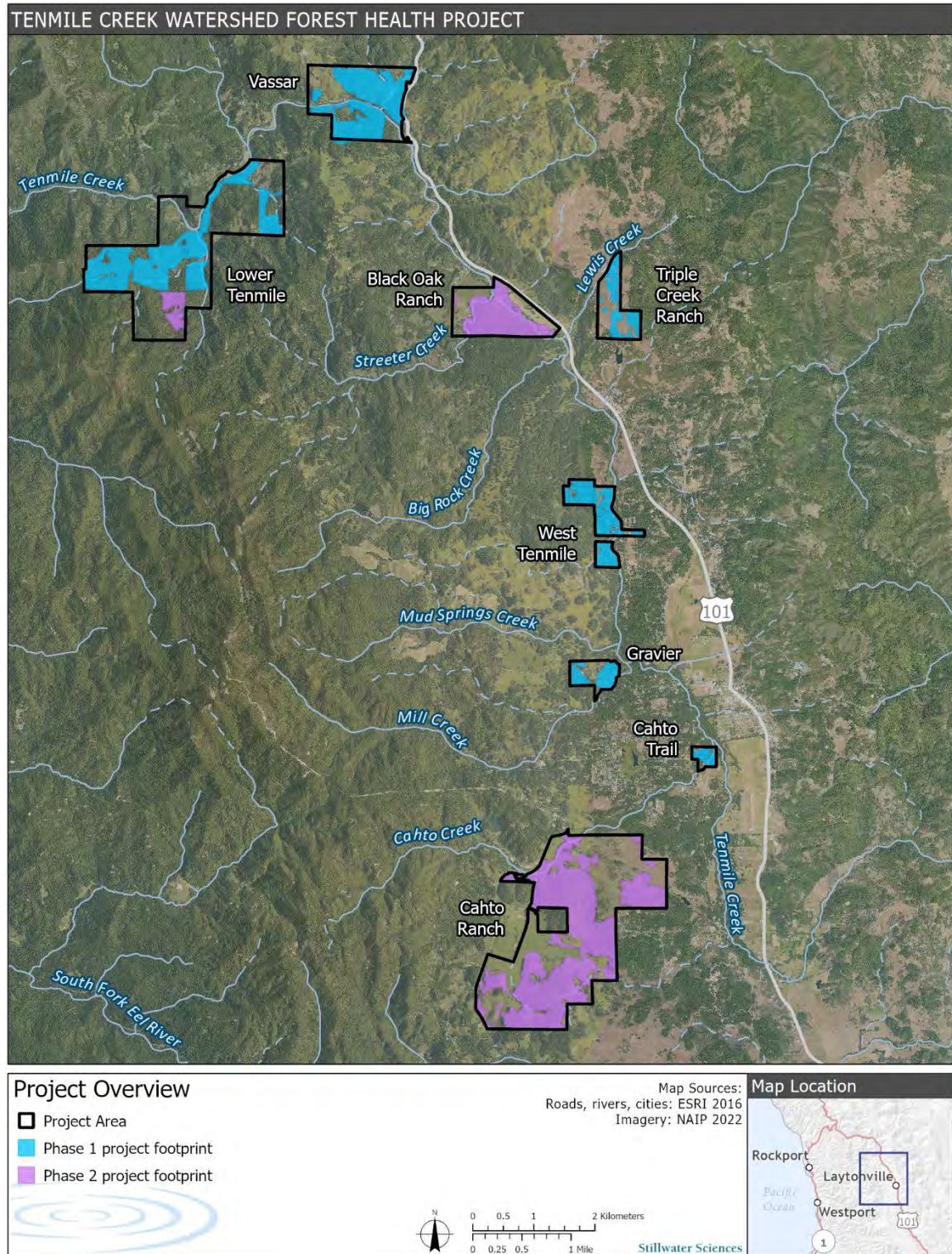


Figure 1. Project Area and vicinity, Laytonville, California.

2 PROJECT DESCRIPTION

The goal of the Project is to enhance forest health and ecological stability. Project objectives include reducing fuel loads, restoring oak woodlands, enhancing soil moisture and fertility, restoring native grasses and hydrologic functions, and creating employment opportunities to boost local socio-economic benefits.

Key management actions include thinning overstocked forest areas, creating shaded fuel breaks, and applying pile and prescribed burns to reduce surface and ladder fuels while enhancing ecosystem resilience and carbon storage. These efforts are designed to protect rural communities, promote biodiversity, and improve water yields.

2.1 Project Approach

The Project will utilize both mechanized and manual treatment methods. Mechanized treatments will occur predominantly on slopes less than 40% and averaging 30% throughout the Project Area. Manual treatment may include the use of chainsaws and/or other various hand mechanized or hand tools to prune trees and woody vegetation, buck (meaning to cut into smaller sizes and lengths) downed debris and materials, and to treat dead, dying, and diseased trees. Manual treatments may occur on slopes greater than 40% or where access of mechanized equipment is infeasible. Prescribed broadcast burning and pile burning will be used to achieve similar treatment prescriptions. Broadcast burning will aim to reimplement appropriate fire return intervals on approximately 347 acres. Pile burning or lop and scatter will also be utilized as a means of biomass removal or treatment in locations that are inaccessible to mechanical equipment.

No vegetation treatment work would take place within 100 feet of a Class I or II watercourse, within 30 feet of a Class III watercourse, or within 50 feet of a wetland. Plants and trees of cultural significance would not be removed.

2.1.1 Forest Fuels Reduction (Thinning)

Understory trees and brush would be thinned to reduce fire hazards, improve tree growth, stabilize carbon in retained trees, and increase forest resilience to high-intensity wildfire disturbances. Forest thinning activities may be manual or mechanical and must be designed to change stand structure to (1) concentrate carbon storage in widely spaced and larger trees that are more resilient to wildfire, drought, and pest outbreaks; (2) reduce the likelihood of wildfire transitioning into the forest canopy; and (3) provide co-benefits such as fish and wildlife habitat, increased biodiversity, and wildlife adaptation to climate change. Conifers that are overtopping black oak trees may be girdled¹ to create a wildlife snag, instead of being removed if removal or felling of those conifer trees could damage the surrounding oak trees.

2.1.2 Prescribed Fire and Cultural Fire

Fire would be applied to the landscape to reduce fuel loads, create heterogenous and diverse vegetation, maintain cultural practices of indigenous communities, and/or promote healthy ecosystem processes such as water storage and pest control. Prescribed fire (also referred to as

¹ Girdling is a technique used to kill a tree in place by removing a strip of the outer bark around the tree to cut off the nutrient flow between the roots and leaves of the tree.

controlled or prescribed burn) is a planned fire that is used under conditions and intensities that are controlled and are intended to meet certain burn objectives (e.g., maintaining or restoring desired plants within a plant community) (NRCS 2012). A prescription is a set of conditions that considers the safety of the public and fire staff, weather, and probability of meeting the burn objectives (National Park Service 2024). Distinguished from prescribed fire, cultural fire is the intentional application of fire to the land by an Indigenous person or cultural group (e.g., family unit, Tribe, clan/moiety, or society) to achieve cultural goals or objectives, such as promoting the health of vegetation and animals that provide food, clothing, and ceremonial items (Roos 2020) and is based on Tribal or Traditional Indigenous law.

2.1.3 Invasive Plant Removal

An integrated pest management approach, focusing on manual hand treatments would be used to remove invasive species such as, but not limited to, *Rubus armeniacus* (Himalayan blackberry), *Cytisus scoparius* (Scotch broom), *Spartium junceum* (Spanish broom), *Genista monspessulana* (French broom), and other non-native species occurring within the Project Area.

2.1.4 Treatment Specifications

Fuel reduction treatments would be implemented following guidelines and specifications provided below:

- Lopping and scattering: Lopping is the severing or cutting of limbs, branches, treetops, and other woody plant material into lengths so that the remaining slash (branches, limbs, and treatment debris cut to be less than 4 inches in diameter) would lie close to the ground. Scattering is the spreading of lopped slash evenly over the ground so that no part of it remains more than 18 inches above the ground. Hand crews would lop and scatter slash on steeper slopes and areas with limited access where chipping, mastication, and burning piles is not feasible. Lopping and scattering would achieve the goals of thinning dense forest stands in less accessible areas and treating the cut trees to reduce fire risk and to increase the decomposition rate of the material.
- Pruning: Residual trees would be pruned by lopping low branches up to a minimum height of 8 feet (above the level of slash on the uphill side of the tree). Pruning would reduce ladder fuels and improve wood quality.
- Broadcast burning: Broadcast burns are controlled applications of fire to fuels under specified conditions that allow fire to be confined to a predetermined area to produce the fire behavior and characteristics required to meet forest health objectives identified in a detailed burn plan (USFS 2024). Broadcast burning of understory would be implemented in accordance with a specific prescription and burn plan that defines the desired maximum flame lengths and fire spread rates based on the fuel types, weather, slopes, aspect, staffing levels, and containment lines and strategies set out in a burn plan. Interior portions of prescribed fires may exceed the prescribed flame lengths planned at the control lines, but the overall prescription is designed to safely contain the fire within a planned fire perimeter. Burns could occur from January through December during which time conditions would be conducive to burning targeted fuels. Broadcast burning may require constructing new control lines or enhancing existing control lines. Control lines are boundaries—natural or humanmade—that firefighters use to control how and where a fire spreads and can include handlines, mow lines, and/or dozer lines.
- Slash treatment: All slash produced would be treated using one of the following methods:

- Chipping or masticating: Fuels present in areas adjacent to roads, landings, building pads and other accessible portions of the treatment areas would be hand fed into a power chipper and chips would be blown onto the ground. Mastication would reduce the size of residual down and dead vegetation by grinding, shredding, or chopping material and leaving it onsite as mulch.
- Piling and burning: Pile and burn operations would occur where vehicle access is available. Hand crews would place piles in existing openings and on compacted ground along roadsides as feasible. Piles would be burned during appropriate times of the year with favorable weather windows.

2.2 Avoidance and Minimization Measures

CEQA compliance for the Project will occur under the Program Environmental Impact Report (PEIR) for the California Vegetation Treatment Program (CalVTP). Therefore, the Project must comply with the PEIR's Standard Project Requirements (SPRs) to avoid or minimize adverse effects on biological resources.

Based on the likelihood of occurrence of biological resources and the analysis of potential environmental effects, SPRs have been identified below to avoid or minimize adverse effects on biological resources. The full description of all SPRs identified in this document is in Appendix A.

3 METHODS

Special-status species may be naturally rare or may have become reduced in numbers due to environmental changes and loss of habitat. Special-status species contribute to the biodiversity and stability of ecosystems. Individuals and populations of these species are important for the genetic diversity and survival of the species. Methods for evaluating the presence of botanical and wildlife resources within the Project Area are provided in the following sections.

3.1 Definitions

For the purposes of this report, special-status species were defined as those that are:

- listed, proposed, or under review as endangered or threatened under the federal Endangered Species Act or the California Endangered Species Act;
- designated by California Department of Fish and Wildlife (CDFW) as a Species of Special Concern;
- designated by CDFW as Fully Protected under the California Fish and Game Code (Sections 3511, 4700, 5050, and 5515);
- protected under the federal Bald and Golden Eagle Protection Act;
- designated as rare under the California Native Plant Protection Act; and/or
- included on CDFW's most recent *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2024) with a California Rare Plant Rank (CRPR) of 1, 2, 3, or 4.

Sensitive natural communities were defined as those natural community types with a state ranking of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable) as listed in the most recent *California Sensitive Natural Communities List* (CDFW 2023).

3.2 Database Queries

Lists of special-status plant, fish, and wildlife species, designated critical habitat for federally listed and proposed endangered, threatened, and candidate species, and sensitive natural communities previously documented in the region of the Project Area were developed through a query of the following resources:

- U.S. Fish and Wildlife Service’s (USFWS) Information for Planning and Conservation (IPaC) portal (USFWS 2024a);
- National Marine Fisheries Service’s (NMFS), West Coast Region, California Species List Tool (NMFS 2016);
- CDFW’s California Natural Diversity Database (CNDDDB) (CDFW 2024); and
- California Native Plant Society’s (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2024a).

The database queries were based on the U.S. Geological Survey 7.5-minute quadrangles in which the Project is located (Cahto Peak and Tan Oak Park) and the surrounding ten quadrangles (Laytonville, Lincoln Ridge, Leggett, Iron Peak, Dutchmans Knoll, Sherwood Peak, Longvale, Updegraff Ridge, Bell Springs, and Noble Butte), collectively referred to as the Project Vicinity. The USFWS IPaC query was based on the spatial extent of the Project Area.

3.3 Field Assessment and Existing Information Review

On March 13, 14, and 15, 2024, Stillwater biologists conducted an assessment of field habitat within the Project Area. Habitats were qualitatively evaluated for potential to support special-status species—including plants, fish, and wildlife—based on habitat types, habitat elements, and visual observation of species present. Vegetation types were classified using the California Wildlife Habitat Relationship (CWHR) habitat classification scheme (CDFW 2021). General habitats and other notable features in the assessment area were photographed.

The following resources were also reviewed to gain further information regarding species’ potential to occur within the Project Area:

- Google Earth aerial imagery (Google Earth 2024).
- Soils data (NRCS 2024); and
- Wetlands and riparian data, including the National Wetland Inventory (USFWS 2024b).
- eBird (eBird 2024);
- North American Bat Acoustic Monitoring Portal (BatAMP) (Conservation Biology Institute and USFS 2024);

The preliminary lists of special-status plant, wildlife, and fish species were evaluated to determine the likelihood for each species’ occurrence within the Project Area based on their habitat requirements and known distributions, field assessments of habitat within the Project Area, elevations (1,250–2,900 feet) in the Project Area, location and date of last recorded observation, and professional judgement. The likelihood of occurrence was rated as *high*, *moderate*, *low*, or *none* based on available information and professional judgement. If a species on the preliminary list requires habitat that is lacking within the Project Area (e.g., coastal dunes) or occurs outside the elevation range of the Project Area, the species’ likelihood of occurrence was considered to be *none*.

Additionally, protocol-level special-status plant surveys were conducted in portions of the Project Area by Salix Natural Resource Management in April, May, June, and July 2024.

4 RESULTS

4.1 Vegetation and Habitats

The Project Area was mapped based on the initial site visit using CWHR vegetation types (Figures 2–8, Table 1). The Project Area is dominated by forested habitats with developed areas and open grasslands mixed throughout. Representative photographs of existing conditions are provided in Figures 9–14.

Table 1. California Wildlife Habitat Relationship types in the Project Area.

CWHR Type	Acres	Percent of Project Area	Habitat Description
Montane Hardwood-Conifer	1561.6	43.4%	The Montane Hardwood-Conifer habitat type was dominated by a mixture of Ponderosa pine (<i>Pinus ponderosa</i>), Douglas fir (<i>Pseudotsuga menziesii</i>), black oak (<i>Quercus kelloggii</i>), and madrone (<i>Arbutus menziesii</i>). Within the Project Area, this forest habitat type was most often observed lacking a substantial understory shrub layer.
Annual Grassland	862.4	24.0%	The Annual Grassland habitat type was characterized by open grasslands which were seasonally dormant at the time of the site assessment (March). Dominant species include primarily nonnative annual grass such as wild oats (<i>Avena</i> sp.) and various bromes (<i>Bromus</i> sp.).
Montane Hardwood	784.4	21.8%	The Montane Hardwood habitat type was dominated by madrone and oaks. Stands of black oak and madrone were mixed in size and age and were found to have some understory composed of nonnative grasses, bracken fern (<i>Pteridium aquilinum</i> var. <i>pubescens</i>), and California blackberry (<i>Rubus ursinus</i>).
Mixed Chaparral	149.8	4.2%	The Mixed Chaparral habitat type was composed almost entirely of dense, monotypic stands of manzanita shrubs (<i>Arctostaphylos manzanita</i> ssp. <i>manzanita</i>). These stands were found exclusively growing in open clearings with no overstory and had little to no herbaceous understory.
Douglas-fir	141.6	3.9%	The Douglas-fir habitat type was primarily composed of Douglas-fir with low diameter at breast height growing closely together and forming a dense canopy layer. The understory was heavily shaded with occasional tanoak (<i>Notholithocarpus densiflorus</i> var. <i>densiflorus</i>) and sword fern (<i>Polystichum munitum</i>).
Montane Riparian	11.6	0.3%	The Montane Riparian habitat type was dominated by riparian hardwood trees such as bigleaf maple (<i>Acer macrophyllum</i>), alder (<i>Alnus</i> spp.), and willow (<i>Salix</i> spp.). Much of the vegetation in this habitat type was seasonally dormant at the time of the site assessment (March).
Developed/Active Channel/Water	86.4	2.4%	--
Total	3,597.8	100.0%	--

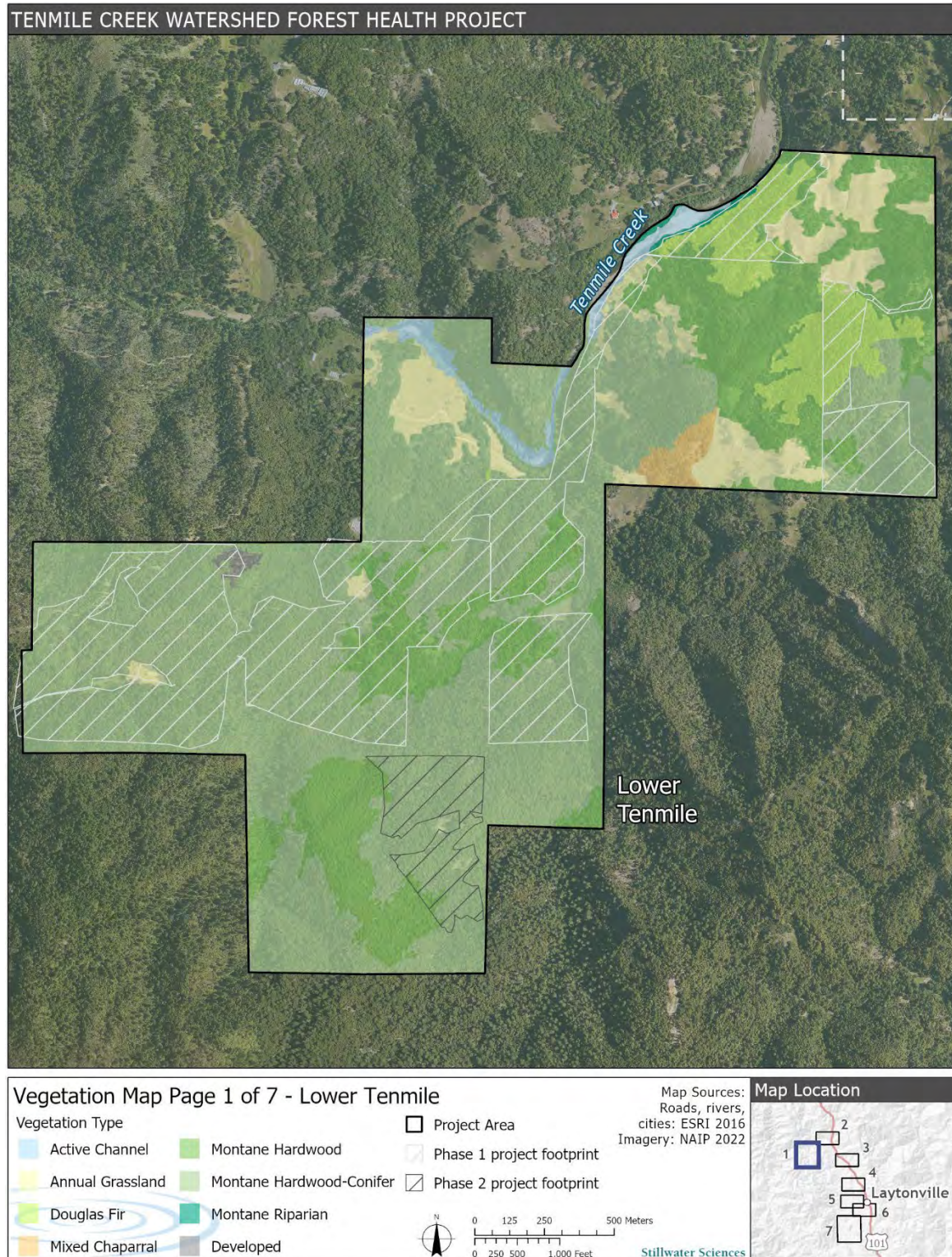


Figure 2. California Wildlife Habitat Relationship habitat types within the Project Area. Page 1 of 7.

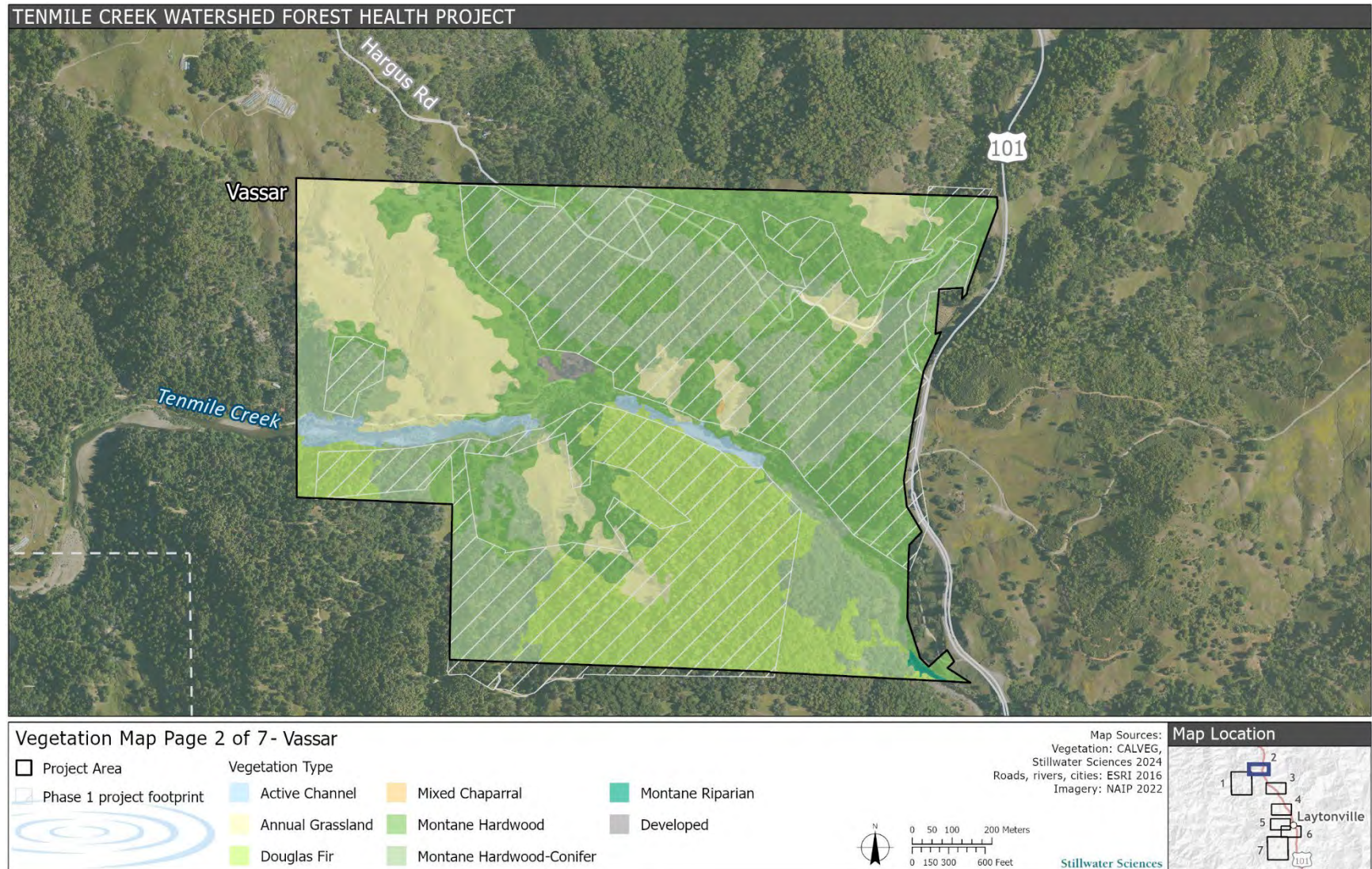


Figure 3. California Wildlife Habitat Relationship habitat types within the Project Area. Page 2 of 7.

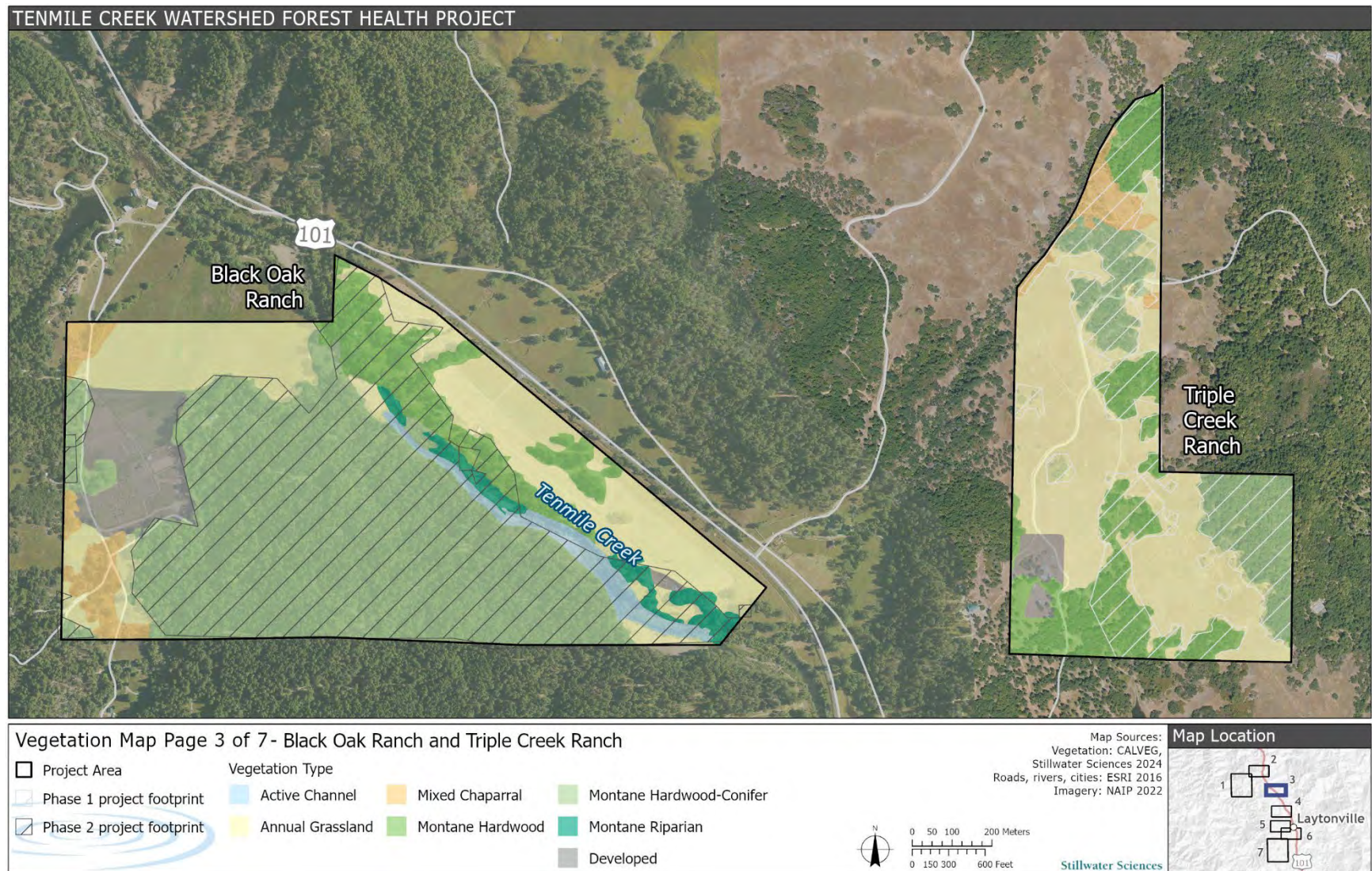


Figure 4. California Wildlife Habitat Relationship habitat types within the Project Area. Page 3 of 7.

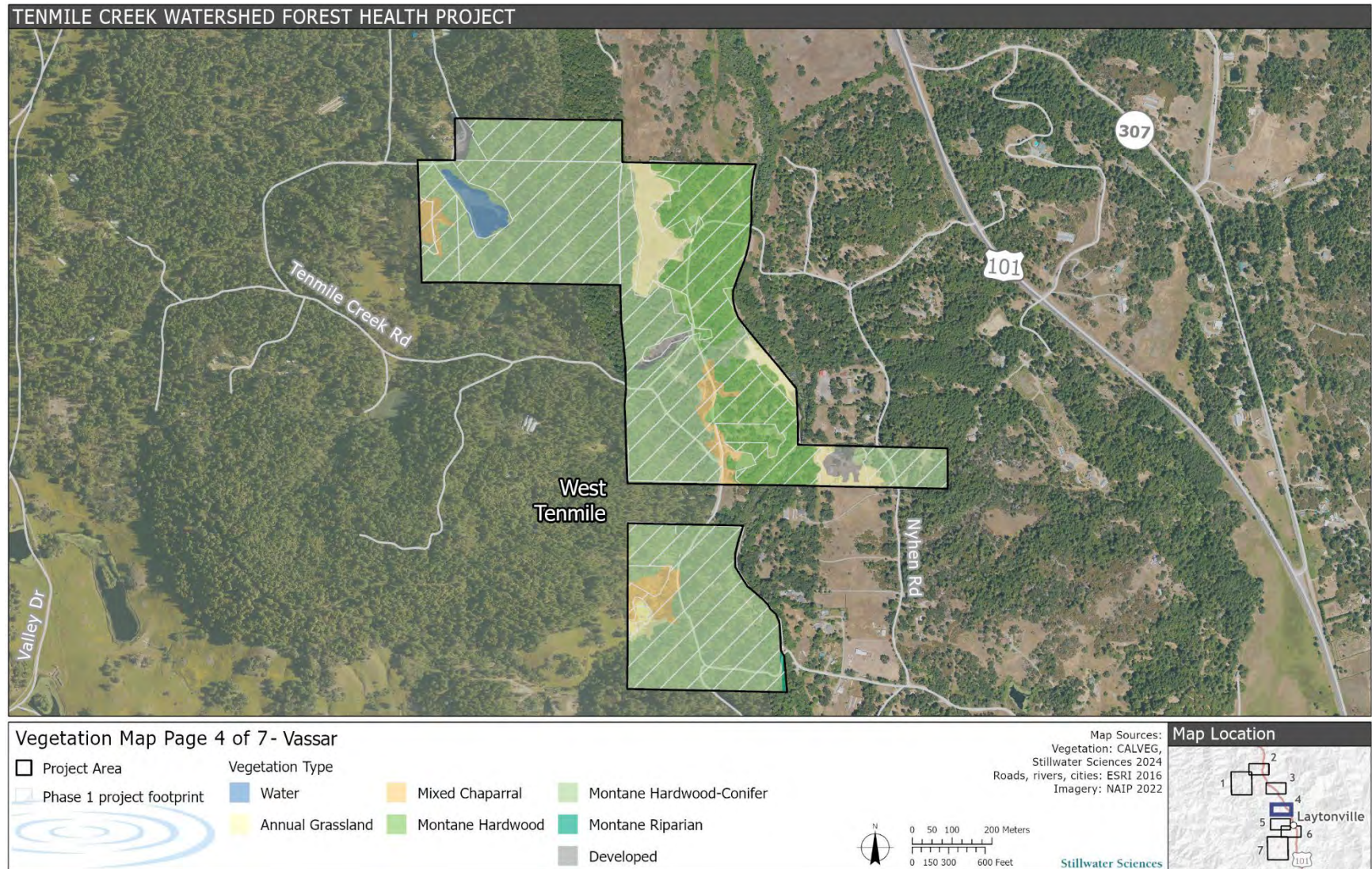


Figure 5. California Wildlife Habitat Relationship habitat types within the Project Area. Page 4 of 7.

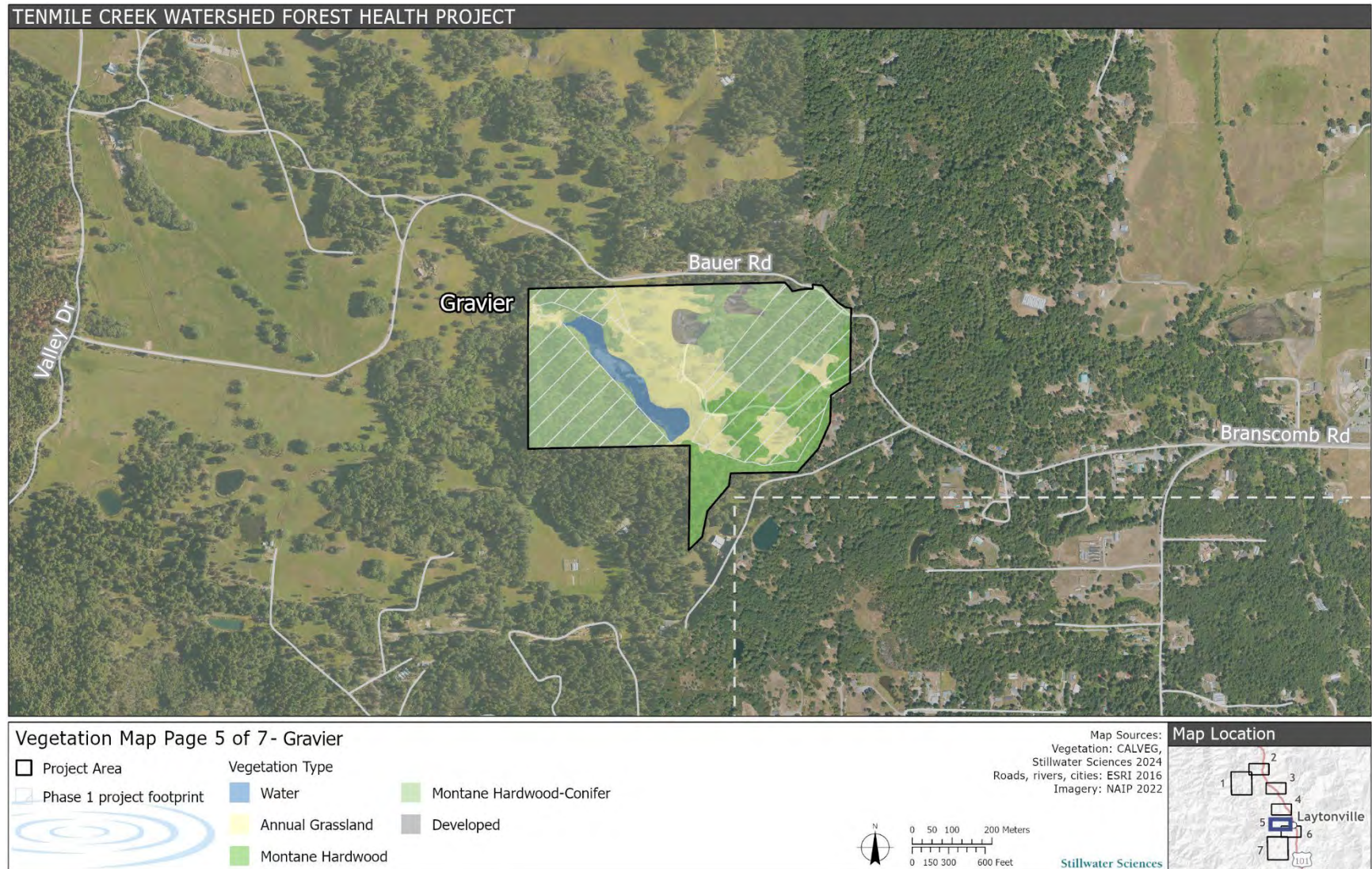


Figure 6. California Wildlife Habitat Relationship habitat types within the Project Area. Page 5 of 7.



Figure 7. California Wildlife Habitat Relationship habitat types within the Project Area. Page 6 of 7.

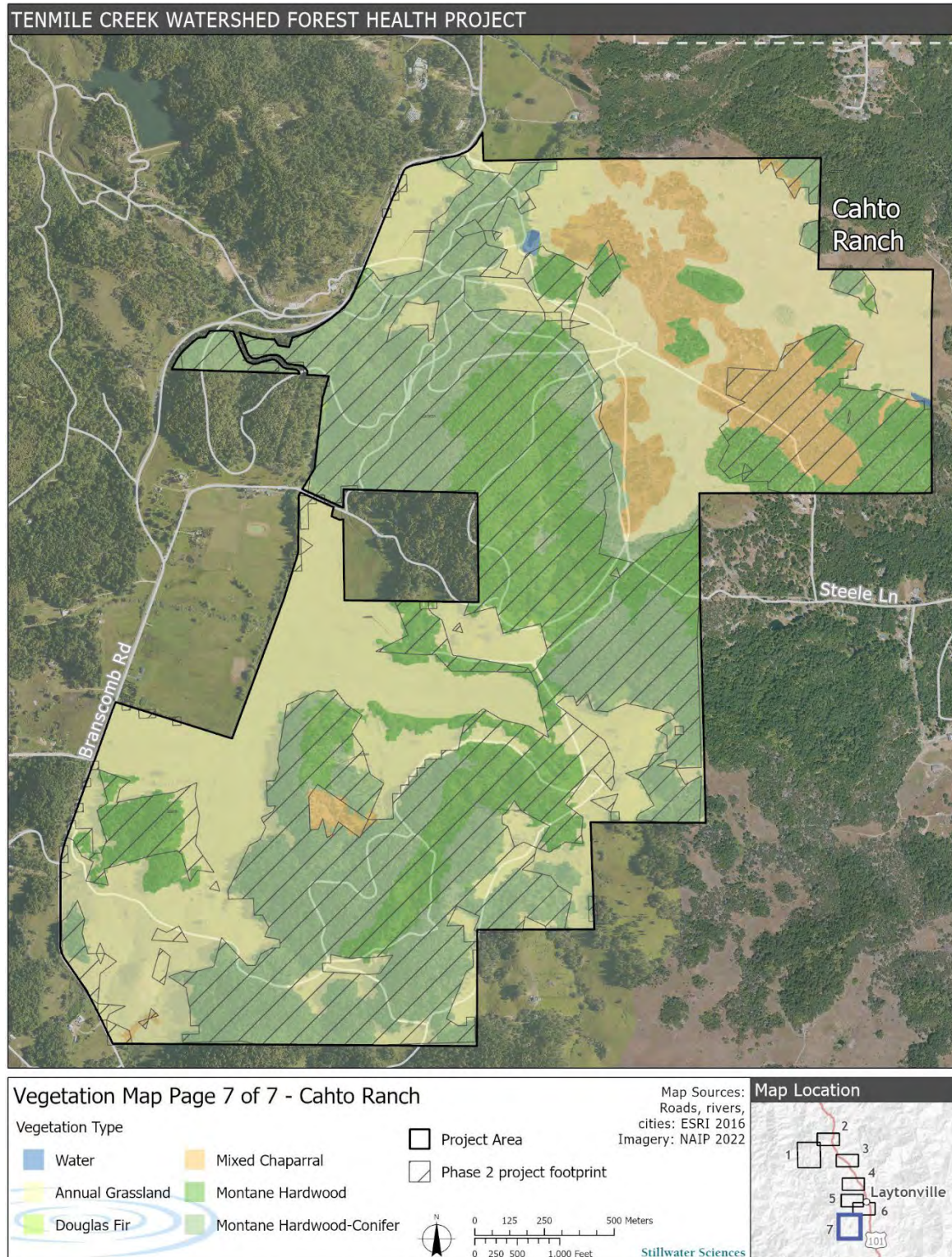


Figure 8. California Wildlife Habitat Relationship habitat types within the Project Area. Page 7 of 7.



Figure 9. Representative photographs of Montane Hardwood-Conifer habitat within the Project Area, taken in March 2024.



Figure 10. Representative photographs of Annual Grassland habitat (foreground) within the Project Area, taken in March 2024.



Figure 11. Representative photographs of Montane Hardwood habitat within the Project Area, taken in March 2024.



Figure 12. Representative photographs of Mixed Chaparral habitat within the Project Area, taken in March 2024.



Figure 13. Representative photographs of Douglas Fir habitat within the Project Area, taken in March 2024.



Figure 14. Representative photographs of Montane Riparian habitat within the Project Area, taken in March 2024.

4.2 Wetland Habitats

A formal delineation of waters and wetlands was not conducted for this Project. National Wetland Inventory (USFWS 2024b) riverine features in the Project Area include Tenmile Creek and its tributaries including Cahto Creek, Mud Springs Creek, Spring Creek, Peterson Creek, and other unnamed tributaries (Figures 15–21). Tenmile Creek is a Class I watercourse, the other riverine features in the Project Area are either Class I or Class II watercourses. Other NWI features in or near the Project Area include Freshwater Forested/Shrub Wetland, Freshwater Emergent Wetland, and Freshwater Pond (Figures 15–21). Reconnaissance-level surveys conducted in March 2024 confirmed riparian vegetation (e.g., bigleaf maple, alder, and willow) along the banks of many of the creeks in the Project Area.

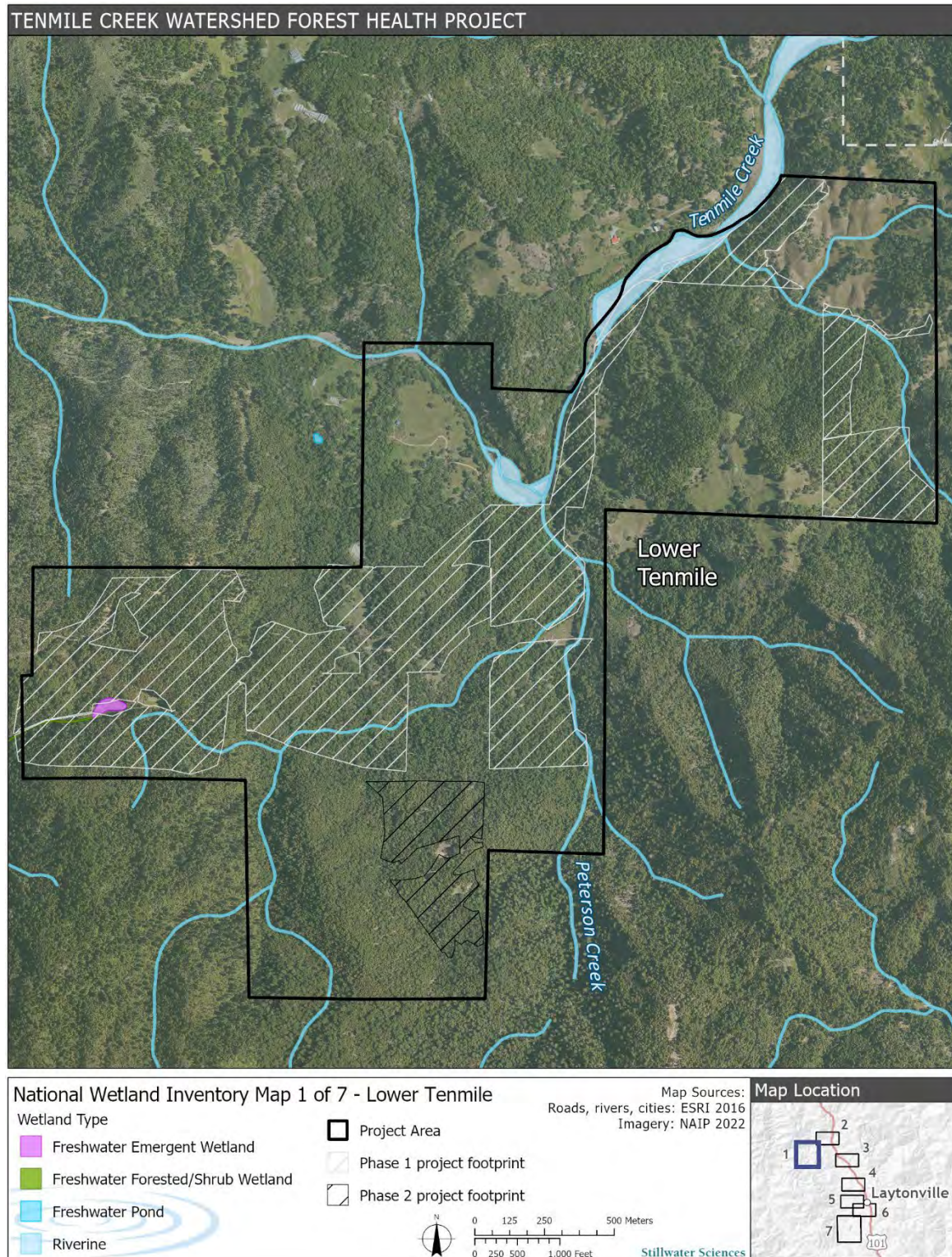


Figure 15. National Wetland Inventory mapped wetlands in the vicinity of the Project Area.
Page 1 of 7.

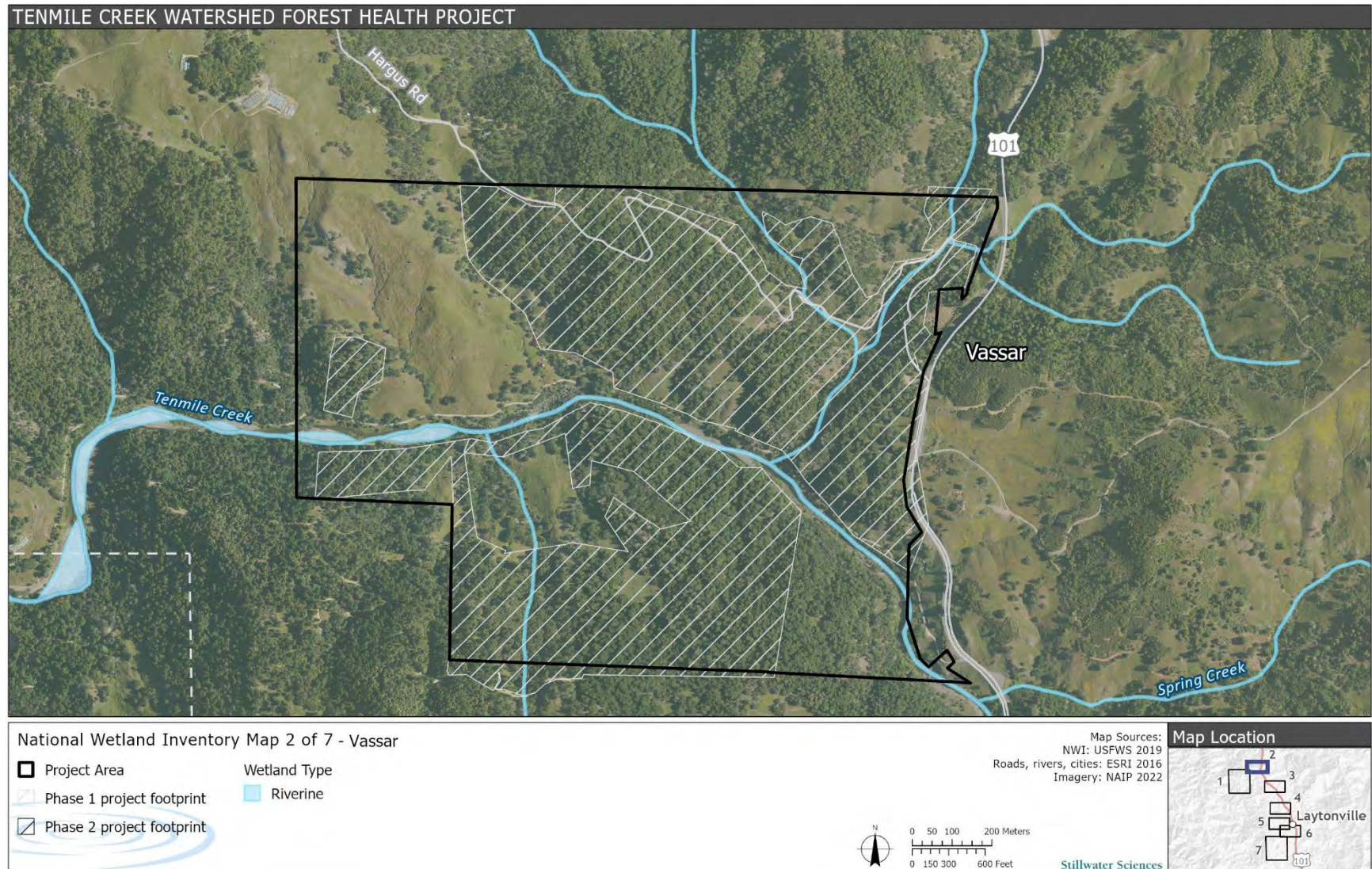


Figure 16. National Wetland Inventory mapped wetlands in the vicinity of the Project Area. Page 2 of 7.

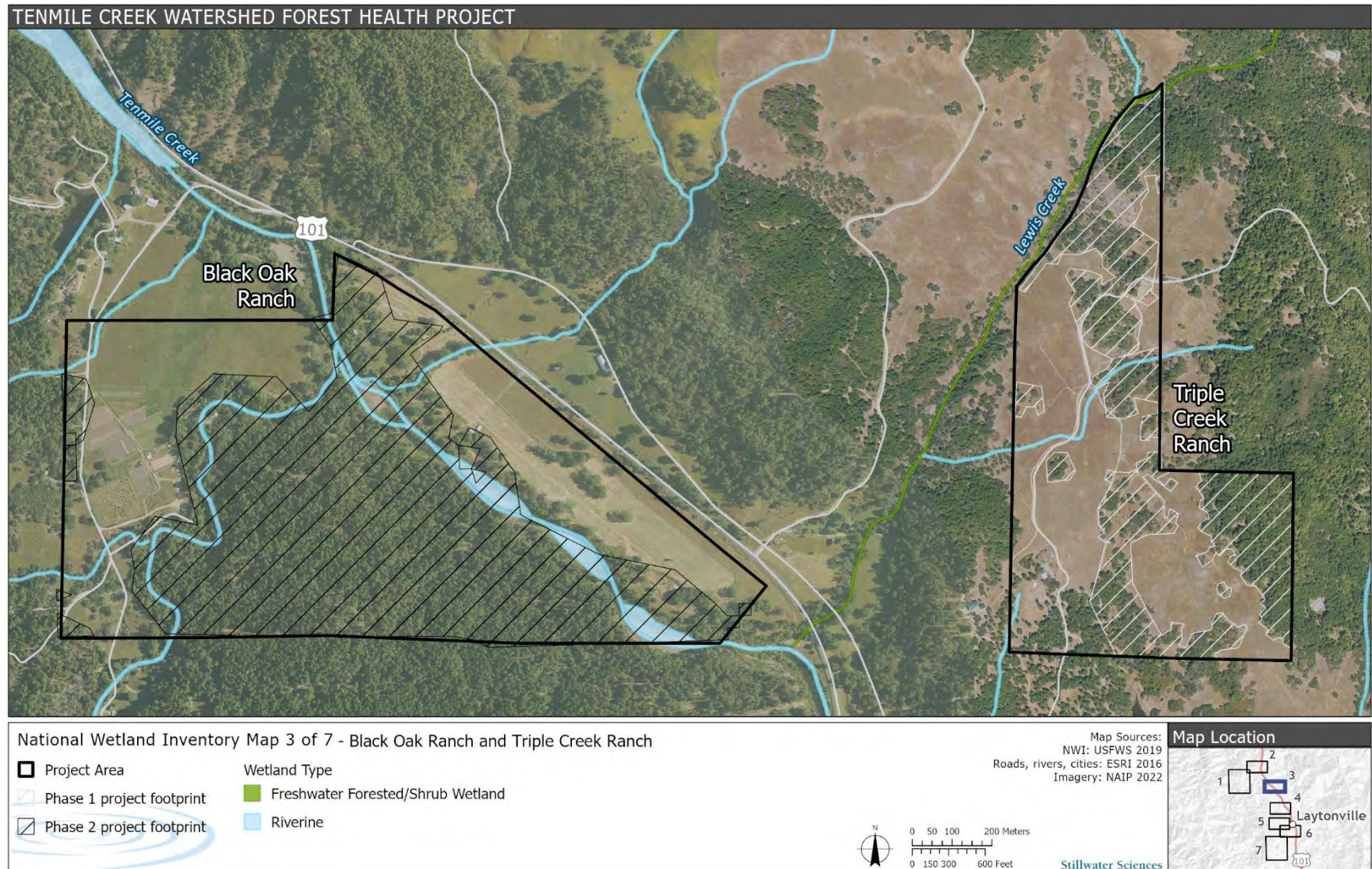


Figure 17. National Wetland Inventory mapped wetlands in the vicinity of the Project Area. Page 3 of 7.

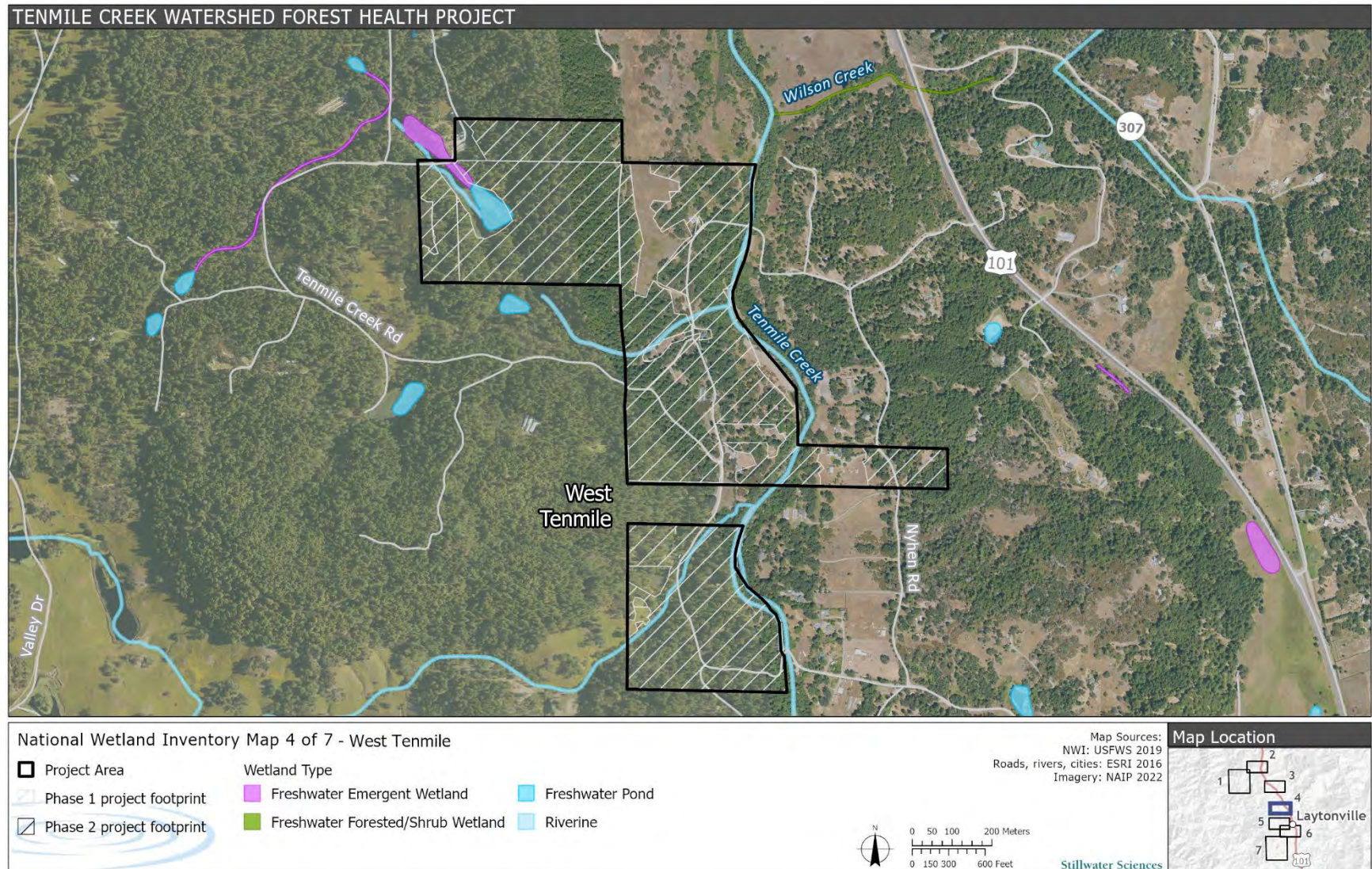


Figure 18. National Wetland Inventory mapped wetlands in the vicinity of the Project Area. Page 4 of 7.

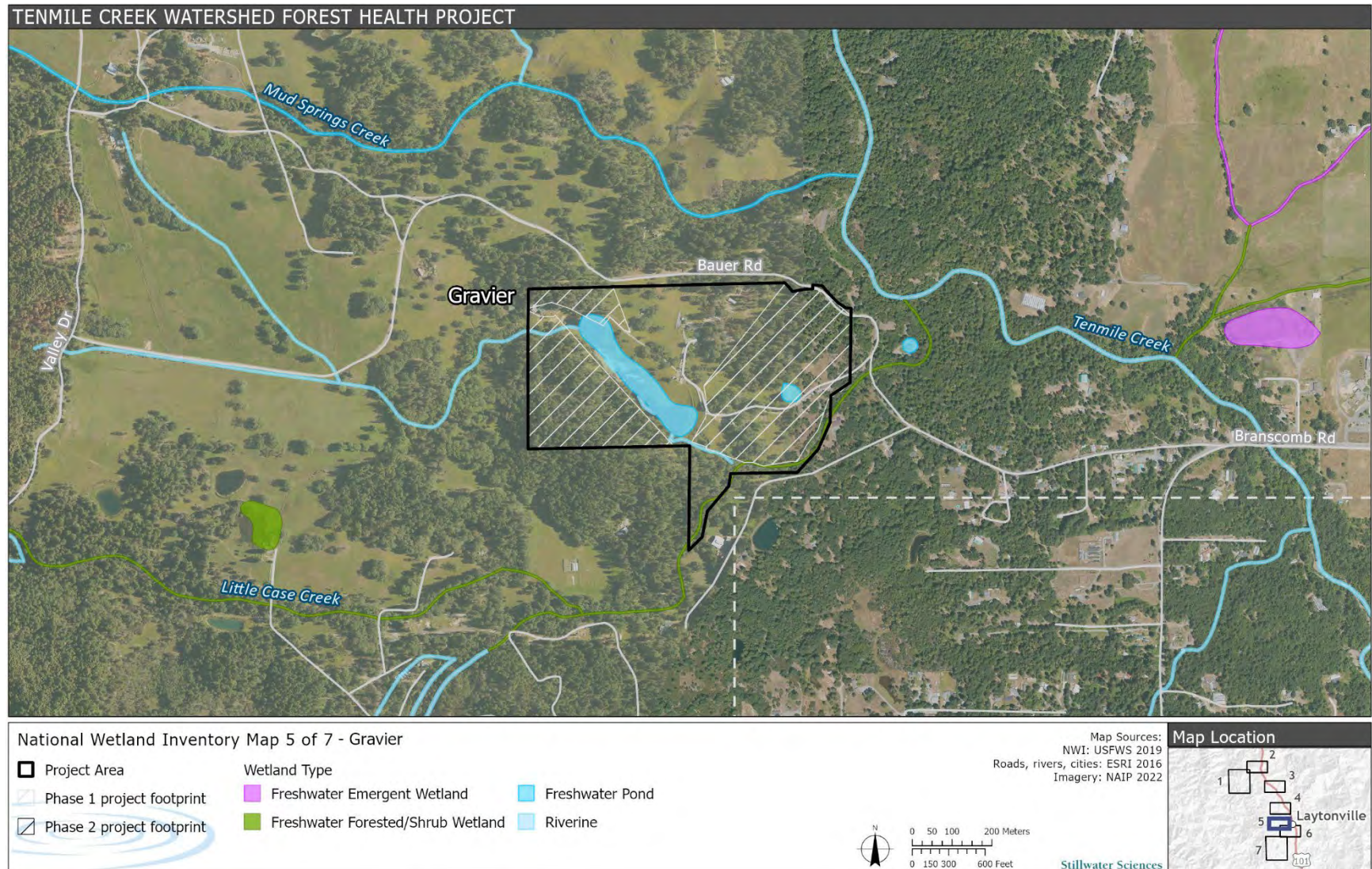


Figure 19. National Wetland Inventory mapped wetlands in the vicinity of the Project Area. Page 5 of 7.

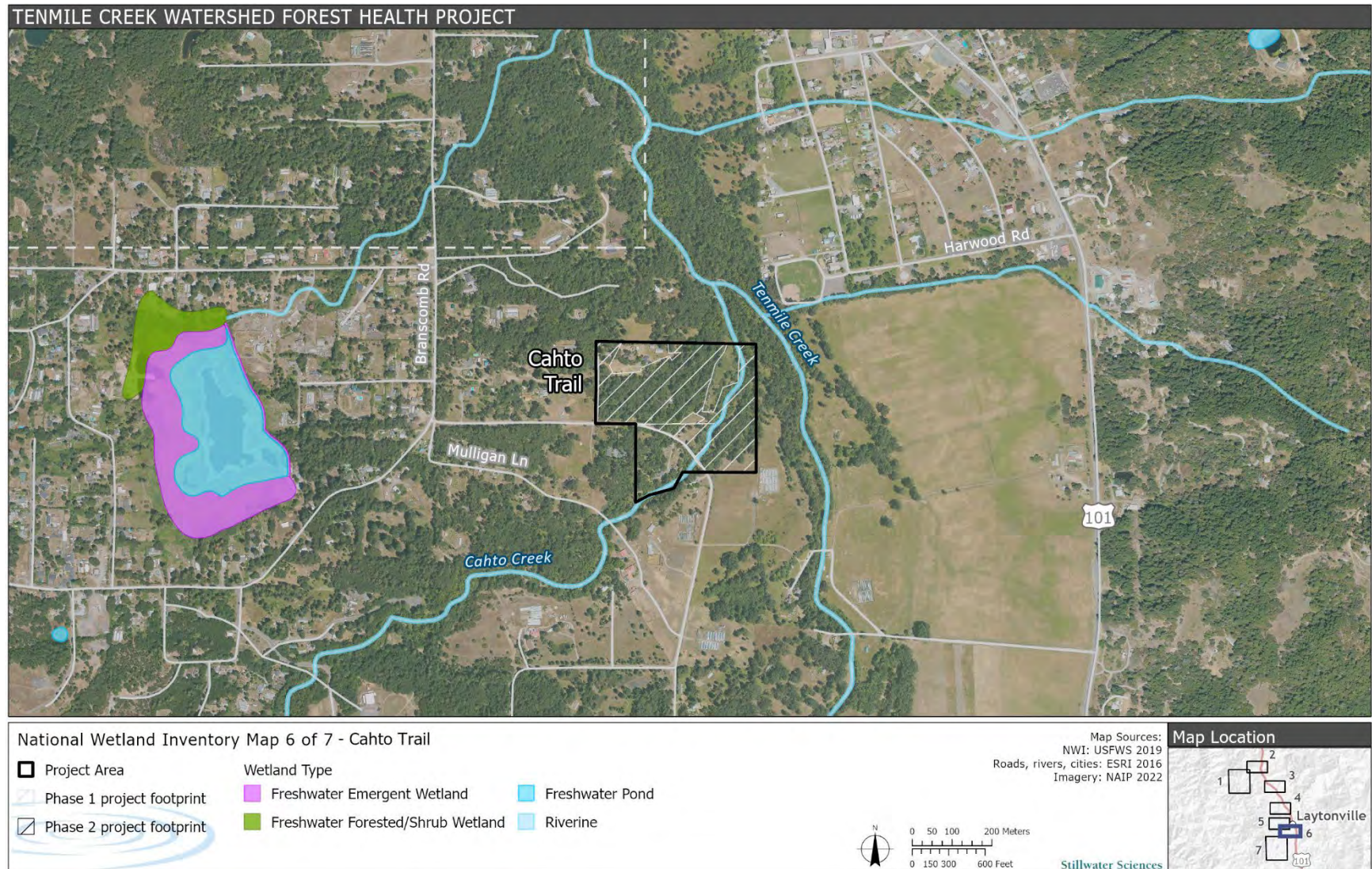


Figure 20. National Wetland Inventory mapped wetlands in the vicinity of the Project Area. Page 6 of 7.

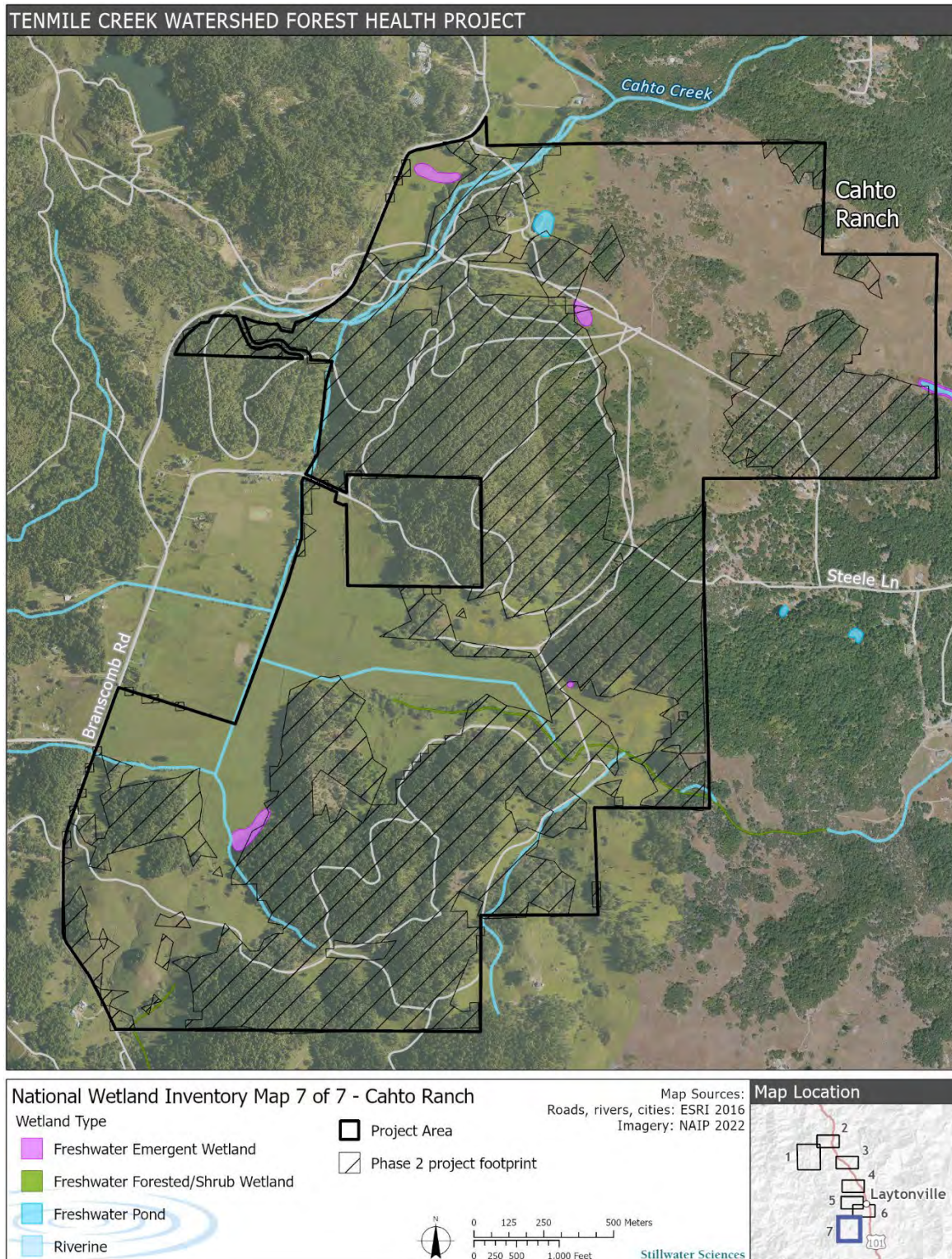


Figure 21. National Wetland Inventory mapped wetlands in the vicinity of the Project Area.
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4.3 Sensitive Natural Communities

Table 2 contains a list of Sensitive Natural Communities with potential to occur within the Project Area. This list was created by querying the Manual of California Vegetation Online Database (CNPS 2024b) for all vegetation alliances associated with each CWHR habitat type documented in the Project Area during reconnaissance-level surveys in March 2024. This list was then narrowed to include only alliances which 1) are listed as rare (state rank of S3, S2, or S1) and 2) have the potential to occur in the vicinity of the Project Area based on geographic range, habitat, and occurrence data (CNPS 2024b).

Table 2. Sensitive Natural Communities with the potential to occur within the Project Area.

Sensitive Natural Community	Common Name	State Status ¹	CWHR Type
<i>Acer macrophyllum</i> Forest & Woodland Alliance	Bigleaf maple forest and woodland	S3	Montane Hardwood-Conifer, Montane Hardwood, Douglas-fir
<i>Heterotheca (oregona, sessiliflora)</i> Herbaceous Alliance	Goldenaster patches	S3	Annual Grassland
<i>Lasthenia glaberrima-Eleocharis macrostachya</i> Herbaceous Alliance	Smooth goldfields - pale spike rush vernal pool bottoms	S2	Annual Grassland
<i>Notholithocarpus densiflorus</i> Forest Alliance	Tanoak forest	S3.2	Montane Hardwood
<i>Quercus garryana</i> (tree) Forest & Woodland Alliance	Oregon white oak woodland and forest	S3	Montane Hardwood
<i>Umbellularia californica</i> Forest & Woodland Alliance	California bay forest and woodland	S3	Montane Hardwood
<i>Arctostaphylos (bakeri, montana)</i> Shrubland Alliance	Baker's or Mt. Tamalpais manzanita chaparral	S3	Mixed Chaparral
<i>Arctostaphylos (canescens, manzanita, stanfordiana)</i> Shrubland Alliance	Hoary, common, and Stanford manzanita chaparral	S3	Mixed Chaparral
<i>Arctostaphylos glandulosa</i> Shrubland Alliance	Eastwood manzanita chaparral	S3	Mixed Chaparral
<i>Arctostaphylos (nummularia, sensitiva) - Chrysopsis chrysophylla</i> Shrubland Alliance	Glossy leaf manzanita - Golden chinquapin chaparral	S2	Mixed Chaparral
<i>Ceanothus (oliganthus, tomentosus)</i> Shrubland Alliance	Hairy leaf - woolly leaf ceanothus chaparral	S3	Mixed Chaparral
<i>Quercus wislizeni</i> – <i>Quercus chrysopsis</i> (shrub) Shrubland Alliance	Canyon live oak - Interior live oak chaparral	S3, S4	Mixed Chaparral
<i>Tsuga heterophylla</i> Forest Alliance	Western hemlock forest	S2	Douglas-fir
<i>Carex nudata</i> Herbaceous Alliance	Torrent sedge patches	S3	Montane Riparian
<i>Fraxinus latifolia</i> Forest & Woodland Alliance	Oregon ash groves	S3.2	Montane Riparian
<i>Populus fremontii</i> – <i>Fraxinus velutina</i> – <i>Salix gooddingii</i> Forest & Woodland Alliance	Fremont cottonwood forest and woodland	S3.2	Montane Riparian
<i>Populus trichocarpa</i> Forest & Woodland Alliance	Black cottonwood forest and woodland	S3	Montane Riparian

Sensitive Natural Community	Common Name	State Status ¹	CWHR Type
<i>Rhododendron columbianum</i> Shrubland Alliance	Western Labrador-tea thickets	S2	Montane Riparian
<i>Vitis arizonica</i> – <i>Vitis girdiana</i> Shrubland Alliance	Wild grape shrubland	S2	Montane Riparian

¹ State ranks for special-status natural communities:

S2 Imperiled

S3 Vulnerable

S4 Apparently Secure

0.2 Moderately threatened in California

4.4 Special-status Plants

Of the 68 special-status plant species previously documented in the Project Vicinity, 12 species were determined to have no potential to occur in the Project Area due to lack of suitable habitat (i.e., no serpentine soil); the remaining 56 special-status plant species have low, moderate, or high potential to occur within the Project Area (Table 2). However, no special-status species were identified during the protocol-level special-status plant surveys within the implementation areas of the Lower Tenmile, Vassar, Gravier, and West Tenmile portions of the Project Area by Salix Natural Resource Management in April, May, June, and July 2024. These areas all have work planned for the first year of implementation. A comprehensive list of all plant species documented within the Project Area during the special-status plant surveys is provided in Appendix A.

Table 3. Special-status plants with the potential to occur within the Project Area.

<i>Scientific Name</i> (Common Name)	Lifeform	Status (Federal/State/CRPR)	Habitat	Likelihood to Occur within Project Area
<i>Alisma gramineum</i> (grass alisma)	aquatic perennial rhizomatous herb	None/None/2B.2	Shallow freshwater marshes and swamps. Elevation: 1,280–5,905 ft. Bloom period: June–August.	Low. One recorded observation within two miles of the Project Area >40 years ago.
<i>Angelica lucida</i> (sea- watch)	perennial herb	None/None/4.2	Coastal bluff scrub, coastal dunes, coastal scrub, and coastal salt marshes and swamps. Elevation: 0–490 ft. Bloom period: April– September.	None. No suitable habitat and outside elevation range.
<i>Arabis mcdonaldiana</i> (McDonald's rockcress)	perennial herb	FE/CE/1B.1	Serpentine in lower montane coniferous forests and upper montane coniferous forests. Elevation: 445–5,905 ft. Bloom period: May–July.	None. No suitable habitat.
<i>Arctostaphylos auriculata</i> (Mt. Diablo manzanita)	perennial evergreen shrub	None/None/1B.3	Sandstone in chaparral and cismontane woodlands. Elevation: 445–2,135 ft. Bloom period: January–March.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Arctostaphylos densiflora</i> (Vine Hill manzanita)	perennial evergreen shrub	None/CE/1B.1	In acidic marine sand in chaparral. Elevation: 165–395 ft. Bloom period: February–April.	None. No suitable habitat and outside elevation range.
<i>Arctostaphylos manzanita</i> ssp. <i>elegans</i> (Konocti manzanita)	perennial evergreen shrub	None/None/1B.3	Volcanic soil in chaparral, cismontane woodlands, and lower montane coniferous forests. Elevation: 1,295–5,300 ft. Bloom period: (January) March–May (July).	Moderate. One recorded observation within two miles of the Project Area <20 years ago.
<i>Arctostaphylos</i> <i>stanfordiana</i> ssp. <i>raichei</i> (Raiche's manzanita)	perennial evergreen shrub	None/None/1B.1	Rocky and often serpentinite soil in chaparral and openings in lower montane coniferous forest. Elevation: 1,475–3,395 ft. Bloom period: February–April.	Low. Suitable habitat potentially present. No observations within ten miles of the Project Area.

Scientific Name (Common Name)	Lifeform	Status (Federal/State/CRPR)	Habitat	Likelihood to Occur within Project Area
<i>Astragalus agnicidus</i> (Humboldt County milk- vetch)	perennial herb	None/CE/1B.1	Disturbed areas, openings, and sometimes roadsides in broadleafed upland forests and North Coast coniferous forests. Elevation: 395–2,625 ft. Bloom period: (March) April–September.	High. Seventeen observations within ten miles of the Project Area >20 to two years ago.
<i>Astragalus rattanii</i> var. <i>rattanii</i> (Rattan's milk- vetch)	perennial herb	None/None/4.3	Gravelly soil and streambanks in chaparral, cismontane woodlands, and lower montane coniferous forests. Elevation: 100–2,705 ft. Bloom period: April–July.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Brasenia schreberi</i> (watershield)	aquatic perennial rhizomatous herb	None/None/2B.3	Freshwater marshes and swamps. Elevation: 0–7,220 ft. Bloom period: June–September.	Low. One recorded observation within two miles of the Project Area >40 years ago.
<i>Calamagrostis bolanderi</i> (Bolander's reed grass)	perennial rhizomatous herb	None/None/4.2	Mesic areas in bogs and fens, broadleafed upland forests, closed-cone coniferous forests, coastal scrub, freshwater marshes and swamps, mesic meadows and seeps, and North Coast coniferous forests. Elevation: 0–1,495 ft. Bloom period: May–August.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Calochortus uniflorus</i> (pink star-tulip)	perennial bulbiferous herb	None/None/4.2	Coastal prairies, coastal scrub, meadows and seeps, and North Coast coniferous forests. Elevation: 35–3,510 ft. Bloom period: Apr–June.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Calystegia atriplicifolia</i> ssp. <i>buttensis</i> (Butte County morning-glory)	perennial rhizomatous herb	None/None/4.2	Sometimes roadsides and rocky areas in chaparral, lower montane coniferous forests, and valley and foothill grasslands. Elevation: 1,855–5,000 ft. Bloom period: May–July.	Low. Suitable habitat present. No observations within ten miles of the Project Area.

Scientific Name (Common Name)	Lifeform	Status (Federal/State/CRPR)	Habitat	Likelihood to Occur within Project Area
<i>Calystegia collina</i> ssp. <i>tridactylosa</i> (three-fingered morning-glory)	perennial rhizomatous herb	None/None/1B.2	Gravelly areas, openings, rocky areas and serpentinite in chaparral and cismontane woodlands. Elevation: 0–1,970 ft. Bloom period: April–June.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Ceanothus foliosus</i> var. <i>vineatus</i> (Vine Hill ceanothus)	perennial evergreen shrub	None/None/1B.1	Chaparral. Elevation: 150–1,000 ft. Bloom period: March–May.	Low. Outside elevation range. Two observations within two miles of the Project Area >90 years ago.
<i>Ceanothus gloriosus</i> var. <i>exaltatus</i> (glory brush)	perennial evergreen shrub	None/None/4.3	Chaparral. Elevation: 100–2,000 ft. Bloom period: March–June (August).	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Ceanothus gloriosus</i> var. <i>gloriosus</i> (Point Reyes ceanothus)	perennial evergreen shrub	None/None/4.3	Sandy soil in closed-cone coniferous forests, coastal bluff scrub, coastal dunes, and coastal scrub. Elevation: 15–1,705 ft. Bloom period: March–May.	None. No suitable habitat.
<i>Coptis laciniata</i> (Oregon goldthread)	perennial rhizomatous herb	None/None/4.2	Mesic areas in meadows and seeps and streambanks in North Coast coniferous forests. Elevation: 0–3,280 ft. Bloom period: (February) March–May (September–November).	High. Twenty observations within ten miles of the Project Area <20 years ago.
<i>Cypripedium californicum</i> (California lady's-slipper)	perennial rhizomatous herb	None/None/4.2	Seeps, usually serpentinite, and streambanks in bogs and fens and lower montane coniferous forests. Elevation: 100–9,025 ft. Bloom period: April–August (September).	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Cypripedium montanum</i> (mountain lady's-slipper)	perennial rhizomatous herb	None/None/4.2	Broadleafed upland forests, cismontane woodlands, lower montane coniferous forests, and North Coast coniferous forests. Elevation: 605–7,300 ft. Bloom period: March–August.	Low. Suitable habitat present. No observations within ten miles of the Project Area.

Scientific Name (Common Name)	Lifeform	Status (Federal/State/CRPR)	Habitat	Likelihood to Occur within Project Area
<i>Delphinium uliginosum</i> (swamp larkspur)	perennial herb	None/None/4.2	Serpentine seeps in chaparral and valley and foothill grasslands. Elevation: 1,115–2,000 ft. Bloom period: May–June.	None. No suitable habitat.
<i>Eastwoodiella californica</i> (swamp harebell)	perennial rhizomatous herb	None/None/1B.2	Mesic areas in bogs and fens, closed-cone coniferous forests, coastal prairies, freshwater marshes and swamps, meadows and seeps, and North Coast coniferous forests. Elevation: 5–1,330 ft. Bloom period: June–October.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Epilobium septentrionale</i> (Humboldt County fuchsia)	perennial herb	None/None/4.3	Sometimes rocky or sandy soil in broadleafed upland forests and North Coast coniferous forests. Elevation: 150–5,905 ft. Bloom period: July–September.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Erigeron biolettii</i> (streamside daisy)	perennial herb	None/None/3	Mesic or rocky areas in broadleafed upland forests, cismontane woodlands, and North Coast coniferous forests. Elevation: 100–3,610 ft. Bloom period: June–October.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Eriogonum kelloggii</i> (Kellogg's buckwheat)	perennial herb	None/CE/1B.2	Rocky areas and serpentine in lower montane coniferous forests. Elevation: 1,900–4,100 ft. Bloom period: (May) June–August.	None. No suitable habitat. Three observations ten within ten miles of the Project Area. Only observed in known serpentine soil.
<i>Erythronium citrinum</i> var. <i>citrinum</i> (lemon-colored fawn lily)	perennial bulbiferous herb	None/None/4.3	Usually in serpentine in chaparral and lower montane coniferous forest. Elevation: 490–4,265 ft. Bloom period: March–May.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Erythronium revolutum</i> (coast fawn lily)	perennial bulbiferous herb	None/None/2B.2	Mesic areas and streambanks in bogs and fens, broadleafed upland forests, and North Coast coniferous forests. Elevation: 0–5,250 ft. Bloom period: March–July (August).	Moderate. Three observations within ten miles to the north and south of the Project Area >90 to <20 years ago.

Scientific Name (Common Name)	Lifeform	Status (Federal/State/CRPR)	Habitat	Likelihood to Occur within Project Area
<i>Fritillaria purdyi</i> (Purdy's fritillary)	perennial bulbiferous herb	None/None/4.3	Usually in serpentinite in chaparral, cismontane woodlands, and lower montane coniferous forests. Elevation: 575–7,400 ft. Bloom period: March–June.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Gentiana setigera</i> (Mendocino gentian)	perennial herb	None/None/1B.2	Mesic areas in lower montane coniferous forests and meadows and seeps. Elevation: 1,100–3,495 ft. Bloom period: (April–July) August–September.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Gilia millefoliata</i> (dark-eyed gilia)	annual herb	None/None/1B.2	Coastal dunes. Elevation: 5–100 ft. Bloom period: April–July.	None. No suitable habitat and outside elevation range.
<i>Hemizonia congesta</i> ssp. <i>calyculata</i> (Mendocino tarplant)	annual herb	None/None/4.3	Sometimes serpentinite in cismontane woodlands and valley and foothill grasslands. Elevation: 740–4,595 ft. Bloom period: July–November.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Hemizonia congesta</i> ssp. <i>congesta</i> (congested-headed hayfield tarplant)	annual herb	None/None/1B.2	Sometimes roadsides in valley and foothill grasslands. Elevation: 65–1,835 ft. Bloom period: April–November.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Hemizonia congesta</i> ssp. <i>tracyi</i> (Tracy's tarplant)	annual herb	None/None/4.3	Openings and sometimes serpentinite in coastal prairies, lower montane coniferous forests, and North Coast coniferous forests. Elevation: 395–3,935 ft. Bloom period: (March–April) May–October.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Hesperolinon adenophyllum</i> (glandular western flax)	annual herb	None/None/1B.2	Usually serpentinite in chaparral, cismontane woodland, and valley and foothill grassland. Elevation: 490–4,315 ft. Bloom period: May–August.	Low. One recorded observation within two miles of the Project Area >140 years ago.
<i>Horkelia tenuiloba</i> (thin-lobed horkelia)	perennial herb	None/None/1B.2	Mesic areas, openings, and sandy soil in broadleaved upland forests, chaparral, and valley and foothill grasslands. Elevation: 165–1,640 ft. Bloom period: May–July (August).	Low. One recorded observation within ten miles of the Project Area >60 years ago.

<i>Scientific Name</i> (Common Name)	Lifeform	Status (Federal/State/CRPR)	Habitat	Likelihood to Occur within Project Area
<i>Hosackia gracilis</i> (harlequin lotus)	perennial rhizomatous herb	None/None/4.2	Wetlands and roadsides in broadleafed upland forests, cismontane woodlands, closed-cone coniferous forests, coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, meadows and seeps, North Coast coniferous forests, and valley and foothill grasslands. Elevation: 0–2,295 ft. Bloom period: March–July.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Lasthenia burkei</i> (Burke's goldfields)	annual herb	FE/CE/1B.1	Mesic areas in meadows and seeps and vernal pools. Elevation: 50–1,970 ft. Bloom period: April–June.	Low. Suitable habitat potentially present. No observations within ten miles of the Project Area.
<i>Lasthenia conjugens</i> (Contra Costa goldfields)	annual herb	FE/None/1B.1	Mesic areas in cismontane woodlands, alkaline playas, valley and foothill grasslands, and vernal pools. Elevation: 0–1,540 ft. Bloom period: March–June.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Lathyrus glandulosus</i> (sticky pea)	perennial rhizomatous herb	None/None/4.3	Cismontane woodlands. Elevation: 985–2,625 ft. Bloom period: April–June.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Leptosiphon aureus</i> (bristly leptosiphon)	annual herb	None/None/4.2	Chaparral, cismontane woodlands, coastal prairies, and valley and foothill grasslands. Elevation: 180–4,920 ft. Bloom period: April–July.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Leptosiphon latisectus</i> (broad-lobed leptosiphon)	annual herb	None/None/4.3	Broadleafed upland forests and cismontane woodlands. Elevation: 560–4,920 ft. Bloom period: April–June.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Leptosiphon rattanii</i> (Rattan's leptosiphon)	annual herb	None/None/4.3	Sometimes gravelly and rocky soils in cismontane woodlands and lower montane coniferous forests. Elevation: 5,580–6,560 ft. Bloom period: May–July.	None. Outside elevation range.

<i>Scientific Name</i> (Common Name)	Lifeform	Status (Federal/State/CRPR)	Habitat	Likelihood to Occur within Project Area
<i>Lilium rubescens</i> (redwood lily)	perennial bulbiferous herb	None/None/4.2	Sometimes on roadsides and serpentinite in broadleaved upland forests, chaparral, lower montane coniferous forests, North Coast coniferous forests, and upper montane coniferous forests. Elevation: 100–6,265 ft. Bloom period: (March) April–August (September).	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Limnanthes bakeri</i> (Baker's meadowfoam)	annual herb	None/CR/1B.1	Freshwater marshes and swamps, meadows and seeps, vernal mesic valley and foothill grasslands, and vernal pools. Elevation: 575–2,985 ft. Bloom period: April–May.	Moderate. Five observations within five miles of the Project Area in the last 50–20 years.
<i>Listera cordata</i> (heart-leaved twayblade)	perennial herb	None/None/4.2	Bogs and fens, lower montane coniferous forests, and North Coast coniferous forests. Elevation: 15–4,495 ft. Bloom period: February–July.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Lomatium engelmannii</i> (Engelmann's lomatium)	perennial herb	None/None/4.3	Serpentinite in chaparral, lower montane coniferous forests, and upper montane coniferous forests. Elevation: 2,855–8,990 ft. Bloom period: May–August.	None. No suitable habitat and outside elevation range.
<i>Lomatium koghiini</i> (Wailaki lomatium)	perennial herb	None/None/1B.2	Serpentinite in lower montane coniferous forests. Elevation: 1,475–4,100 ft. Bloom period: April–June.	None. No suitable habitat. Two observations ten within ten miles of the Project Area. Only observed in known serpentine soil.
<i>Lupinus milo-bakeri</i> (Milo Baker's lupine)	annual herb	None/CT/1B.1	Often roadsides in cismontane woodlands and valley and foothill grasslands. Elevation: 1,295–1,410 ft. Bloom period: June–September.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Micranthes marshallii</i> (Marshall's saxifrage)	perennial rhizomatous herb	None/None/4.3	Rocky areas and streambanks in riparian forests. Elevation: 295–6,990 ft. Bloom period: March–August.	Low. Suitable habitat present. No observations within ten miles of the Project Area.

Scientific Name (Common Name)	Lifeform	Status (Federal/State/CRPR)	Habitat	Likelihood to Occur within Project Area
<i>Mitellastrca caulescens</i> (leafy-stemmed mitrewort)	perennial rhizomatous herb	None/None/4.2	Mesic areas and sometimes roadsides in broadleafed upland forests, lower montane coniferous forests, meadows and seeps, and North Coast coniferous forests. Elevation: 15–5,580 ft. Bloom period: (March) April–October.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> (Baker's navarretia)	annual herb	None/None/1B.1	Mesic areas in cismontane woodlands, lower montane coniferous forests, meadows and seeps, valley and foothill grasslands, and vernal pools. Elevation: 15–5,710 ft. Bloom period: April–July.	Low. One observation within ten miles of the Project Area >120 years ago
<i>Piperia candida</i> (white- flowered rein orchid)	perennial herb	None/None/1B.2	Sometimes serpentinite in broadleafed upland forests, lower montane coniferous forests, and North Coast coniferous forests. Elevation: 100–4,300 ft. Bloom period: (March–April) May–September.	High. Twenty observations within ten miles to the north, south and west of the Project Area One recorded observation within two miles of the Project Area <20 years ago.
<i>Pityopus californicus</i> (California pinefoot)	achlorophyllous perennial herb	None/None/4.2	Mesic areas in broadleafed upland forests, lower montane coniferous forests, North Coast coniferous forests, and upper montane coniferous forest. Elevation: 50–7,300 ft. Bloom period: (March–April) May–August.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Pleuropogon hooverianus</i> (North Coast semaphore grass)	perennial rhizomatous herb	None/CT/1B.1	Mesic areas in broadleafed upland forest, Meadows and seeps, North Coast coniferous forest Elevation: 35–2,200 ft. Bloom period: April–June.	Moderate. One population within ten miles observed five times >20 years ago and one observation within two miles of the Project Area >120 years ago.
<i>Pleuropogon refractus</i> (nodding semaphore grass)	perennial rhizomatous herb	None/None/4.2	Mesic areas in lower montane coniferous forests, meadows and seeps, North Coast coniferous forests, and riparian forests. Elevation: 0–5,250 ft. Bloom period: (February–March) April–August.	Low. Suitable habitat present. No observations within ten miles of the Project Area.

Scientific Name (Common Name)	Lifeform	Status (Federal/State/CRPR)	Habitat	Likelihood to Occur within Project Area
<i>Potamogeton epihydrus</i> (Nuttall's ribbon-leaved pondweed)	aquatic perennial rhizomatous herb	None/None/2B.2	Shallow freshwater marshes and swamps. Elevation: 1,210–7,125 ft. Bloom period: (June) July–September.	Moderate. One observation within two miles of the Project Area >30 years ago.
<i>Ramalina thrausta</i> (angel's hair lichen)	epiphytic fruticose lichen	None/None/2B.1	Dead twigs and other lichens in North Coast coniferous forests. Elevation: 245–1,410 ft. Bloom period: N/A	Moderate. One observation within five miles of the Project Area >30 years ago.
<i>Rhynchospora globularis</i> (round-headed beaked- rush)	perennial rhizomatous herb	None/None/2B.1	Freshwater marshes and swamps. Elevation: 150–195 ft. Bloom period: July–August	None. Outside elevation range.
<i>Sedum eastwoodiae</i> (Red Mountain stonecrop)	perennial herb	None/None/1B.2	Serpentine in lower montane coniferous forests. Elevation: 1,970–3,935 ft. Bloom period: May–July.	None. No suitable habitat. Two observations ten within ten miles of the Project Area. Only observed in known serpentine soil.
<i>Sidalcea malachroides</i> (maple-leaved checkerbloom)	perennial herb	None/None/4.2	Often in disturbed areas in broadleaved upland forests, coastal prairies, coastal scrub, North Coast coniferous forests, and riparian woodland. Elevation: 0–2,395 ft. Bloom period: (March) April–August.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Silene bolanderi</i> (Bolander's catchfly)	perennial herb	None/None/1B.2	Usually grassy openings, sometimes dry rocky slopes, canyons, or roadsides in edges of chaparral, cismontane woodlands, lower montane coniferous forests, meadows and seeps, and North Coast coniferous forests Elevation: 1,380–3,775 ft. Bloom period: May–June.	Moderate. Five observations within ten miles of the Project Area from >90 to six years ago.

Scientific Name (Common Name)	Lifeform	Status (Federal/State/CRPR)	Habitat	Likelihood to Occur within Project Area
<i>Silene greenei</i> ssp. <i>angustifolia</i> (Red Mountain catchfly)	perennial herb	None/CE/1B.2	Usually serpentinite and rocky areas in chaparral and lower montane coniferous forests. Elevation: 1,395–6,840 ft. Bloom period: May–June.	Low. Four observations within ten miles of the Project Area as recently as seven years ago. Only observed in known serpentinite soil.
<i>Sulcaria badia</i> (grooved beard lichen)	epiphytic fruticose lichen	None/None/4.2	Usually bark of hardwoods and conifers in cismontane woodlands and lower montane coniferous forests. Elevation: 1,360–4,955 ft. Bloom period: N/A	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Thermopsis robusta</i> (robust false lupine)	perennial rhizomatous herb	None/None/1B.2	Broadleaved upland forests and North Coast coniferous forests Elevation: 490–4,920 ft. Bloom period: May–July.	Moderate. Five observations within 10 miles of the Project Area as recently as seven years ago.
<i>Trifolium amoenum</i> (two- fork clover)	annual herb	FE/None/1B.1	Coastal bluff scrub and sometimes in serpentinite in valley and foothill grasslands. Elevation: 15–1,360 ft. Bloom period: April–June.	Low. Suitable habitat present. No observations within ten miles of the Project Area.
<i>Usnea longissima</i> (Methuselah's beard lichen)	epiphytic fruticose lichen	None/None/4.2	Tree branches; usually on old growth hardwoods and conifers in broadleaved upland forests and North Coast coniferous forests. Elevation: 165–4,790 ft. Bloom period: N/A	Low. Two observations within ten miles of the Project Area >20 years ago.
<i>Viburnum ellipticum</i> (oval-leaved viburnum)	perennial deciduous shrub	None/None/2B.3	Chaparral, cismontane woodlands, and lower montane coniferous forests. Elevation: 705–4,595 ft. Bloom period: May–June.	Low. Four observations within ten miles of the Project Area >140 to >90 years ago.

Scientific Name (Common Name)	Lifeform	Status (Federal/State/CRPR)	Habitat	Likelihood to Occur within Project Area
<i>Wyethia longicaulis</i> (Humboldt County wyethia)	perennial evergreen shrub	None/None/1B.1	Rocky and often serpentinite soil in chaparral and openings in lower montane coniferous forest. Elevation: 1,475 – 3,395 ft. Bloom period: February–April.	Low. Suitable habitat present. No observations within ten miles of the Project Area.

¹ Status:

Federal

FE Federally endangered
None Not listed

State

CE State endangered
CR State rare
None Not listed

California Rare Plant Rank (CRPR):

1B Plants rare, threatened, or endangered in California and elsewhere
2B Plants rare, threatened, or endangered in California, but more common elsewhere
3 Plants about which more information is needed, on review list
4 Plants of limited distribution, on watch list

CRPR Threat Ranks:

0.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 Moderately threatened in California (20–80% occurrences threatened / moderate degree and immediacy of threat)
0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

² Months in parentheses are uncommon; N/A = Not applicable

4.5 Fish and Wildlife

Of the 30 special-status fish and wildlife species that were identified from the database queries conducted for the Project (described in Section 3.2), 11 have a high potential to occur within the Project Area, 11 have a moderate potential, five have a low potential, and three have no potential. Table 4 provides the likelihood for these special-status fish and wildlife species to occur, and for the 22 species with a moderate to high potential to occur, their sensitive life history timing, and an analysis of potential Project effects on individuals and their habitat are also provided.

Table 4. Special-status wildlife evaluated with the potential to occur within the Project Area and potential Project effects.

Common Name <i>Scientific Name</i>	Query Sources	Status ^a Federal/ State	Distribution in California	Habitat Association	Likelihood to Occur within Project Area	Sensitive Life History Timing ^b	Potential Project-related Effects on the Species and Habitat
<i>Invertebrates</i>							
Monarch butterfly (California overwintering population) <i>Danaus plexippus</i> <i>plexippus</i>	USFWS	FC/–	Range includes most of California; it breeds throughout California and overwinters in suitable groves along the California coast	Adults forage on a variety of flowering plants during breeding and migration; larva (caterpillars) require milkweed (<i>Asclepias</i> spp.) as a host plant. Overwinter roosts include eucalyptus (<i>Eucalyptus</i> sp.), Monterey pines (<i>Pinus radiata</i>), and Monterey cypress (<i>Hesperocyparis macrocarpa</i>) trees or groves.	High: Monarch butterflies have the potential to breed in the Project Area because <i>Asclepias cordifolia</i> (purple milkweed) was documented in the Lower Tenmile area during the 2024 special-status plant surveys (Appendix A). Also, flowering plants for which adults can forage for nectar are present in the Project Area. Monarch adults have been observed within 1.5 miles of the Project Area (Lower Tenmile) and larvae have been observed on <i>Asclepias</i> spp. within 4.5 miles of the Cahto Ranch (2013) (Western Monarch Milkweed Occurrence Database 2024). No critical habitat has been designated for this species.	Breeding season: March through October; purple milkweed blooms from March through July, while vegetative parts can be present one to two months before and after this period Overwintering season: November through February	Forest management activities can affect breeding habitat (milkweed) if it is removed or disturbed, and larvae may directly be harmed or killed if milkweed is disturbed during the breeding season.
Western bumble bee <i>Bombus occidentalis</i>	CDFW	–/SCE	Current range includes northern California and northern Sierra Nevada Mountains	Forages on flowering plants in chaparral, scrub, mountain meadows, forested openings, open grassy areas, and urban parks and gardens. Host plant genera include, but are not limited to, <i>Ceanothus</i> , <i>Centaurea</i> , <i>Chrysothamnus</i> , <i>Cirsium</i> , <i>Eriogonum</i> , <i>Geranium</i> , <i>Grindellia</i> , <i>Lupinus</i> , <i>Melilotus</i> , <i>Monardella</i> , <i>Rubus</i> , <i>Solidago</i> , and <i>Trifolium</i> . Nests underground in pre-existing cavities (abandoned small mammal burrows) but can also nest above ground in thatched grass, brush piles, fallen logs, and human-made structures.	Low: While foraging habitat and potential nesting sites occur within the Project Area, the species is generally rare in the southern portion of the range. Observations within the vicinity include two observations within two miles of Lower Tenmile (1981 and 1984) and one observation within ten miles of Vassar (1968) (CDFW 2024). The closest occurrence in the Bumble Bee Watch database is over 60 miles away (Xerces Society 2024).	Colony active period: March through October Overwintering period: November through February	Forest management activities are not expected to disturb nesting or foraging habitat because treatment activities will be restricted to forested areas, a habitat that western bumblebees generally do not forage or nest in.

Common Name <i>Scientific Name</i>	Query Sources	Status ^a Federal/ State	Distribution in California	Habitat Association	Likelihood to Occur within Project Area	Sensitive Life History Timing ^b	Potential Project-related Effects on the Species and Habitat
Crotch’s bumble bee <i>Bombus crotchii</i>	CDFW	–/SCE	Range includes the southern Pacific Coast, Great Basin, Mojave Desert, Sonoran Desert, Central Valley, and adjacent foothills through most of southwestern California; recent observations mainly in southwestern and central California.	Forages on flowering plants in open grassland and scrub habitats. Host plant genera include, but are not limited to, <i>Antirrhinum</i> , <i>Asclepias</i> , <i>Chaenactis</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , <i>Eriogonum</i> , <i>Lupinus</i> , <i>Medicago</i> , <i>Phacelia</i> , <i>Salvia</i> , and <i>Phacelia</i> . Nests are often located underground. in pre-existing cavities (abandoned small mammal burrows), but can may also nest aboveground in thatched grass, brush piles, fallen logs, and human-made structures.	Low: Potential foraging habitat and nesting sites occur within the Project Area. The most recent occurrence is about 35 miles from Cahto Trail in 2022 (Xerces Society 2024), and the nearest CNDDDB observation is about 1.5 miles from Lower Tenmile in 1978 (CDFW 2024).	Colony active period: March through September, while may occur as early as February or as late as October Overwintering period: September through March	Forest management activities are not expected to disturb nesting or foraging habitat because treatment activities will be restricted to forested areas, a habitat that Crotch’s bumblebees generally do not forage or nest in.
<i>Fish</i>							
Coho salmon, Southern Oregon/Northern California Coast Evolutionary Significant Unit (ESU) <i>Oncorhynchus kisutch</i>	NMFS, CDFW	FT/ST	Range includes Punta Gorda north to the Oregon border	Low-gradient portions of coastal draining streams with sufficiently cool water temperatures. Adult spawning: fine to coarse gravel in pool tailouts or low-gradient riffles with nearby cover or deep pools. Juvenile rearing: instream pool habitats often associated with large wood or off-channel features that provide low-velocity protection from high flows and cover from predation and water temperatures less than approximately 17°C.	High: Present in waterways (e.g., Cahto Creek and Tenmile) within or adjacent to the Project. Juvenile coho salmon have been documented in Cahto Creek (Higgins 2023), a tributary to Tenmile Creek. Critical habitat is located on creeks (e.g., Cahto Creek, Tenmile Creek) within the Project Area.	Adult migration: fall and winter Spawning: few weeks following migration (December–February) Fry emergence: 3–4 months after spawning Juvenile rearing: year round Emigration from streams to mainstem: March–May Outmigration: April and May, peak in early May	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and embeddedness of spawning gravel and affect the survival of eggs and health of juveniles and adults.
Chinook salmon, California Coastal ESU <i>Oncorhynchus tshawytscha</i>	NMFS	FT/–	Range includes Russian River (Sonoma County) north to Redwood Creek (Humboldt County)	Coastal draining streams. Adult spawning: medium gravel to small cobble in pool tails or low-gradient riffles with nearby cover or deep pools. Juvenile rearing: fry utilize shallow stream margins and juveniles utilize pool or deep run habitats with instream cover from winter flows and predation, often associated with large cobble, boulders, or large wood in water temperatures less than approximately 19°C.	High: Present in waterways (e.g., Cahto Creek and Tenmile) within or adjacent to the Project. Spawning adults were observed in Cahto Creek during the winter 2016/2017 survey season (Starks et al. 2017), which is a tributary to Tenmile Creek. Critical habitat is located on creeks (e.g., Cahto Creek, Tenmile Creek) within the Project Area.	Adult migration: fall and winter (September–early November) Spawning: few weeks following freshwater entry (November–January, peak in December) Fry emergence: late winter or spring Juvenile rearing: none Outmigration: February–late June, peak from March to May	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and embeddedness of spawning gravel affect the survival of eggs and health of fry and adults.

Common Name <i>Scientific Name</i>	Query Sources	Status ^a Federal/ State	Distribution in California	Habitat Association	Likelihood to Occur within Project Area	Sensitive Life History Timing ^b	Potential Project-related Effects on the Species and Habitat
Steelhead, northern California distinct population segment (DPS) winter-run <i>Oncorhynchus mykiss irideus</i>	NMFS, CDFW	FT/–	Range includes Coastal streams from the Russian River (exclusive) north to Redwood Creek (Humboldt County)	<p>Rivers and streams with cold water, clean gravel of appropriate size for spawning, and suitable rearing habitat.</p> <p>Adult spawning: medium to coarse gravel in pool tails or low-gradient riffles with nearby cover or deep pools.</p> <p>Juvenile rearing: pool or deep run habitats with instream cover from winter flows and predation, often associated with large cobble, boulders, or large wood in water temperatures less than approximately 22°C. Juveniles typically rear in fresh water for 1 or more years before migrating to the ocean.</p>	<p>High: Present in waterways (e.g., Cahto Creek and Tenmile) within or adjacent to the Project. Stillwater Sciences surveys in June 2023 and CDFW surveys in July 2009 observed steelhead/rainbow trout in Cahto Creek (Stillwater Sciences 2023, CDFG 2009). CNDDDB occurrence from 2022 include Tenmile Creek and tributaries (e.g., Peterson Creek) (CDFW 2024).</p> <p>Designated critical habitat is located on creeks (e.g., Chato Creek and Tenmile Creek) within the Project Area.</p>	<p>Adult migration: October through March</p> <p>Spawning: late February through April</p> <p>Fry emergence: 6 weeks following hatching (April–June)</p> <p>Juvenile rearing: year-round</p> <p>Outmigration: late-winter and spring (February–June [peak in March and April] and October–November)</p>	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and embeddedness of spawning gravel affect the survival of eggs and health of fry, juveniles, and adults.
Steelhead, northern California DPS summer-run <i>Oncorhynchus mykiss irideus</i>	NMFS, CDFW	FT/SE	Range includes portions of Redwood Creek (Humboldt County) and the Mad, Eel, and Mattole River basins	<p>Rivers and streams with cold water, clean gravel of appropriate size for spawning, and suitable rearing habitat; juveniles typically rear in fresh water for 1 or more years before migrating to the ocean. Adults require suitable pools for holding prior to spawning and tend to spawn in smaller, higher-gradient streams than winter-run steelhead. Adults are capable of spawning upstream of partial barriers to movement, which are only passable at intermediate stream flows.</p>	<p>None: Outside known distribution. CNDDDB location in area notes that the population is extirpated (CDFW 2024). Not known to occur in the Tenmile Creek watershed.</p> <p>Designated critical habitat is not present within the Project Area.</p>	Not applicable	Not applicable

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Tidewater goby <i>Eucyclogobius newberryi</i>	CDFW, USFWS	FE/–	Range includes San Diego County north to the mouth of the Smith River in Del Norte County	Typically in shallow waters of coastal lagoons and the uppermost zone of brackish large estuaries; prefer sandy substrate for spawning, but can be found on silt, mud, or rocky substrates; typically in shallow water, but can occur in water up to 15 feet in lagoons and within a wide range of salinity (0–42 ppt).	None: Outside the range and no suitable habitat present. The nearest CNDDDB occurrence is from 1997 about 14 miles from the Project Area (CDFW 2024). Critical habitat has been designated for this species and is not present within the Project Area.	Not applicable	Not applicable
Pacific lamprey <i>Entosphenus tridentatus</i>	CDFW	–/SSC	Most coastal flowing watersheds between Mexico and Oregon.	Anadromous species that spawns and rears in freshwater before emigrating to the ocean to feed and grow. Generally distributed wherever salmon and steelhead occur. Adult spawning: coarse gravel or small cobble in pool tails or low-gradient riffles. Larval rearing: low-velocity areas where they burrow into fine silt and sand substrates that often contain organic matter. Water temperatures less than approximately 22°C.	High: Present in waterways within or adjacent to the Project. Holding adults documented in Cahto Creek in 2012 (Stillwater Sciences 2014). The nearest CNDDDB occurrence is 13 miles from the Project Area in 1996 (CDFW 2024).	Adult migration: late winter to early summer Spawning: March through July Egg hatching: 15 days after eggs deposited into the redd Emergence: 15 days following hatching Juvenile rearing: 4–10 years Outmigration: fall to spring Ocean period: 18–40 months	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and embeddedness of spawning gravel affect the survival of eggs and health of fry, juveniles, and adults.
Reptiles							
Northwestern pond turtle <i>Actinemys marmorata</i>	USFWS, CDFW	FPT/SSC	Range is from the Oregon border along the coast ranges to the Mexican border, and west of the crest of the Cascades and Sierras	Permanent, slow-moving fresh or brackish water with available basking sites and adjacent open habitats or forest for nesting	Moderate: Tenmile and Cahto Creek provide suitable aquatic habitat, while the extent of basking and breeding habitat has not been assessed. Northwest pond turtles have been observed within the Project Area (Vassar) in Tenmile Creek (1988) (CDFW 2024). Surveys conducted near Holland Reservoir in 2023 documented two individuals in off-channel pond habitat about 0.5 mile upstream of Cahto Ranch (Stillwater Sciences 2023). Additional observations include a CNDDDB occurrence in a pond three miles south of Cahto Ranch (2017) and about eight miles from West Tenmile, Gravier, and Cahto Trail (2004) (CDFW 2024). Critical habitat has not been designated for this species.	General active period: February through November Mating: April–May Nesting: April–August Egg incubation: while unknown, laboratory hating occurred in 73–81 days Hatchling emergence: late-summer or fall, but some may overwinter and emerge the following spring Hibernation: winter in either aquatic or terrestrial habitat Estivation: summer in aquatic habitat	While no in-water work would occur, upland ground disturbance could directly affect upland nesting and hibernating habitat, which can cause mortality to incubating eggs and individuals.

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<i>Amphibians</i>							
Pacific tailed frog (also known as coastal- tailed frog) <i>Ascaphus truei</i>	CDFW	–/SSC	Coastal Mendocino County north to the Oregon border, with an isolated population in Shasta region	Occurs in montane hardwood-conifer, redwood, Douglas-fir and ponderosa pine habitats. Restricted to perennial montane streams. In and adjacent to cold, clear, moderate- to fast-flowing, perennial montane streams. Tadpoles require water below 15°C.	Low: In 2023, Stillwater Sciences biologists measured water temperatures in the mainstem of Cahto Creek and the southern Cahto Creek tributary to be 12.5–13.5°C, which is suitable for tadpole development. However, these temperatures were recorded in early summer following a wet water year, and temperatures during a normal late- summer/fall (during tadpole development) likely exceed 15°C. It is anticipated that other creeks within the Project Area are also too warm based on these recordings. The majority of CNDDB occurrences are near the coast or more than 20 years old. The nearest occurrence is from 1999 about 1.5 miles from Lower Tenmile in Elder Creek and from 1996 about 7 miles of Cahto Ranch in the Middle Fork Tenmile River (CDFW 2024).	Not applicable	No Project effects are anticipated
Northern red-legged frog <i>Rana aurora</i>	CDFW	–/SSC	Ranges from Mills Creek in Mendocino County to Oregon border	Breeds in still or slow-moving water with emergent and overhanging vegetation, including wetlands, wet meadows, ponds, lakes, and low- gradient, slow moving stream reaches with permanent pools; uses adjacent uplands for dispersal and summer retreat	High: Suitable aquatic habitat for breeding and terrestrial habitat for cover and dispersal is present within the Project Area. Two occurrences about seven miles west of Lower Tenmile near Huckleberry Creek (2006, 2012). Several occurrences about ten miles south of Cahto Ranch (CDFW 2024).	Active period: year-round Egg laying: late November to April Egg hatching: about 4 weeks following egg laying Tadpole metamorphosis: 4–7 months following hatching Upland dispersal period: post- tadpole metamorphosis	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and the survival of eggs and health of tadpoles, juveniles, and adults. Forest management activities in upland habitats, including use of vehicles and/or mechanized equipment, may result in direct injury or mortality of dispersing juveniles and adults.

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Foothill yellow-legged frog, North Coast clade <i>Rana boylei</i>	CDFW	–/SSC	North of San Francisco Bay through the Coast Range and Klamath Mountains	Shallow tributaries and mainstems of perennial streams and rivers, typically associated with cobble or boulder substrate	High: Suitable aquatic habitat is present in Tenmile Creek, Cahto Creek, and the southern and northern Cahto Creek tributaries. Many occurrences within the Project Area and in the Project vicinity, which include one occurrence within the Project Area (Lower Tenmile) along Fox Creek in 2018, another 2018 occurrence within one mile of Black Oak Ranch and West Tenmile along Big Rock Creek, and several observations within five miles of Lower Tenmile in McKinley Creek, Elder Creek, Tenmile Creek, and South Fork Eel River (CDFW 2024).	Active period: year-round Mating and egg-laying: occurs exclusively in streams and rivers from April until early July, after streams have slowed from winter runoff. Egg hatching: about four weeks following egg laying Tadpole metamorphosis: July to October Upland dispersal: post-tadpole metamorphosis	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and the survival of eggs and health of tadpoles, juveniles, and adults. Forest management activities in upland habitats, including use of vehicles and/or mechanized equipment, may result in direct injury or mortality of juveniles and adults.
Southern torrent salamander <i>Rhyacotriton variegatus</i>	CDFW	–/SSC	Coastal drainages from near Point Arena in Mendocino County to the Oregon border	In and adjacent to cold, permanent, well-shaded mountain springs, waterfalls, and seeps with rocky substrate	Moderate: Tributaries within the Project Area likely provide suitable aquatic habitat with adjacent terrestrial refuge for cover. The most recent occurrence (2012) is about 1.5 mi southwest of Lower Tenmile in Skunk Creek, with several more historic occurrences (1985) within two miles of the Project Area (Lower Tenmile) in McKinley Creek, Elder Creek, and Tenmile Creek (CDFW 2024).	Breeding: may occur year-round, while peak oviposition period is in August and September Egg hatching: about 8 months following egg laying; peak egg hatching occurs in the spring Larval metamorphosis: 2–2.5 years following hatching	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and the survival of eggs and health of developing larvae, juveniles, and adults.
Red-bellied newt <i>Taricha rivularis</i>	CDFW	–/SSC	Along the coast from near Bodega, Sonoma County, to near Honeydew, Humboldt County, and inland to Lower Lake and Kelsey Creek, Lake County	Breeding and larval development habitat includes rapid-flowing, permanent streams or rivers with rocky substrate in proximity to redwood forests and other coastal woodlands. Adult terrestrial habitat primarily includes redwood forests but also found within mixed conifer, valley-foothill woodland, montane hardwood and hardwood-conifer habitats.	Moderate: Tributaries within the Project Area likely provide suitable breeding habitat with adjacent coniferous forest (primarily comprised of Montane Hardwood Conifer CWHR habitat) for adults. The majority of occurrences are south of the Project Area (east of Fort Bragg), and a few occurrences have been documented about 7.5 miles east of Lower Tenmile (2004) and ten miles southeast of Cahto Ranch (2014) (CDFW 2024).	Breeding and egg laying: February–April Egg hatching: 16–34 days following egg laying, depending on temperature Larval metamorphosis: late summer to early fall Adult aestivation: summer months (terrestrial habitat)	While no in-water work would occur, mobilization of sediment, as a result of ground disturbance near waterways, could affect water quality and the survival of eggs and health of developing larvae, juveniles, and adults. Forest management activities in upland habitats, including use of vehicles and/or mechanized equipment, may result in direct injury or mortality of juveniles and adults.

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Birds							
American goshawk <i>Accipiter atricapillus</i>	CDFW	–/SSC	Nests in North Coast Ranges through Sierra Nevada, Klamath, Cascade, and Warner Mountains, in Mount Pinos and San Jacinto, San Bernardino, and White Mountains; winters along north coast, throughout foothills, and in northern deserts	Mature and old-growth stands of coniferous forest, and while found over a large range, they are more commonly found in middle and higher elevations (1,000–10,800 ft); nests in dense part of stands (> 60% canopy cover) near an opening	Moderate: May nest within coniferous forest stands within the Project Area, which primarily consists of second growth Montane Hardwood-Conifer habitat, with a mixture of Ponderosa pine (<i>Pinus ponderosa</i>), Douglas fir (<i>Pseudotsuga menziesii</i>), black oak (<i>Quercus kelloggii</i>), and madrone (<i>Arbutus menziesii</i>) that lacks a substantial shrub layer. Older- more-suitable nesting stands may be present in adjacent non-private lands. Foraging habitat present. Recent sightings of goshawks have occurred at the Angelo Coast Range Reserve, located about 3.5 miles from the Project (2012, 2015, 2019) (eBird 2024) The most recent CNDDDB occurrence is 8.5 miles north of Lower Tenmile in the Hollow Tree Creek watershed (1997) (CDFW 2024).	General breeding season: February through August Nesting initiated: March or early-April Egg laying: late-April to early May Incubation period: 28–32 days following egg laying Nestling period: 34–35 days following hatching	Noise from vehicles and/or mechanized equipment or burning may affect breeding individuals, if nesting nearby, which could result in mortality of young if adults leave the nest. Due to the Project removing younger trees and brush, it is not anticipated that nests within large trees will be removed. The Project is to remove understory trees and brush, which is anticipated to ultimately enhance foraging opportunities and habitat (more open flyways within a forest structure and access to prey).
Golden eagle <i>Aquila chrysaetos</i>	USFWS	BGECP/FP	Species is an uncommon permanent resident and migrant throughout California, except center of Central Valley	Open woodlands and oak savannahs, grasslands, chaparral, sagebrush flats; nests on steep cliffs or medium to tall trees	Moderate: While cliffs appear absent from the Project Area, individuals may be nesting in forests within or adjacent to the Project Area. Suitable foraging habitat is present in grasslands within the Project Area. Numerous observations within 10 miles of the Project Area including several occurrences within the Project Area at Black Oak Ranch (2016, 2017), one observation about one mile from West Tenmile and Gravier (2024), and another observation about 3 miles south of Cahto Ranch (2015) (eBird 2024). Nearest CNDDDB occurrence is about 25 miles away (1975) (CDFW 2024).	General breeding season: late January through August Nesting initiated: late January Egg laying: typically, in March, while may occur 1–3 months after nest is constructed Incubation period: 41–45 days following egg laying Nestling period: 45–81 days following hatching	If breeding is occurring within or near the treatment areas, noise from equipment (e.g., chainsaws) or burning may disturb eagles during the breeding season, which could result in indirect mortality to individuals. Since the Project is intended to remove younger trees and understory brush, no removal of nest trees is anticipated.

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Marbled murrelet <i>Brachyramphus marmoratus</i>	USFWS, CDFW	FT/SE	Nesting birds mostly concentrated near coastal waters in Del Norte and Humboldt counties, and in lesser numbers near San Mateo and Santa Cruz counties; species winters throughout the nesting range and in small numbers in southern California	Most time spent on the ocean; nests inland in large areas of old-growth conifers with suitable platforms, especially redwood or Douglas-fir forests near coastal areas	<p>Moderate: Due to the densely forested habitat within the Project Area, which primarily consists of second growth CWHR Montane Hardwood-Conifer habitat, and the proximity of critical habitat being within and adjacent to the Project Area, there is a moderate potential that individuals may be roosting within or adjacent to the Project Area (especially in the Lower Tenmile parcel which is within and adjacent to critical habitat). There is a high potential for individuals to be flying over the Project Area during daily migrations to forage at the ocean.</p> <p>A single CNDDDB record from 1995 is about 4.5 miles west of the Project Area (CDFW 2024).</p> <p>Critical habitat has been designated for this species. Designated critical habitat borders a small portion of the Project Area (Lower Tenmile). No Project activities will occur within critical habitat. All other treatment parcels within the Project Area are located within three miles of critical habitat (USFWS 2024c).</p>	Nesting initiated: May, while as late as July Egg laying: variable occurring between March through August Incubation period: 28–30 days following egg laying Nestling period: 30 days following hatching	<p>If nesting is occurring within or near the treatment areas, noise from equipment (e.g., chainsaws) or burning may disturb marbled murrelets during the breeding season, which could result in indirect mortality to individuals.</p> <p>Since the Project is intended to remove younger trees and understory brush, no removal of nest trees is anticipated.</p>
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	USFWS	FT/SSC	Species nests in locations along the California coast, including the Eel River in Humboldt County; nests in the interior of the state in the Central Valley, Klamath Basin, Modoc Plateau, and Great Basin, Mojave, and Colorado deserts; winters primarily along coast	Barren to sparsely vegetated beaches, barrier beaches, salt-evaporation pond levees, and shores of alkali lakes; also nests on gravel bars in rivers with wide flood plains; needs sandy, gravelly, or friable soils for nesting	<p>None: Outside the range and no suitable habitat present.</p> <p>Documented occurrences are from distances more than 15 miles from the Project (eBird, CDFW 2024).</p> <p>Designated critical habitat is not present within the Project Area.</p>	Not applicable	No Project effects are anticipated.
Yellow-billed cuckoo <i>Coccyzus americanus</i>	USFWS	FT/SE	Species breeds in limited portions of the Sacramento River and the South Fork Kern River; small populations may nest in Butte, Yuba, Sutter, San Bernardino, Riverside, Inyo, Los Angeles, and Imperial counties	Summer resident of valley foothill and desert riparian habitats; nests in open woodland with clearings and low, dense, scrubby vegetation	<p>Low: Suitable riparian habitat may be present along creeks within the Project Area, while the cuckoo is not likely to occur as the closest known occurrence is more than 30 miles away (CDFW 2024, eBird 2024).</p> <p>Critical habitat is not present within the Project Area and is located about 75 miles east of the Project Area.</p>	Not applicable	No Project effects are anticipated.

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Bald eagle <i>Haliaeetus leucocephalus</i>	USFWS	BGECP/S E	Species is a permanent resident and uncommon winter migrant, found nesting primarily in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity counties	Large bodies of water or rivers with abundant fish, uses snags or other perches; nests in advanced-successional conifer forest near open water	Moderate: Suitable nesting trees may be present within the Project Area. Eagles typically nest near foraging habitat, and the most suitable foraging habitat in the area is Holland Reservoir and the Eel River, which is about 0.4 miles and 2 miles from the Project Area, respectively. Observations of eagles have occurred along the Eel River and have also been observed annually since 2018 at the Angelo Coast Range Reserve (eBird 2024), which is about 3.5 miles from the Project.	Breeding season: February through August Nest building: typically 1 to 3 months before egg-laying	If breeding is occurring within or near the treatment areas, noise from equipment (e.g., chainsaws) or burning may disturb bald eagles during the breeding season, which could result in indirect mortality to individuals. Since the Project is intended to remove younger trees and understory brush, no removal of nest trees is anticipated. Project-related noise disturbance could result in temporary displacement of individuals flying in the vicinity of the nearby Holland Reservoir, where they may be present foraging.
Purple martin <i>Progne subis</i>	CDFW, USFWS	–/SSC	Summer resident and migrant; most densely populated in central and northern coastal conifer forests and smaller and more localized areas in the Sierra Nevada, interior foothills, and southern California	Conifer, valley-foothill, montane-hardwood forests with large snags in open areas; most nest sites located in upper slopes of hilly terrain; also may nest in human-made structures with cavities	High: Two occurrences within the Project Area (Black Oak Ranch in 2022 and Cahto Ranch in 2017). Numerous occurrences within five miles of the Project Area (eBird 2024). The nearest CNDDDB occurrence is an observation of a breeding pair about ten miles west of the Project Area in 1994 (CDFW 2024).	Nesting bird season: February – August	Removing vegetation could result in direct mortality to nesting individuals, including eggs and young, if present and loss of nesting habitat.

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Northern spotted owl <i>Strix occidentalis caurina</i>	USFWS, CDFW	FT/SSC	Range includes Northwestern California south to Marin County, and southeast to the Pit River area of Shasta County	Typically found in older forested habitats; nests in complex stands dominated by conifers, especially coastal redwood, with hardwood understories; some open areas are important for foraging.	<p>Moderate: Suitable nesting, roosting, and/or foraging habitat is likely present within, or adjacent to, the Project Area. The forest structure within the Project Area, primarily consists of second growth Montane Hardwood-Conifer habitat, with a mixture of Ponderosa pine, Douglas fir, black oak, and madrone that lack a substantial shrub layer. . Habitat adjacent to the Project Area appears to consist of dense coniferous forest and mixed hardwood/conifer forest, which may support older more suitable nesting stands on non-private lands.</p> <p>The closest nesting owl location (activity center) (MEN0228) is about 0.7 miles south of the Project Area (Cahto Ranch) and was last documented in 1995. Another nearby activity center (MEN0012) is 1.15 miles west of Lower Tenmile and was last documented in 1998. Twelve other activity centers are within 7 miles of the Project Area. (CDFW 2024).</p> <p>Critical habitat is not present within the Project Area and is located about 2.5 miles west of the Project Area.</p>	Breeding season: March 1 through September 30 Critical breeding season: March 1–July 15 Late-breeding season is July 16–September 30	<p>Chainsaw noise disturbance and burning activities will not occur within 0.25 miles of known activity centers; therefore, no effects from these activities are anticipated on known activity centers.</p> <p>If breeding owls are present within 0.25 miles, then noise from chainsaws may disturb owls during the breeding season, and if chainsaw use occurs within 195 feet during the critical breeding season then owls may be disrupted to the point that breeding activities may be affected. Similarly, if burning occurs within 0.25 miles of an activity center during the breeding season, activity centers may be disturbed and if burning occurs within 0.25 miles during the critical breeding season, then breeding activities may be affected.</p> <p>Vegetation removal will occur within the home range (1.2 miles) of 2 known activity centers. While the goal of the Project is to remove understory trees and brush, the ultimate benefit will likely enhance foraging opportunities and habitat (more open flyways within a forest structure and access to prey).</p>
Numerous other species, including but not limited to, Allen's hummingbird, chestnut-backed chickadee, western screech owl	USFWS	MBTA	Range encompasses California	Variable including, but not limited to, grasses, shrubs, and trees	<p>High: Birds protected under the MBTA have been documented within the Project Area (e.g., Allen’s hummingbird in 2017; chestnut-backed chickadee, oak titmouse, and wrentit in 2022; and rufous hummingbird in 2024) and within 5 miles of the Project Area (e.g., olive-sided flycatcher in 2022, and western screech owl in 2023) (eBird 2024).</p>	Nesting bird season: February through August	Removing vegetation could result in direct mortality to nesting individuals, including eggs and young, if present and loss of nesting habitat.

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<i>Mammals</i>							
Pallid bat <i>Antrozous pallidus</i>	CDFW	–/SSC	Throughout California except for elevations greater than 3,000 m in the Sierra Nevada	Roosts in rock crevices, cavities in live or dead trees hollows, mines, caves, and a variety of vacant and occupied buildings; feeds in a variety of open woodland habitats and most frequently in riparian zone, in open oak savannah, and open mixed deciduous forest	High: Trees with cavities may provide roosting habitat. Bats may also roost in buildings on the parcels. Upland foraging habitat present. No known mines or caves are present. Species documented acoustically about two miles from the Project Area in 2020 (Conservation Biology Institute and USFS 2024). The nearest CNDDDB occurrence is within eight miles of the Project Area (2004). The most recent CNDDDB occurrence is from 2016 and is 17 miles north of the Project Area (CDFW 2024).	Maternity season: May 1 through August 31 Hibernating season: November 1 through March 31	Removing trees with cavities (roosting habitat), may result in mortality to bats, including non-volant young (young not able to fly), during the maternity season and to adults during the hibernating season. Any bats roosting in buildings would not likely be affected as no treatment activities will occur within 100 feet of any structure.
Townsend’s big-eared bat <i>Corynorhinus townsendii</i>	CDFW	–/SSC	Throughout California, found in all but subalpine and alpine habitats, details of distribution not well known	Roosts in cavities, most often in tunnels, caves, mines, and buildings, but also rock shelters, preferentially close to water. Most abundant in mesic habitats, also found in oak woodlands, desert, vegetated drainages, caves or cave-like structures (including basal hollows in large trees, mines, tunnels, and buildings).	High: Roosting habitat may be present in any caves or mines and buildings in the Project Area, if present. Roosting may also occur in trees with large basil hollows for roosting, if present. Suitable foraging habitat present throughout the Project Area. No known mines or caves are present. Species documented acoustically about two miles from the Project in 2020 (Conservation Biology Institute and USFS 2024). The nearest CNDDDB occurrence is from 1990 within one mile of the Project Are (Lower Tenmile), while more recent occurrences include 2017 and 2015, which are about 14 and 20 miles from the Project Area, respectively (CDFW 2024).	Maternity season: May 1 through August 31 Hibernating season: November 1 through March 31	Noise- and smoke-generating activities have the potential to disturb roosting bats in caves/mines and trees with large basil hollows, which could cause roost abandonment, which may also result in mortality to non-volant young (young unable to fly), depending on proximity to the source of the disturbance. Any bats roosting in buildings would not likely be affected as no treatment activities will occur within 100 feet of any structure.
Western red bat <i>Lasiurus frantzii</i>	CDFW	–/SSC	Near the Pacific Coast, Central Valley, and the Sierra Nevada	Roosts on foliage in forests and woodlands, and primarily in riparian trees such as sycamores and cottonwoods, while less in shrubs; feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Hibernates under leaves in forests.	Moderate: Riparian trees along creeks within the Project Area may provide roosting habitat; suitable foraging habitat present throughout the Project Area. Species documented acoustically about two miles from the Project in 2020 (Conservation Biology Institute and USFS 2024). The only CNDDDB occurrence in the Project Vicinity is from 1998 and is 13 miles east of the Project Area (CDFW 2024).	Maternity season: May 1 through August 31 Hibernating season: November 1 through March 31	Removing riparian trees with foliage (roosting habitat), may result in mortality to bats, including non-volant young (young not able to fly). If individuals are present during the winter season, ground disturbance may result in injury or mortality to individuals roosting under leaves.

Common Name <i>Scientific Name</i>	Query Sources	Status ^a Federal/ State	Distribution in California	Habitat Association	Likelihood to Occur within Project Area	Sensitive Life History Timing ^b	Potential Project-related Effects on the Species and Habitat
Sonoma tree vole <i>Arborimus pomo</i>	CDFW	–/SSC	Along the North Coast from Sonoma County north to the Oregon border, generally along the fog belt	Primarily nests in old-growth or partially harvested old-growth stands, while also present in young stands. Associated with Douglas-fir, redwood, grand fir, and montane hardwood-conifer habitats in the fog belt. Feeds almost exclusively on Douglas fir needles.	Moderate: The existing forest structure of a mixed aged stand of Douglas-fir trees and redwoods may provide suitable nesting and foraging habitat. While rare to uncommon throughout its range, the species was documented (six nests) within the Project Area (Lower Tenmile) in 1984, and numerous observations of nests have occurred within five miles of the Project Area (CDFW 2024).	Breeding season: year-round, mainly February through September	Removing trees may result in direct mortality to individuals. While the goal of the Project is to remove understory trees and brush, the ultimate goal of the Project is to enhance forest health and providing opportunities for trees to grow larger in stature, which would be preferable to the vole.
Fisher, Northern California/Southern Oregon DPS <i>Pekania pekanti</i>	CDFW	–/SSC	The northern Coast Range, including the Trinity and Klamath forests	Dense (greater than 50% canopy cover), advanced-successional conifer forests, with complex forest structure; den in hollow trees and snags.	Moderate: Suitable habitat within the Project Area includes denning features such as hollow snags within dense conifer forests. The Project Area may also be used as a corridor to adjacent forests outside of the Project Area, which may provide higher-quality later-successional forests. While suitable habitat may be present in the area and the Project is within the range of the fisher, most occurrences within Project vicinity are over 100 years old, including one occurrence within the Project Area (Cahto Ranch) from 1889. The most recent occurrence is from 2012, about 23 miles southeast of the Project Area (CDFW 2024). The lack of observations may be due to the species being elusive.	Mating season: March and April Embryo development: approximately 10 months following breeding Gestation period: approximately 40 days, so kits are born between March and April (one year after mating and just before the new mating season begins). Weaning: 6–8 weeks following birth Dispersal period: fall	Removing trees with snags (denning habitat), especially between spring and fall, may result in harm or mortality to individuals. If breeding is occurring within or near the treatment areas, noise from equipment (e.g., chainsaws) or burning may disturb fishers during the breeding season, which could result in indirect mortality to individuals.
American badger <i>Taxidea taxus</i>	CDFW	–/SSC	Throughout the state except in the humid coastal forests of Del Norte County and the northwest portion of Humboldt County	Shrubland, open grasslands, fields, and alpine meadows with friable soils	Low: While suitable habitat (open grasslands) is present in the Project Area, the species is rare with only two historical CNDDDB occurrences from 1945 and 1916, 2 and 15 miles from the Project Area, respectively (CDFW 2024).	Not applicable	No Project effects are anticipated.

Notes: CDFW = California Department Fish and Wildlife; CNDDDB = California Natural Diversity Database; ppt = parts per thousand; USFWS = U.S. Fish and Wildlife Service

^a Status codes:

Federal	State
FE Listed as endangered under the federal Endangered Species Act	SE Listed as Endangered under the California Endangered Species Act
FT Listed as threatened under the federal Endangered Species Act	ST Listed as Threatened under the California Endangered Species Act
FC Federal candidate species	SCE State Candidate Endangered
FPT Federally proposed for listing as threatened	SSC CDFW Species of Special Concern
BGECP Protected under the Bald and Golden Eagle Protection Act	FP Fully protected
MBTA Protected under the Migratory Bird Treaty Act	— No state status

^b Sensitive life history timing was identified for species with a moderate to high potential to occur within the Project Area.

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Appendices

Appendix A

Comprehensive Plant Species List

Table A-1. Comprehensive list of plant species documented within the implementation areas of the Lower Tenmile, Vassar, Gravier, and West Tenmile portions of the Project Area by Salix Natural Resource Management in April, May, June, and July 2024.

Scientific name	Common name	Family	Native status
<i>Acer macrophyllum</i>	bigleaf maple	Sapindaceae	Native
<i>Achillea millefolium</i>	common yarrow	Asteraceae	Native
<i>Achyrachaena mollis</i>	blow wives	Asteraceae	Native
<i>Acmispon americanus</i> var. <i>americanus</i>	Spanish lotus	Fabaceae	Native
<i>Acmispon brachycarpus</i>	hairy hill lotus	Fabaceae	Native
<i>Acmispon glaber</i>	deerweed	Fabaceae	Native
<i>Acmispon parviflorus</i>	rose-flowered lotus	Fabaceae	Native
<i>Acmispon wrangelianus</i>	Chilean trefoil	Fabaceae	Native
<i>Adelinia grande</i>	hound's tongue	Boraginaceae	Native
<i>Adenocaulon bicolor</i>	trail plant	Asteraceae	Native
<i>Adiantum jordanii</i>	California maidenhair fern	Pteridaceae	Native
<i>Aesculus californica</i>	California buckeye	Sapindaceae	Native
<i>Agoseris grandiflora</i> var. <i>leptophylla</i>	giant mountain dandelion	Asteraceae	Native
<i>Agoseris heterophylla</i>	mountain dandelion	Asteraceae	Native
<i>Agoseris retrorsa</i>	spear-leaved dandelion	Asteraceae	Native
<i>Agrostis pallens</i>	Diego bent grass	Poaceae	Native
<i>Aira caryophylla</i>	silver European hairgrass	Poaceae	Non-native
<i>Aira elegans</i>	elegant hairgrass	Poaceae	Non-native
<i>Allotropa virgata</i>	sugar stick	Ericaceae	Native
<i>Alnus rhombifolia</i>	white alder	Betulaceae	Native
<i>Anisocarpus madiodes</i>	woodland madia	Asteraceae	Native
<i>Anthoxanthum odoratum</i>	vanilla grass	Poaceae	Non-native
<i>Apocynum androsaemifolium</i>	bitter dogbane	Apocynaceae	Native
<i>Aquilegia formosa</i>	crimson columbine	Ranunculaceae	Native
<i>Arbutus menziesii</i>	Pacific madrone	Ericaceae	Native
<i>Arctostaphylos glandulosa</i> ssp. <i>cushingiana</i>	Cushing manzanita	Ericaceae	Native
<i>Arctostaphylos glandulosa</i> ssp. <i>glandulosa</i>	Eastwood manzanita	Ericaceae	Native
<i>Arctostaphylos manzanita</i> ssp. <i>manzanita</i>	common manzanita	Ericaceae	Native
<i>Arctostaphylos manzanita</i> var. <i>glaucescens</i>	common manzanita	Ericaceae	Native
<i>Arctostaphylos patula</i>	greenleaf manzanita	Ericaceae	Native
<i>Arctostaphylos stanfordiana</i> ssp. <i>stanfordiana</i>	Stanford's manzanita	Ericaceae	Native
<i>Artemisia douglasiana</i>	mugwort	Asteraceae	Native
<i>Asclepias cordifolia</i>	purple milkweed	Apocynaceae	Native
<i>Asyneuma prenanthoides</i>	California harebell	Campanulaceae	Native
<i>Athyrium filix-femina</i> var. <i>cyclosorum</i>	lady fern	Woodsiaceae	Native
<i>Avena sativa</i>	wild oats (glabrous lemma)	Poaceae	Non-native
<i>Avena</i> sp.	oats	Poaceae	Non-native
<i>Baccharis glutinosa</i>	marsh baccharis	Asteraceae	Native
<i>Baccharis pilularis</i> ssp. <i>consanguinea</i>	coyote brush	Asteraceae	Native
<i>Berberis nervosa</i>	dwarf Oregon-grape	Berberidaceae	Native
<i>Berula erecta</i>	cut-leaved water parsnip	Apiaceae	Native
<i>Brassica nigra</i>	black mustard	Brassicaceae	Non-native

Scientific name	Common name	Family	Native status
<i>Briza maxima</i>	large rattlesnake grass	Poaceae	Non-native
<i>Briza minor</i>	small rattlesnake grass	Poaceae	Non-native
<i>Bromus diandrus</i>	ripgut grass	Poaceae	Non-native
<i>Bromus hordeaceus</i>	soft chess	Poaceae	Non-native
<i>Bromus madritensis</i> ssp. <i>rubens</i>	foxtail broom	Poaceae	Non-native
<i>Bromus sitchensis</i> var. <i>carinatus</i>	California brome	Poaceae	Native
<i>Bromus sitchensis</i> var. <i>sitchensis</i>	Sitka brome	Poaceae	Native
<i>Bromus vulgaris</i>	common brome	Poaceae	Native
<i>Calamagrostis rubescens</i>	pine grass	Poaceae	Native
<i>Calocedrus decurrens</i>	incense-cedar	Cupressaceae	Native
<i>Calochortus tolmiei</i>	hairy star tulip	Liliaceae	Native
<i>Cardamine californica</i>	California milkmaids	Brassicaceae	Native
<i>Cardamine oligosperma</i>	western bittercress	Brassicaceae	Native
<i>Carduus pycnocephalus</i>	Italian thistle	Asteraceae	Non-native
<i>Carex brevicaulis</i>	short stem sedge	Cyperaceae	Native
<i>Carex leptopoda</i>	slender footed sedge	Cyperaceae	Native
<i>Carex nudata</i>	torrent sedge	Cyperaceae	Native
<i>Carex praegracilis</i>	field sedge	Cyperaceae	Native
<i>Carex tumulicola</i>	split awn sedge	Cyperaceae	Native
<i>Ceanothus cuneatus</i> var. <i>cuneatus</i>	buckbrush	Rhamnaceae	Native
<i>Ceanothus incanus</i>	coastal whitethorn	Rhamnaceae	Native
<i>Ceanothus integerrimus</i> var. <i>macrothyrsus</i>	deerbrush	Rhamnaceae	Native
<i>Ceanothus velutinus</i>	snowbrush	Rhamnaceae	Native
<i>Centaurea solstitialis</i>	yellow starthistle	Asteraceae	Non-native
<i>Cephalanthera austini</i>	phantom orchid	Orchidaceae	Native
<i>Cerastium</i> sp.	chickweed	Caryophyllaceae	Non-native
<i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i>	soap plant	Agavaceae	Native
<i>Cirsium brevistylum</i>	Indian thistle	Asteraceae	Native
<i>Cirsium occidentale</i> var. <i>venustum</i>	venus thistle	Asteraceae	Native
<i>Cirsium vulgare</i>	bull thistle	Asteraceae	Non-native
<i>Clarkia concinna</i> ssp. <i>concinna</i>	red ribbons	Onagraceae	Native
<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i>	winecup clarkia	Onagraceae	Native
<i>Clarkia unguiculata</i>	woodland clarkia	Onagraceae	Native
<i>Claytonia perfoliata</i> ssp. <i>perfoliata</i>	miner's lettuce	Montiaceae	Native
<i>Clinopodium douglasii</i>	yerba santa	Lamiaceae	Native
<i>Collinsia heterophylla</i> var. <i>heterophylla</i>	purple Chinese houses	Plantaginaceae	Native
<i>Collomia heterophylla</i>	varied-leaf collomia	Polemoniaceae	Native
<i>Corallorhiza maculata</i>	spotted coralroot	Orchidaceae	Native
<i>Cornus nuttallii</i>	Pacific dogwood	Cornaceae	Native
<i>Cornus sericea</i> ssp. <i>sericea</i>	red osier dogwood	Cornaceae	Native
<i>Corylus cornuta</i> var. <i>californica</i>	California hazelnut	Betulaceae	Native
<i>Crepis vesicaria</i> ssp. <i>taraxacifolia</i>	beaked hawkbeard	Asteraceae	Non-native
<i>Croton setiger</i>	turkey mullein	Euphorbiaceae	Native
<i>Cynosurus echinatus</i>	hedgehog grass	Poaceae	Non-native
<i>Cyperus eragrostis</i>	nutsedge	Cyperaceae	Native
<i>Cytisus scoparius</i>	Scotch broom	Fabaceae	Non-native
<i>Dactylis glomerata</i>	orchard grass	Poaceae	Non-native
<i>Danthonia californica</i>	California oatgrass	Poaceae	Native

Scientific name	Common name	Family	Native status
<i>Daucus carota</i>	Queen Anne's lace	Apiaceae	Non-native
<i>Daucus pusillus</i>	wild carrot	Apiaceae	Native
<i>Delphinium nudicaule</i>	scarlet larkspur	Ranunculaceae	Native
<i>Deschampsia elongata</i>	slender hairgrass	Poaceae	Native
<i>Dicentra formosa</i>	Pacific bleeding heart	Papaveraceae	Native
<i>Dichelostemma congestum</i>	fork-toothed ookow	Themidaceae	Native
<i>Diplacus aurantiacus</i>	orange monkey bush	Phrymaceae	Native
<i>Dipterostemon capitatum</i>	blue dicks	Themidaceae	Native
<i>Dipterostemon capitatum</i> ssp. <i>capitatum</i>	blue dicks	Themidaceae	Native
<i>Drymocallis glandulosa</i> ssp. <i>glandulosa</i>	sticky cinquefoil	Rosaceae	Native
<i>Dryopteris arguta</i>	coastal wood fern	Dryopteridaceae	Native
<i>Elymus caput-medusae</i>	Medusa head	Poaceae	Non-native
<i>Elymus glaucus</i> ssp. <i>glaucus</i>	wild rye	Poaceae	Native
<i>Epilobium brachycarpum</i>	panicled willowherb	Onagraceae	Native
<i>Epilobium ciliatum</i>	willowherb	Onagraceae	Native
<i>Epilobium minutum</i>	minute willowherb	Onagraceae	Native
<i>Equisetum arvense</i>	horsetail	Equisetaceae	Native
<i>Equisetum laevigatum</i>	smooth scouring rush	Equisetaceae	Native
<i>Erigeron bonariensis</i>	flax-leaved horseweed	Asteraceae	Non-native
<i>Erigeron canadensis</i>	horseweed	Asteraceae	Native
<i>Eriophyllum lanatum</i> var. <i>achilleoides</i>	yarrow-leaved sunflower	Asteraceae	Native
<i>Erodium moschatum</i>	whitestem filaree	Geraniaceae	Non-native
<i>Erysimum capitatum</i> var. <i>capitatum</i>	western wallflower	Brassicaceae	Native
<i>Erythranthe guttata</i>	seep-spring monkey flower	Phrymaceae	Native
<i>Eschscholzia californica</i>	California poppy	Papaveraceae	Native
<i>Euchiton gymnocephalus</i>	creeping cudweed	Asteraceae	Non-native
<i>Euchiton</i> spp.	cudweed	Asteraceae	Non-native
<i>Euphorbia crenulata</i>	Chinese caps	Euphorbiaceae	Native
<i>Eurybia radulina</i>	roughleaf aster	Asteraceae	Native
<i>Festuca bromoides</i>	brome fescue	Poaceae	Non-native
<i>Festuca californica</i>	California fescue	Poaceae	Native
<i>Festuca microstachys</i>	small fescue	Poaceae	Native
<i>Festuca occidentalis</i>	western fescue	Poaceae	Native
<i>Festuca octoflora</i>	sixweeks grass	Poaceae	Native
<i>Festuca perennis</i>	Italian rye grass	Poaceae	Non-native
<i>Festuca subulata</i>	bearded fescue	Poaceae	Native
<i>Festuca subuliflora</i>	crinkle-awn fescue	Poaceae	Native
<i>Fragaria vesca</i>	strawberry	Rosaceae	Native
<i>Frangula californica</i> ssp. <i>californica</i>	California coffeeberry	Rhamnaceae	Native
<i>Fraxinus latifolia</i>	Oregon ash	Oleaceae	Native
<i>Fritillaria affinis</i>	mission bells	Liliaceae	Native
<i>Galium aparine</i>	cleavers	Rubiaceae	Non-native
<i>Galium californicum</i> var. <i>californicum</i>	California bedstraw	Rubiaceae	Native
<i>Galium triflorum</i>	sweet-scented bedstraw	Rubiaceae	Native
<i>Gamochaeta ustulata</i>	purple cudweed	Asteraceae	Native
<i>Genista monspessulana</i>	French broom	Fabaceae	Non-native
<i>Geranium dissectum</i>	cut-leaved geranium	Geraniaceae	Non-native
<i>Geranium molle</i>	dovefoot geranium	Geraniaceae	Non-native
<i>Goodyera oblongifolia</i>	rattlesnake plantain	Orchidaceae	Native

Scientific name	Common name	Family	Native status
<i>Hieracium albiflorum</i>	white hawkweed	Asteraceae	Native
<i>Hirschfeldia incana</i>	summer mustard	Brassicaceae	Non-native
<i>Holcus lanatus</i>	velvet grass	Poaceae	Non-native
<i>Holodiscus discolor</i> var. <i>discolor</i>	oceanspray	Rosaceae	Native
<i>Hordeum brachyantherum</i> ssp. <i>brachyantherum</i>	northern barley	Poaceae	Native
<i>Hordeum marinum</i>	Mediterranean barley	Poaceae	Non-native
<i>Hypericum concinnum</i>	gold wire	Hypericaceae	Native
<i>Hypericum perforatum</i> ssp. <i>perforatum</i>	Klamath weed	Hypericaceae	Non-native
<i>Hypochaeris glabra</i>	smooth cats ear	Asteraceae	Non-native
<i>Hypochaeris radicata</i>	hairy cats ear	Asteraceae	Non-native
<i>Iris macrosiphon</i>	bowl-tubed iris	Iridaceae	Native
<i>Iris purdyi</i>	Purdy's iris	Iridaceae	Native
<i>Juncus balticus</i> ssp. <i>ater</i>	Baltic rush	Juncaceae	Native
<i>Juncus bolanderi</i>	Bolander's rush	Juncaceae	Native
<i>Juncus bufonius</i> var. <i>bufonius</i>	toad rush	Juncaceae	Native
<i>Juncus effusus</i>	common rush	Juncaceae	Native
<i>Juncus effusus</i> ssp. <i>pacificus</i>	common rush	Juncaceae	Native
<i>Juncus patens</i>	common rush	Juncaceae	Native
<i>Juncus tenuis</i>	slender rush	Juncaceae	Native
<i>Kickxia elata</i>	sharp leaved fluellin	Plantaginaceae	Non-native
<i>Lamium purpureum</i>	purple dead nettle	Lamiaceae	Non-native
<i>Lasthenia californica</i> ssp. <i>californica</i>	California goldfields	Asteraceae	Native
<i>Lathyrus angulatus</i>	Angled pea vine	Fabaceae	Non-native
<i>Lathyrus latifolius</i>	everlasting pea	Fabaceae	Non-native
<i>Lathyrus sulphureus</i> var. <i>sulphureus</i>	Brewer's pea	Fabaceae	Native
<i>Lathyrus torreyi</i>	Redwood pea	Fabaceae	Native
<i>Lathyrus vestitus</i>	common pacific pea	Fabaceae	Native
<i>Leontodon saxatilis</i> ssp. <i>saxatilis</i>	hawkbit	Asteraceae	Non-native
<i>Leptosiphon androsaceus</i>	false babystars	Polemoniaceae	Native
<i>Leucanthemum vulgare</i>	ox-eyed daisy	Asteraceae	Non-native
<i>Ligusticum apifolium</i>	lovage	Apiaceae	Native
<i>Limnanthes douglasii</i> ssp. <i>nivea</i>	snowwhite meadowfoam	Limnanthaceae	Native
<i>Linum bienne</i>	western blue flax	Linaceae	Non-native
<i>Lithophragma affine</i>	common woodland star	Saxifragaceae	Native
<i>Logfia filaginoides</i>	California cottonrose	Asteraceae	Native
<i>Logfia gallica</i>	narrowleaf cottonrose	Asteraceae	Non-native
<i>Lomatium dasycarpum</i> ssp. <i>dasycarpum</i>	woolly fruited lomatium	Apiaceae	Native
<i>Lonicera hispidula</i>	hairy honeysuckle	Caprifoliaceae	Native
<i>Lupinus bicolor</i>	miniature lupine	Fabaceae	Native
<i>Lupinus polyphyllus</i> var. <i>polyphyllus</i>	meadow lupine	Fabaceae	Native
<i>Luzula</i> sp.	wood rush	Juncaceae	Native
<i>Lysimachia arvensis</i>	scarlet pimpernel	Myrsinaceae	Native
<i>Lysimachia latifolia</i>	Pacific star flower	Myrsinaceae	Native
<i>Madia elegans</i>	common madia	Asteraceae	Native
<i>Madia exigua</i>	small tarweed	Asteraceae	Native
<i>Madia gracilis</i>	slender tarweed	Asteraceae	Native
<i>Maianthemum racemosum</i>	branched Solomon's seal	Ruscaceae	Native
<i>Malva neglecta</i>	cheese weed	Malvaceae	Non-native

Scientific name	Common name	Family	Native status
<i>Marah</i> sp.	manroot	Cucurbitaceae	Native
<i>Matricaria discoidea</i>	pineapple weed	Asteraceae	Native
<i>Medicago polymorpha</i>	bur clover	Fabaceae	Non-native
<i>Melica californica</i>	California melic	Poaceae	Native
<i>Melica geyeri</i>	Geyer's onion	Poaceae	Native
<i>Melica harfordii</i>	Harford's melic	Poaceae	Native
<i>Mentha pulegium</i>	pennyroyal	Lamiaceae	Non-native
<i>Micropus californicus</i> var. <i>californicus</i>	q-tips	Asteraceae	Native
<i>Monardella villosa</i> var. <i>villosa</i>	coyote mint	Lamiaceae	Native
<i>Navarretia intertexta</i>	Interwoven navarretia	Polemoniaceae	Native
<i>Nemophila parviflora</i> var. <i>parviflora</i>	small-flowered nemophila	Hydrophyllaceae	Native
<i>Notholithocarpus densiflorus</i> var. <i>densiflorus</i>	tanoak	Fagaceae	Native
<i>Oemleria cerasiformis</i>	oso berry	Rosaceae	Native
<i>Osmorhiza berteroi</i>	mountain sweet-cicely	Apiaceae	Native
<i>Oxalis corniculata</i>	creeping wood sorrel	Oxalidaceae	Non-native
<i>Pedicularis densiflora</i>	Indian warrior	Orobanchaceae	Native
<i>Penstemon heterophyllus</i>	Foothill penstemon	Plantaginaceae	Native
<i>Pentagramma triangularis</i> ssp. <i>triangularis</i>	gold-backed fern	Pteridaceae	Native
<i>Perideridia</i> spp.	yampah	Apiaceae	Native
<i>Phacelia</i> sp.	phacelia	Hydrophyllaceae	Native
<i>Phalaris</i> sp.	harding grass	Poaceae	Native
<i>Philadelphus lewisii</i>	mock orange	Hydrangeaceae	Native
<i>Physocarpus capitatus</i>	Pacific ninebark	Rosaceae	Native
<i>Pinus lambertiana</i>	sugar pine	Pinaceae	Native
<i>Pinus ponderosa</i>	Ponderosa pine	Pinaceae	Native
<i>Piperia elegans</i> ssp. <i>elegans</i>	elegant piperia	Orchidaceae	Native
<i>Piperia elongata</i>	dense-flowered rein orchid	Orchidaceae	Native
<i>Piperia transversa</i>	mountain piperia	Orchidaceae	Native
<i>Plantago lanceolata</i>	English plantain	Plantaginaceae	Non-native
<i>Plectritis</i> sp.	plectritis	Valerianaceae	Native
<i>Poa kelloggii</i>	Kellogg's blue grass	Poaceae	Native
<i>Poa pratensis</i> ssp. <i>pratensis</i>	Kentucky blue grass	Poaceae	Non-native
<i>Poa secunda</i> ssp. <i>secunda</i>	pine bluegrass	Poaceae	Native
<i>Polypodium californicum</i>	California polypody	Polypodiaceae	Native
<i>Polystichum imbricans</i>	rock sword fern	Dryopteridaceae	Native
<i>Polystichum munitum</i>	sword fern	Dryopteridaceae	Native
<i>Populus fremontii</i>	Fremont's poplar	Betulaceae	Native
<i>Primula hendersonii</i>	Henderson's shooting star	Primulaceae	Native
<i>Prunella vulgaris</i> var. <i>vulgaris</i>	self-heal	Lamiaceae	Non-native
<i>Pseudognaphalium californicum</i>	ladies tobacco	Asteraceae	Native
<i>Pseudognaphalium stramineum</i>	cottonbatting plant	Asteraceae	Native
<i>Pseudotsuga menziesii</i>	Douglas-fir	Pinaceae	Native
<i>Psilocarphus</i> sp.	wooly marbles	Asteraceae	Native
<i>Pteridium aquilinum</i> var. <i>pubescens</i>	western bracken fern	Dennstaedtiaceae	Native
<i>Pyrola aphylla</i>	leafless wintergreen	Ericaceae	Native
<i>Pyrola picta</i>	wintergreen	Ericaceae	Native
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	coast live oak	Fagaceae	Native
<i>Quercus chrysolepis</i>	canyon live oak	Fagaceae	Native
<i>Quercus garryana</i> var. <i>garryana</i>	Oregon white oak	Fagaceae	Native

Scientific name	Common name	Family	Native status
<i>Quercus kelloggii</i>	black oak	Fagaceae	Native
<i>Quercus lobata</i>	valley oak	Fagaceae	Native
<i>Quercus xmorehus</i>	Oracle oak	Fagaceae	Native
<i>Ranunculus occidentalis</i> var. <i>occidentalis</i>	western buttercup	Ranunculaceae	Native
<i>Rhinotropis californica</i>	California milkwort	Polygalaceae	Native
<i>Ribes sanguineum</i> var. <i>glutinosum</i>	pink-flowering currant	Grossulariaceae	Native
<i>Ribes</i> spp.	gooseberry	Grossulariaceae	Native
<i>Rosa gymnocarpa</i>	wood rose	Rosaceae	Native
<i>Rubus armeniacus</i>	Himalaya berry	Rosaceae	Non-native
<i>Rubus leucodermis</i>	white-stemmed raspberry	Rosaceae	Native
<i>Rubus parviflorus</i>	thimbleberry	Rosaceae	Native
<i>Rubus ursinus</i>	trailing blackberry	Rosaceae	Native
<i>Rumex crispus</i>	curly dock	Polygonaceae	Non-native
<i>Salix scouleriana</i>	Scouler's willow	Salicaceae	Native
<i>Salix sitchensis</i>	Sitka willow	Salicaceae	Native
<i>Sanicula bipinnatifida</i>	purple sanicle	Apiaceae	Native
<i>Sanicula crassicaulis</i>	pacific snakeroot	Apiaceae	Native
<i>Sanicula laciniata</i>	coast sanicle	Apiaceae	Native
<i>Saxifraga mertensiana</i>	saxifrage	Saxifragaceae	Native
<i>Scandix pecten-veneris</i>	Shepherd's needle	Apiaceae	Non-native
<i>Sedum radiatum</i>	coast range stonecrop	Crassulaceae	Native
<i>Sedum spatulifolium</i>	pacific stonecrop	Crassulaceae	Native
<i>Senecio sylvaticus</i>	woodland groundsel	Asteraceae	Non-native
<i>Senecio vulgaris</i>	common butterweed	Asteraceae	Non-native
<i>Sherardia arvensis</i>	field madder	Rubiaceae	Native
<i>Silene laciniata</i> var. <i>californica</i>	indian pink	Caryophyllaceae	Native
<i>Silybum marianum</i>	milkthistle	Asteraceae	Non-native
<i>Sisyrinchium bellum</i>	blue-eyed grass	Iridaceae	Native
<i>Solanum</i> sp.	nightshade	Solanaceae	Native
<i>Sonchus asper</i> ssp. <i>asper</i>	prickly sow thistle	Asteraceae	Non-native
<i>Sonchus oleraceus</i>	common sow thistle	Asteraceae	Non-native
<i>Stachys ajugoides</i> var. <i>rigida</i>	hedge nettle	Lamiaceae	Native
<i>Stachys rigida</i> var. <i>quercetorum</i>	rough hedgenettle	Lamiaceae	Native
<i>Stellaria</i> sp.	chickweed	Caryophyllaceae	Non-native
<i>Stephanomeria virgata</i>	twiggy leaf plant	Asteraceae	Native
<i>Stipa pulchra</i>	purple needle grass	Poaceae	Native
<i>Symphoricarpos albus</i> var. <i>laevigatus</i>	common snowberry	Caprifoliaceae	Native
<i>Taraxacum officinale</i>	dandelion	Asteraceae	Non-native
<i>Taraxia ovata</i>	suncup	Onagraceae	Native
<i>Tauschia</i> sp.	compound umbels	Apiaceae	Native
<i>Tellima grandiflora</i>	fringe cups	Saxifragaceae	Native
<i>Tolpis barbata</i>	European milkwort	Asteraceae	Non-native
<i>Torilis arvensis</i>	tall sock destroyer	Apiaceae	Non-native
<i>Torreya californica</i>	California nutmeg	Taxaceae	Native
<i>Toxicodendron diversilobum</i>	poisonoak	Anacardiaceae	Native
<i>Toxicoscordion fremontii</i>	Fremont's death camas	Melanthiaceae	Native
<i>Trichostema lanceolatum</i>	vinegar weed	Lamiaceae	Native
<i>Trifolium ciliolatum</i>	tree clover	Fabaceae	Native
<i>Trifolium depauperatum</i> var. <i>depauperatum</i>	dwarf sack clover	Fabaceae	Native

Scientific name	Common name	Family	Native status
<i>Trifolium dubium</i>	shamrock clover	Fabaceae	Non-native
<i>Trifolium fragiferum</i>	strawberry clover	Fabaceae	Non-native
<i>Trifolium fucatum</i>	bull clover	Fabaceae	Native
<i>Trifolium hirtum</i>	rose clover	Fabaceae	Non-native
<i>Trifolium incarnatum</i>	crimson clover	Fabaceae	Non-native
<i>Trifolium microcephalum</i>	small-headed clover	Fabaceae	Native
<i>Trifolium oliganthum</i>	few-flowered clover	Fabaceae	Native
<i>Trifolium repens</i>	white clover	Fabaceae	Non-native
<i>Trifolium subterraneum</i>	subterranean clover	Fabaceae	Non-native
<i>Trifolium variegatum</i> var. <i>variegatum</i>	white-tipped clover	Fabaceae	Native
<i>Trifolium wildenovii</i>	Tomcat clover	Fabaceae	Native
<i>Trillium albidum</i>	giant wake robin	Melanthiaceae	Native
<i>Triteleia hyacinthina</i>	wild hyacinth	Themidaceae	Native
<i>Triteleia laxa</i>	Ithuriel's spear	Themidaceae	Native
<i>Umbellularia californica</i>	laurel	Lauraceae	Native
<i>Vaccinium ovatum</i>	evergreen huckleberry	Ericaceae	Native
<i>Vancouveria planipetala</i>	redwood inside-out-flower	Berberidaceae	Native
<i>Verbascum thapsus</i>	woolly mullein	Scrophulariaceae	Non-native
<i>Verbena lasiostachys</i>	western verbena	Verbenaceae	Native
<i>Veronica americana</i>	brooklime	Plantaginaceae	Native
<i>Vicia americana</i> var. <i>americana</i>	American vetch	Fabaceae	Native
<i>Vicia benghalensis</i>	purple vetch	Fabaceae	Non-native
<i>Vicia hirsuta</i>	hairy vetch	Fabaceae	Non-native
<i>Vicia sativa</i>	spring vetch	Fabaceae	Non-native
<i>Vicia</i> sp.	vetch	Fabaceae	Native
<i>Vicia villosa</i>	hairy vetch	Fabaceae	Non-native
<i>Viola ocellata</i>	wedge-leaved violet	Violaceae	Native
<i>Viola purpurea</i>	goosefoot violet	Violaceae	Native
<i>Whipplea modesta</i>	modesty	Hydrangeaceae	Native
<i>Woodwardia fimbriata</i>	giant chain fern	Blechnaceae	Native
<i>Wyethia</i> sp.	mule's ears	Asteraceae	Native
<i>Xerophyllum tenax</i>	beargrass	Melanthiaceae	Native
<i>Zeltnera</i> sp.	Centaury	Gentianaceae	Native

Appendix C –

**A Cultural Resource Investigation Report for Tenmile Creek
Watershed Forest Health Project (CALFIRE Forest Health Grant
#8GG22660) Laytonville, Mendocino County, California**

APPENDIX C

A Cultural Resource Investigation Report for Tenmile Creek Watershed Forest Health Project (CALFIRE #8GG22660) Laytonville, Mendocino County, California



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August 2024

Confidential Information

Archaeological and other heritage resources can be damaged or destroyed through uncontrolled public disclosure of information regarding their location. This document contains sensitive information regarding the nature and location of archaeological sites that should not be disclosed to unauthorized persons.

Information regarding the location, character or ownership of a historic resource is exempt from the Freedom of Information Act pursuant to 16 U.S.C. 470w-3 (National Historic Preservation Act) and 16 U.S.C. § 470hh (Archaeological Resources Protection Act) and California State Government Code, Section 6254.10. Portions of this report may need to be redacted before being made available to the public.

Cover Photo: Project Area showing Typical Vegetation in the Triple Creek Parcel, looking south image 15492.jpeg.

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APPENDIX A: NWIC Record Search Results Maps

APPENDIX B: Records of Correspondence with Tribal Representatives

APPENDIX C: California Department of Parks and Recreation 523 series Site Record Forms.

1.0 INVESTIGATION SUMMARY

Roscoe and Associates (RA) conducted a cultural resources investigation for the Tenmile Creek Watershed Forest Health Project in May 2024. The Mendocino County Resource Conservation District (MCRCD) received funding from a CalFire Forest Health Grant and is working with the Eel River Recovery Project (ERRP) to treat approximately 1,914-acres of private, school district, and Tribal Forest lands located just outside of the town of Laytonville, California. This project is divided into Phase 1 Project Implementation and Phase 2 Planning Parcels. MCRCD and the ERRP are preparing a Project Specific Analysis (PSA) as part of the California Vegetation Treatment Program (CalVTP) adopted by the California Board of Forestry and Fire Protection. The Project Area is in the Eel River watershed, in northwestern Mendocino County. The 109 acre portion of the project located on the Laytonville Rancheria was documented in a separate report.

The Eel River Recovery Project employed RA to assist in satisfying the environmental requirements specified by CalVTP's guidelines regarding Historical Resources. RA conducted this cultural resources investigation in compliance with the CalVTP Standard Project Requirements and Mitigation Measures for Archaeological, Historical, and Tribal Cultural Resources as well as the requirements specified in the California Environmental Quality Act (CEQA) and its guidelines with regard to historical and tribal cultural resources (California Public Resources Code (PRC) Section 21084.1, CA AB52 Chapter 532 (2014)).

In order to complete this investigation, RA conducted a review of regional archaeological and ethno-geographic literature, and historical maps; a record search conducted at the California Historical Resources Information System's Northwest Information Center (NWIC) in Rohnert Park California; correspondence with local Native American tribal representatives; and a pedestrian field survey. James Roscoe, M.A., oversaw all aspects of the investigation and meets the Secretary of Interior's Professional Qualifications Standards for Archaeology (Title 36 Code of Federal Regulations Part 61, and 48 Federal Regulation 44716). Roscoe has over 45 years of experience conducting historical resource and historic property investigations throughout California. Research Associates Melinda Salisbury B.A., Jarrett Lowery, B.A., Matthew Bouffard B.S., Mary Carlquist, B.A., Brian Amparan B.A., Jacqueline Farrington, B.A., Michael Roscoe B.A., and Jennifer Burns Whiteman, M.A. assisted Mr. Roscoe throughout the investigation.

Regional ethno-geographic research indicates that the Project Area lies within the traditional territory of the Cahto Tribe. Early ethnographers, who studied the Cahto and their neighbor Tribes, note that a seasonal round was followed; spending winters in their primary villages in the major river valleys and going into the hills in summer to hunt and gather seasonal plant foods. Spring and fall brought them to the major streams for the salmon runs. The Cahto people had approximately 50 villages within the Eel River watershed, including Long Valley and Cahto Valley (Kroeber 1925, Myers 1978, Barrett 1908: Map 1). The Laytonville Rancheria was founded in 1908 for the Cahto Tribe. Due to its relative geographic isolation, non-native settlement in Cahto, Laytonville, and surrounding area evolved more slowly than other regions of Northern California.

The NWIC records search was conducted for the Phase 1 and Phase 2 Parcels. The record search revealed four previously recorded archaeological sites and historic-era features within the Phase 1 Parcels and two archaeological sites identified within the Phase 2 Planning Parcels (documented in section 6.1 and Appendix A). Sites identified within the Phase 1 Parcels include one built-environment historic-era feature, a rock wall (Triple Creek Ranch APN 013-570-059), one Native American archaeological site, one multi-component archaeological site (both in Cahto Trail APN 014-260-032) and one Native American isolated artifact (Lower Tenmile APN 013-560-060). Two Native American archaeological sites have been previously identified within the Phase 2 Planning Parcels (Black Oak Ranch APN 013-560-047). None of these resources have been evaluated for CRHR eligibility.

Roscoe initiated correspondence with local Tribal Representatives as part of the background research effort. RA contacted the Native American Heritage Commission (NAHC) to request the results of a Sacred Lands File records (SLF) search and a list of Native American tribal representatives and interested individuals who should be contacted for more information. The NAHC responded stating that the results of the SLF records search were negative and attached a list of Native American tribes who may also have knowledge of cultural resources in the APE. This list included representatives of the Cahto Tribe, Coyote Valley Band of Pomo Indians, Guidiville Rancheria of California, Hopland Band of Pomo Indians, Manchester Band of Pomo Indians of the Manchester Rancheria, Yokayo Tribe, Noyo River Indian Community, Pinoleville Pomo Nations, Potter Valley Tribe, Redwood Valley or Little River Band of Pomo Indians, Robinson Rancheria of Pomo Indians, Round Valley Reservation/Covelo Indian Community, and Sherwood Valley Rancheria of Pomo. RA Research Associate Melinda Salisbury sent letters to these representatives on behalf of Mr. Roscoe on February 5, 2024. These letters included a description of the proposed project activities used and associated acreages, a map of the treatment area at a sufficient scale to indicate the spatial extent of activities, a request for information regarding potential impacts to cultural resources from the proposed treatments and a detailed description of the depth of ground disturbance expected. Valeria Stanley, THPO of the Sherwood Valley Tribe responded on February 5, 2024, via email that the Tribe would not be formally responding as the Project Area is not within their traditional territory and deferred to the Cahto Tribe. No other responses were received (Appendix B).

Prior to the field survey Mr. Roscoe met with the Cahto Tribal Council on November 17, 2023, to discuss project protocol and coordination. Verne Wilson, Tribal Monitor for the Cahto Tribe agreed to participate in the cultural study and guide the field survey.

James Roscoe M.A. conducted the archaeological survey of the Treatment Areas within the Phase 1 Project Implementation Parcels on January 29, February 25 and 26, May 10 and 11, and June 3, 4, and 18, 2024. Mr. Roscoe was accompanied by Research Associates Jarrett Lowery, B.A., Matthew Bouffard, B.S., Mary Carlquist, B.A., Brian Amparan, B.A., Jacqueline Farrington, B.A., and Michael Roscoe, B.A. The crew was guided through the Project Area by Cahto Tribe representative, Verne Wilson of the Laytonville Rancheria. The field crew employed a mixed strategy survey, with intensive efforts focused on areas of high sensitivity and cursory efforts focused on areas of low sensitivity (steep slopes over 30%).

Historical resource sensitivity was determined based on the background research which indicated that Native American archaeological sites in the area are generally found on flats along the main river or on its important tributaries, and along ridgelines which were used as travel routes and gathering areas. Historic-era resources could include remnants of the homesteading and ranching activities that began here in the late 1800's. These resources are typically found in the region along the river or on flat terraces close to water, as well as along established travel routes.

The field survey encompassed approximately 626 acres of the Treatment Areas within the Phase 1 Implementation Parcels utilizing systematic parallel and zig-zag transect methods spaced between 10 and 20 meters apart. Surveyors also employed intuitive survey methods in areas with high sensitivity or where archaeological resources were encountered, covering 100% of the area in these vicinities. Areas with a greater than 30% slope were deemed unlikely to contain archaeological or historical sites that would qualify for listing on the CRHR. In the Lower Tenmile and Vassar parcels, 347.6 acres were over 30% slope and not surveyed. Areas that were excluded from pedestrian survey due to steep slopes were visually examined, when possible, by at least one crew member. All treatment areas in Triple Creek and Gravier were surveyed. Approximately 68 acres of treatment area were not surveyed within the West Tenmile and Cahto Trail project areas. This was due to parcels being inaccessible or because treatment areas were not yet defined at the time of the survey.

RA identified a total of seven archaeological resources in the Phase 1 Implementation Parcel Treatment Areas as a result of this investigation: one isolated artifact, one historic-era road segment, three sparse lithic scatters, one chert quarry, and one pre-contact habitation site. The isolated artifact was noted but not recorded as it does not appear to be part of a nearby feature or archaeological site and is categorically ineligible for listing on the CRHR. All other identified resources are documented on the appropriate California Department of Parks and Recreation 523 series site record forms which are included in Appendix C.

The three sparse lithic scatters were identified in disturbed contexts and none of the observed artifacts are diagnostic of a specific type or time period and none contain the necessary qualities to be considered eligible for the CRHR. The road segment is not associated with any events or individuals important in local or national history; is not diagnostic of a specific type or time period that would yield data; and the site does not retain integrity; therefore, the site does not contain the necessary qualities to be considered eligible for the CRHR.

Two archaeological sites identified within the Phase 1 Parcel Treatment Areas as a result of this investigation, the Lower Tenmile Quarry Site and Gravier Habitation Site, are recommended as potentially eligible for inclusion on the CRHR under Criterion D. No other historical or unique archeological resources (CEQA Guidelines Sections 15064.5 (a) and 21083.2 (g)) or tribal cultural resources (California Public Resources Code Section 21074), were identified within the proposed project areas during this investigation.

Current project plans do not propose any ground disturbing activities within the documented site boundaries; therefore, RA recommends that the project will not cause substantial adverse changes to these resources. If project plans change to include ground disturbing activities within the site boundaries, further cultural investigations and Tribal consultations are recommended. RA recommends that pedestrian field surveys should be conducted within the treatment areas that were not covered by this investigation because they were either added to the project after the pedestrian survey was completed or due to limited private land access. These areas should be surveyed by a qualified archaeologist who meets the Secretary of Interior's Professional Qualifications Standards for Archaeology prior to project implementation, including the Cahto Trail Parcel (APN 014-260-032) and the West Ten Mile parcels (APNs 013-790-029, 013-790-003, 013-790-004, 013-190-015, 013-790-005, 013-790-007 and 014-460-004).

A representative of the Cahto Tribe, Verne Wilson, was present during all field survey work. Correspondence with the Cahto Tribe resulted in recommendations for a cultural monitor present during proposed work related to this project. Roscoe and Associates recommends that prior to project implementation, a monitoring plan should be drafted in consultation with the Cahto Tribe to determine the specifics of post-implementation recording requirements, how discoveries will be addressed, and how collections will be curated or reburied.

Despite a thorough investigation, project activities may have the potential to inadvertently uncover archaeological material or human remains. In the event that materials or remains are identified during project implementation, Section 9.0 of this report offers recommendations to ensure potential project impacts on inadvertently discovered resources are eliminated or reduced to less than significant levels.

2.0 PROJECT DESCRIPTION

The Tenmile Creek Watershed Forest Health Project is located in Mendocino County near Laytonville, CA (Figure 1). The Mendocino County Resource Conservation District (MCRCD) received funding from a CalFire Forest Health Grant and is working with the Eel River Recovery Project (ERRP) to treat approximately 1,914-acres of private, school district, including 109 acres of Tribal Forest lands located just outside of the town of Laytonville, California (Figures 2-7). The project areas are divided by Phase 1 Implementation Parcels and Phase 2 Planning Parcels. MCRCD and the ERRP are preparing a Project Specific Analysis (PSA) as part of the California Vegetation Treatment Program (CalVTP) adopted by the California Board of Forestry and Fire Protection. As funding becomes available in the future, additional treatment areas may be proposed and amended through subsequent PSA approvals.

The overall project spans various landowners and boundaries to optimize landscape-scale forest health improvement and protect terrestrial carbon stocks. It emphasizes local workforce development and utilization to enhance local socio-economic benefits and reinforce community involvement in restoration efforts. The focus includes fuel thinning and prescribed fire to optimize efficiency and ecological benefits. The Tenmile Creek Watershed Project aims to:

- Reduce fuel loads
- Restore oak woodland
- Enhance soil moisture and fertility
- Restore hydrologic function
- Promote ecosystem health and carbon storage
- Protect rural communities
- Create jobs

Key management actions include thinning overstocked forest areas, creating shaded fuel breaks, and applying pile and prescribed burns to reduce surface and ladder fuels while enhancing ecosystem resilience and carbon storage. These efforts are designed to protect rural communities, promote biodiversity, and improve water yields.

Treatment types

Forest fuels reduction is proposed for the entire Project area. Forest fuels reduction consists of treating understory trees and brush with the goals of reducing fire hazards, improving tree growth, stabilizing carbon in retained trees, and increasing forest resilience to high intensity wildfire disturbances. Forest thinning activities can be manual or mechanical and must be designed to change stand structure to:

1. Concentrate carbon storage in widely spaced and larger trees that are more resilient to wildfire, drought, and pest outbreaks; and
2. Reduce the likelihood of wildfire transitioning into the forest canopy.
3. Provide co-benefits such as fish and wildlife habitat, increased biodiversity, and wildlife adaptation to climate change.



Figure 1. Project Vicinity Map

Conifers that are overtopping black oak trees may be girdled (to create a wildlife snag) instead of removed if removal or felling of those conifer trees could damage the released oak trees.

Operations may occur on slopes greater than 40% when traveling between treatment areas. Understory vegetation, brush, and shrubs under the drip lines of trees shall be cut and masticated leaving root systems intact for resprouting. All debris and material left by masticating equipment will be scattered throughout the treatment area. Manual treatment may include the use of chainsaws and/or other various hand mechanized or hand tools to prune trees and woody vegetation, buck (meaning to cut into smaller sizes and lengths) downed debris and materials, and to treat dead, dying, and diseased trees. Additionally, prescribed broadcast burning and pile burning will be used to achieve similar treatment prescriptions, as described above. An integrated pest management approach, using manual hand treatments to remove invasive species such as, but not limited to, Himalayan Blackberry, Scotch Broom, Spanish Broom, French Broom, and other non-native species occurring in the project area. Manual treatments include the use of hand tools and hand-operated power tools to cut, clear, or prune herbaceous or woody species. Manual activities may operate on slopes greater than 50% as needed and will adhere to the following specifications.

All slash produced (branches, limbs, and treatment debris less than four inches in diameter) will be treated using one of the following methods:

- Chip or masticate adjacent to roads, landings, building pads and other accessible portions of the treatment areas. Equipment includes power chippers whereby material would be hand fed and chips would be blown onto the ground. Mastication involves reducing the size of residual down and dead material by grinding shredding or chopping material and leaving it on-site as mulch.

Chipping

Roadside mechanical cutting and shredding of existing surface fuels and slash created from tree felling and yarding. Existing surface fuels, thinning and pruning residue, and cut brush would be pulled to forest roads and chipped into small pieces using a chipper. Chipping residue would be distributed back into the treatment unit, utilized for biomass, or utilized as a cover to reduce the risk of invasive plant establishment at landings and roads.

- Pile and burn: Pile and burn operations would occur where vehicle access is available. Piles will be placed on roadsides utilizing existing openings and compacted ground as feasible. Piles will be created using hand crews. All material less than 10" diameters will be piled. Piles will be located outside the drip line of desirable trees. No piles will be constructed on slopes greater than 40%. Piles should be located outside of the dripline of overstory trees where possible and at least 20 feet from the edge of the project area. If piles cannot be located outside of drip line, then it must be at least 20 feet from the bole of any leave tree, and pile size may be decreased to prevent damage to residual stand (i.e. scorching). Where openings exist that will accommodate a larger pile, large piles are preferred. Piles size may not decrease to less than 4 feet in diameter. Piles shall be compact with a maximum diameter of 10 feet and maximum height of 6 feet. Piles will be constructed with boles and limbs laid parallel to slope to reduce roll-out and to maintain compactness. No material shall extend from the general perimeter of the pile more than 18 inches. No piles will be created within Watercourse Protection Zones.
- Lop and scatter: lopping is the severing and spreading of slash so that no part of it remains more than 18 inches above the ground. Lop and scatter will be implemented by hand crews on steeper slopes and areas with limited access where chipping, mastication, and burning piles is not feasible.

- Pruning will reduce ladder fuels and improve wood quality. Prune residual trees by lopping low branches up to a minimum height of 8' (above the level of slash on the uphill side of the tree).
- Broadcast Burn: Understory burns would be implemented in accordance with a specific prescription and burn plan that defines the desired maximum flame lengths and fire spread rates based on the fuel types, weather, slopes, aspect, staffing levels and containment lines and strategies set out in a burn plan. Interior portions of prescribed fires may exceed the prescribed flame lengths planned at the control lines, but the overall prescription is designed to safely contain the fire within the planned fire perimeter. Burns could occur from January through December during which conditions would be conducive to burning targeted fuels. Broadcast burning may require the construction of new control lines or enhancement of existing control lines. This may include handlines, mow lines, and/or dozer lines.
-

No vegetation treatment work will take place within 100' of a Class I or II watercourse (including Tenmile Creek) or within 30' of a Class III watercourse. Plants and trees of cultural significance will not be removed. This includes Pacific yew, sugar pine and big leaf maple.

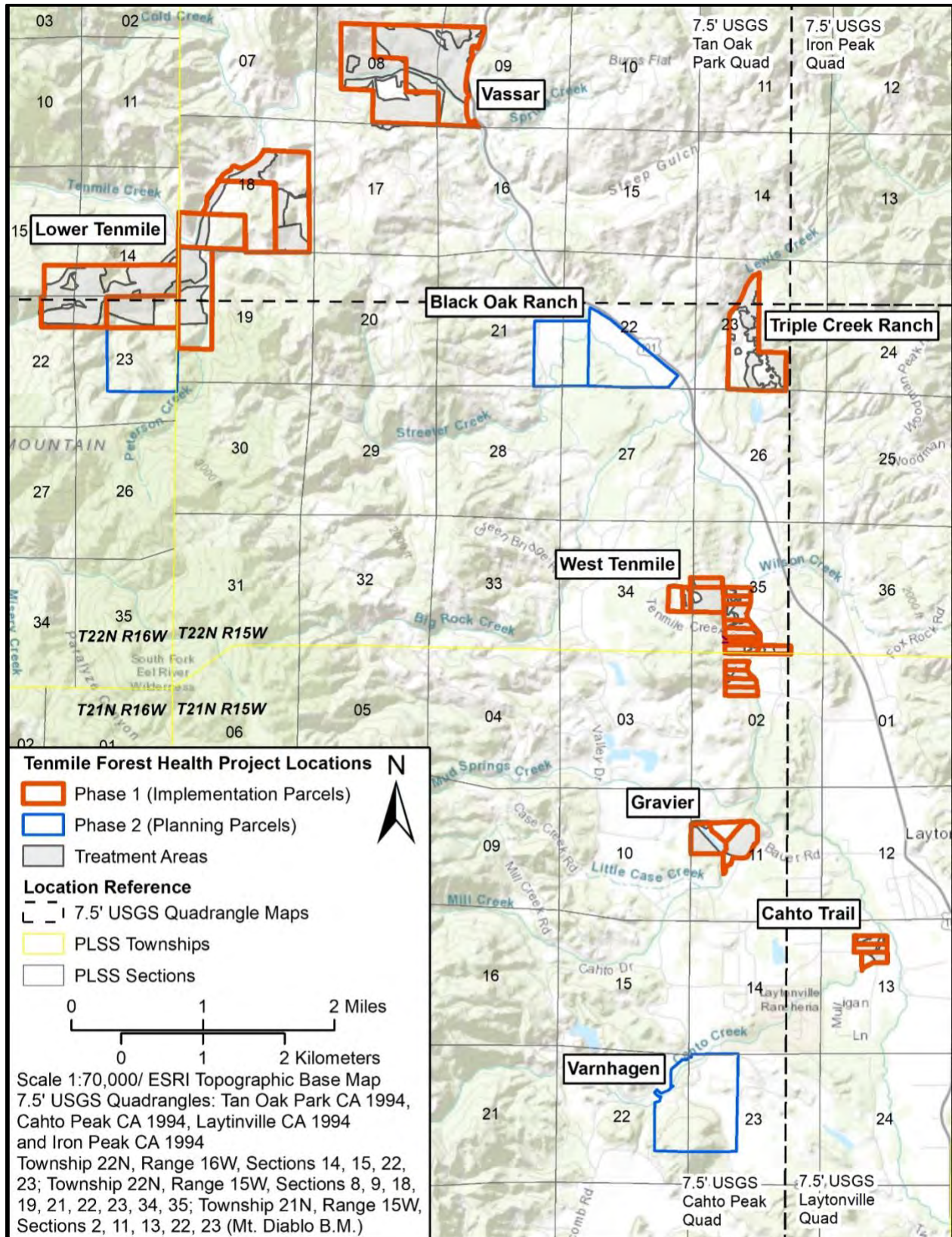


Figure 2. Project Location Overview.

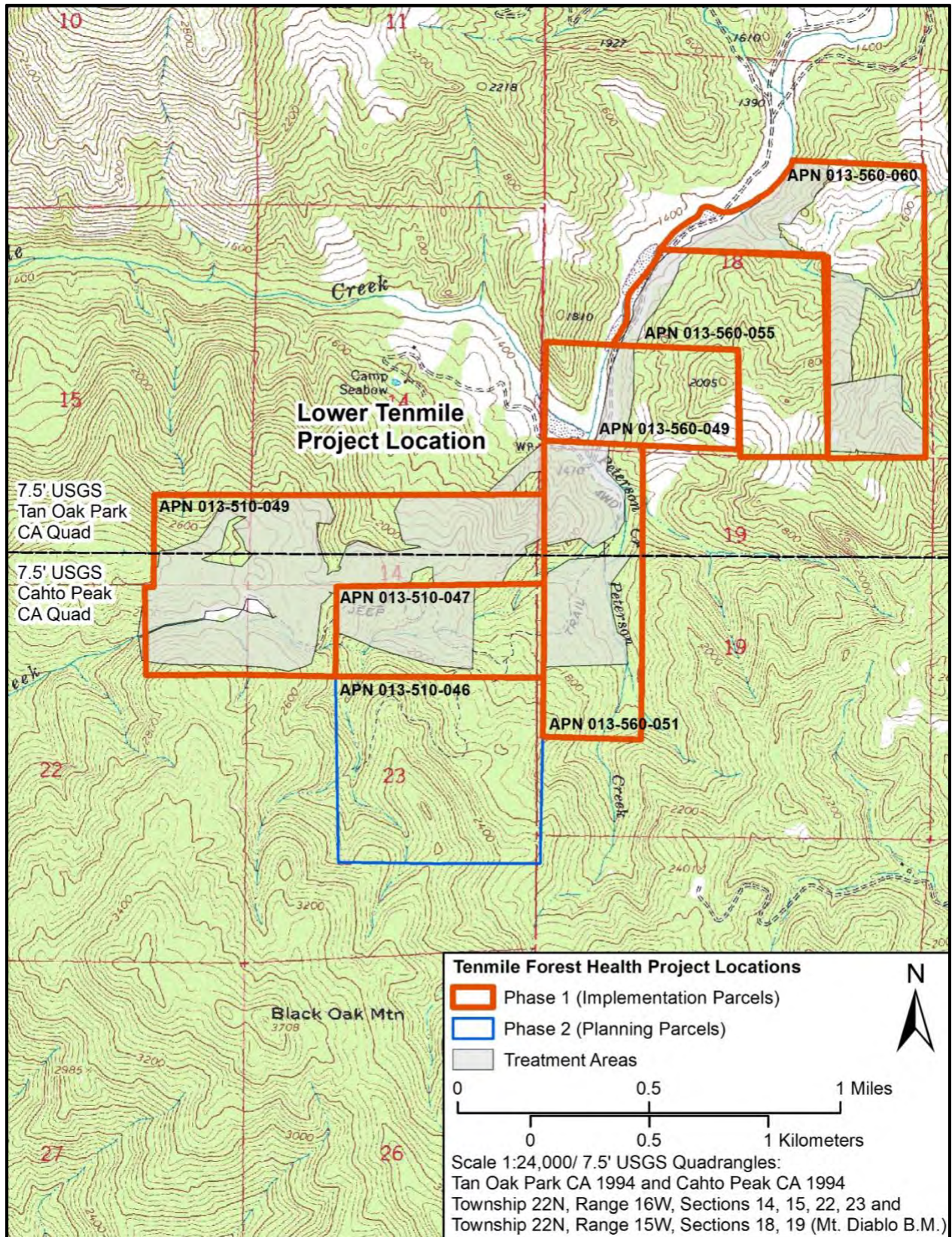


Figure 3. Lower Tenmile Project Location showing proposed treatment areas.

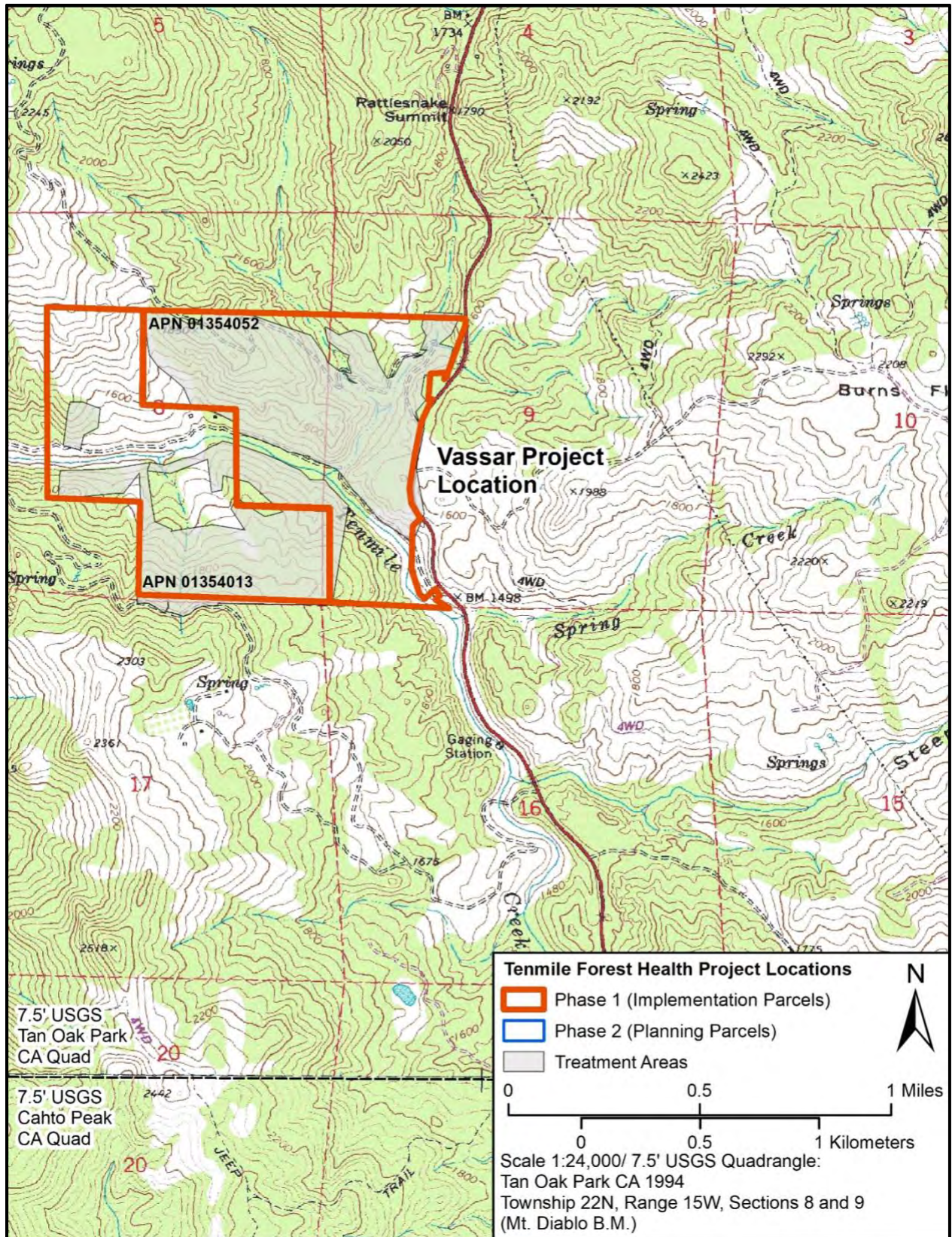
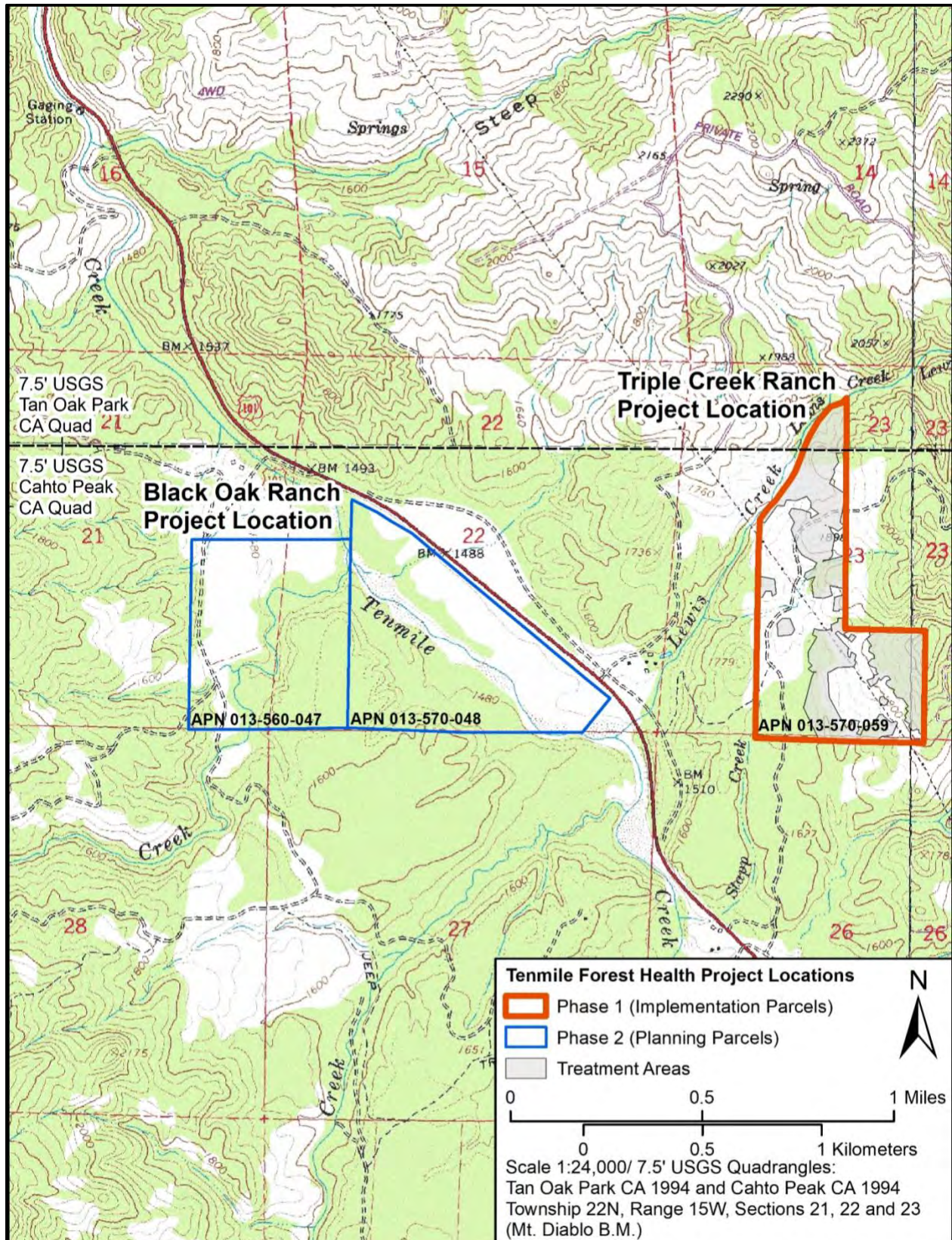


Figure 4. Vassar Project Location showing proposed treatment areas.



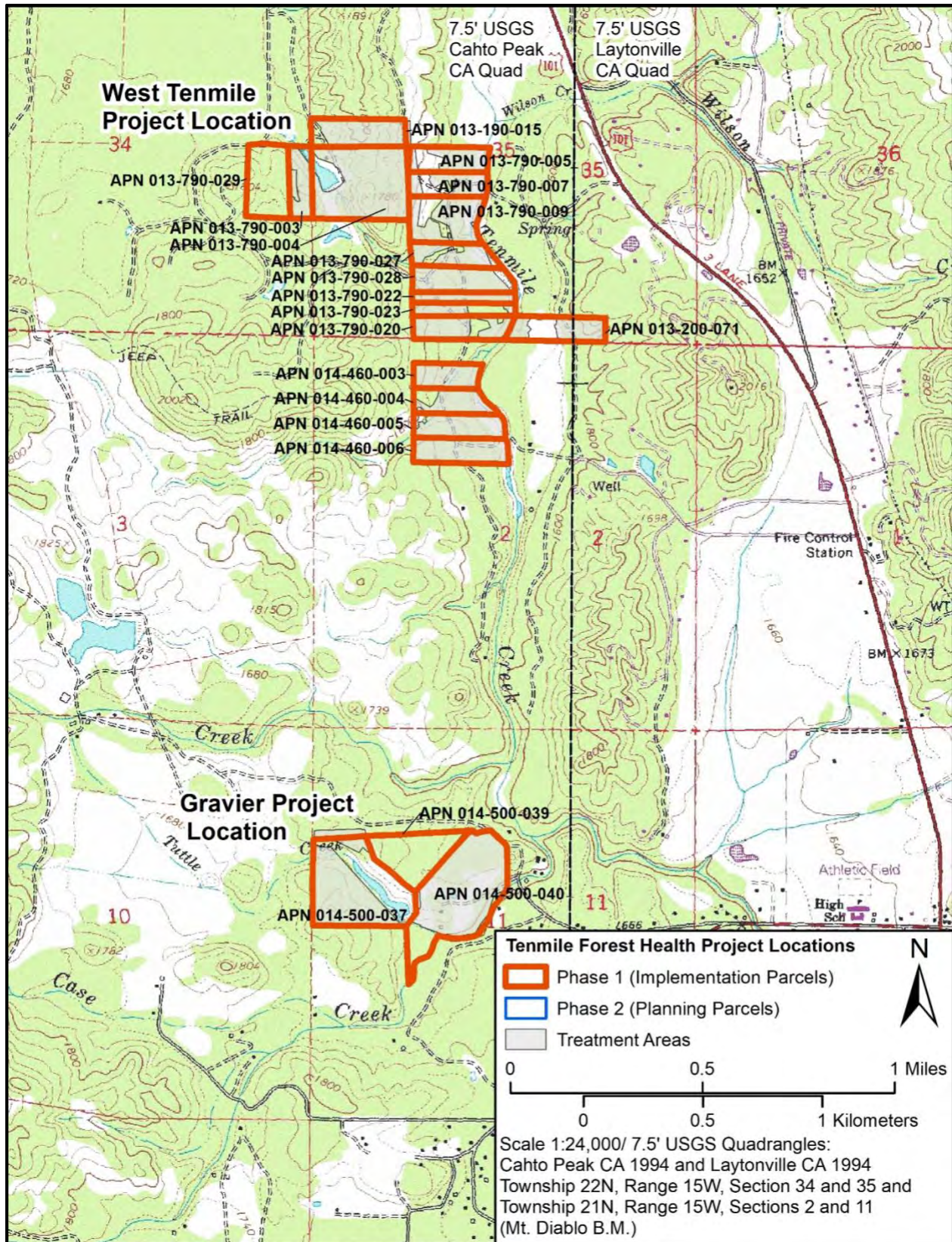


Figure 6. West Ten Mile and Gravier Project locations showing proposed treatment areas.

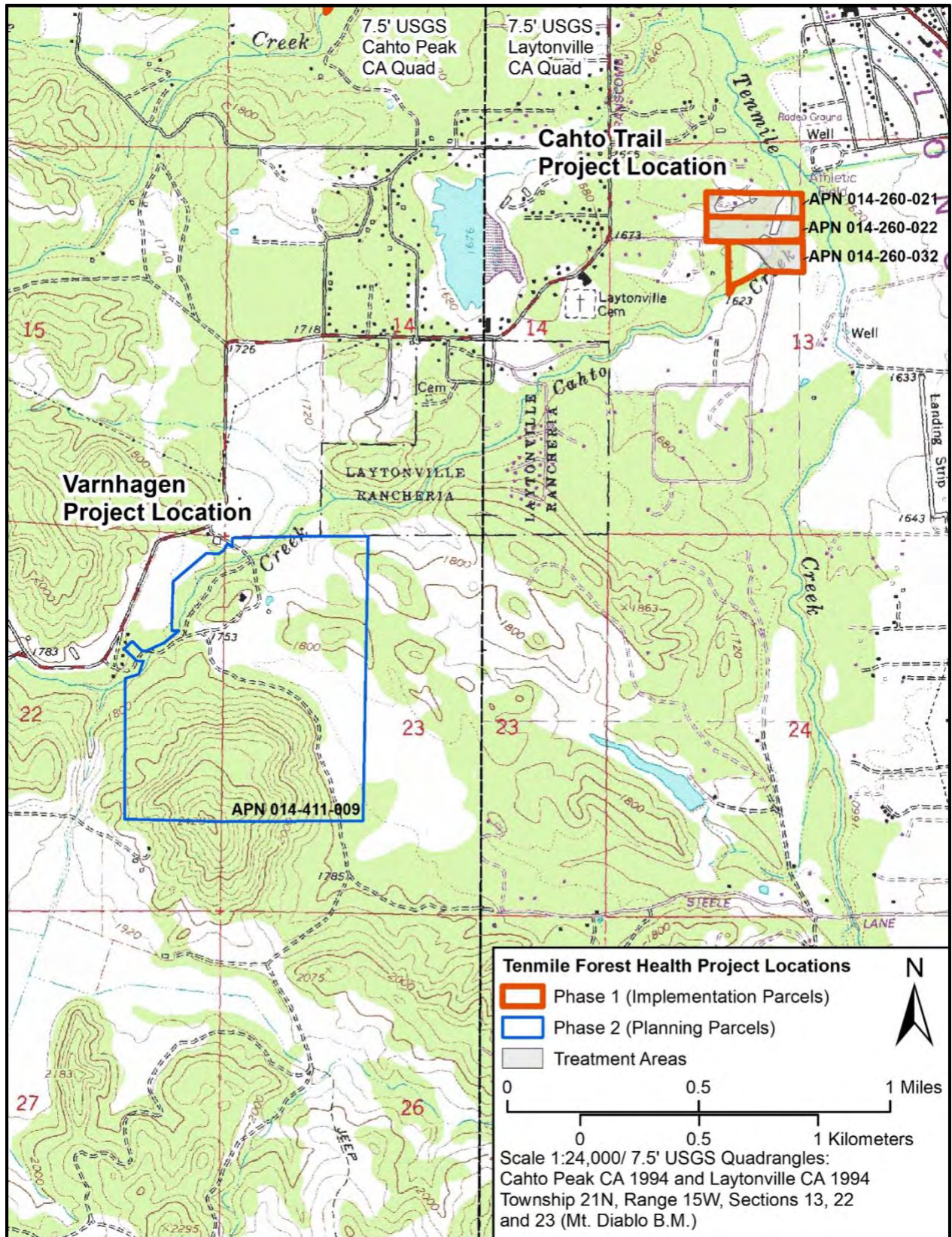


Figure 7. Cahto Trail Project and Varnhagen Planning Project locations showing proposed treatment areas.

3.0 REGULATORY FRAMEWORK

MCRCD and the ERRP are preparing an Environmental Impact Report as part of the California Vegetation Treatment Program (CalVTP) adopted by the California Board of Forestry and Fire Protection (Board). This program evaluates the potential environmental effects of implementing qualifying vegetation treatments that reduce the risk of wildfire throughout the State Responsibility Area in California. The MCRCD would be the CEQA Responsible Agency for this project. The MCRCD is seeking CEQA compliance for the proposed project as a later activity covered by the CalVTP PEIR, using its PSA checklist. The proposed treatment type (i.e., Wildland Urban Interface (WUI) fuel reduction and ecological restoration) and the treatment activities (i.e., burning, manual, and mechanical treatments) are consistent with those evaluated in the CalVTP PEIR. In addition, the treatment areas are entirely within the CalVTP treatable landscape.

This cultural resource investigation was conducted in compliance with the environmental requirements specified in the California Environmental Quality Act (CEQA) and its guidelines with regard to historical and tribal cultural resources (California Public Resources Code (PRC) Section 21084.1, CA AB52 Chapter 532 (2014)) as well as the CalVTP Standard Project Requirements and Mitigation Measures for Archaeological, Historical, and Tribal Cultural Resources.

In this investigation RA considered impacts to *historical, tribal cultural, or unique archaeological resources*, by assessing the historical significance of artifacts, objects, structures, buildings, sites, and landscapes that meet the age criteria for significance evaluation, 45 years before present. RA's investigation: (1) identifies and documents all artifacts, structures, buildings and sites that are more than 50 years old and located within the project area; (2) assesses the historical significance of identified resources to determine if they would be considered historical or tribal cultural resources eligible for the California or National Registers; (3) makes recommendations regarding the project's potential to adversely change identified resources, and (4) develops recommendations to negate, minimize or mitigate substantial adverse change to identified resources.

3.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA) as codified in California Public Resources Code Sections 21000 et seq., is the principal statute governing the environmental review of projects in the state. CEQA requires that projects financed or approved by state agencies (including county governments), must assess the effects of the project to the environment. A project that may cause a substantial adverse change in the significance of a *historical, tribal cultural, or unique archaeological resource* is a project that may have a significant effect on the environment (PRC 21084.1, CA AB52 Chapter 532 (2014), and PRC Section 21083.2). Actions that would cause a substantial adverse change to the significance of a *historical, tribal cultural, or unique archaeological resource* include but are not limited to demolition, replacement, substantial alteration, and relocation.

California Environmental Quality Act - Definitions

The term "*historical resource*" is legally defined in California Code of Regulations (CCR), Title 14, Chapter 3, Section 15064.5 (a). Under 14 CCR 15064.5(a)(3), an historical resource is defined as:

(1) A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (CRHR) (PRC Section 5024.1).

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements in section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies

must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC Section 5024.1) including the following:

- A. is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B. is associated with the lives of persons important in our past;
- C. embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or
- D. has yielded, or may be likely to yield, information important in prehistory or history.

The CRHR also includes resources listed in or formally determined eligible for the listing in the National Register of Historic Places, as well as California State Landmarks and Points of Historical Interest. Resources of local significance that are listed under a local preservation ordinance or are otherwise considered historically significant at a local level, may also be considered eligible for the CRHR. The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to section 5020.1(k) of the PRC), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC sections 5020.1(j) or 5024.1.

The term "*tribal cultural resource*" is legally defined in PRC Section 21074:

- (a) "Tribal cultural resources" are either of the following:
 - (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the CRHR.
 - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
 - (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- (b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- (c) A historical resource described in PRC Section 21084.1, a unique archaeological resource as defined in subdivision (g) of PRC Section 21083.2, or a "non-unique archaeological resource" as defined in subdivision (h) of PRC Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

A "*unique archaeological resource*" is an archaeological artifact, object, or site that meets any of the criteria presented in PRC Section 21083.2(g):

(g) As used in this section, "*unique archaeological resource*" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

3.3 CalVTP Standard Project Requirements and Mitigation Measures- Archaeological, Historical, And Tribal Cultural Resources

SPR CUL-1 Conduct Record Search: An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR CUL-2 Contact Geographically Affiliated Native American Tribes: The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List. Using the appropriate Native Americans Contact List, the project proponent will notify the California Native American Tribes in the counties where the treatment activity is located. The notification will contain the following:

- ❖ A written description of the treatment location and boundaries.
 - ❖ A brief narrative of the treatment objectives.
 - ❖ A description of the activities used (e.g., prescribed burning, mastication) and associated acreages.
 - ❖ A map of the treatment area at a sufficient scale to indicate the spatial extent of activities.
 - ❖ A request for information regarding potential impacts to cultural resources from the proposed treatment.
 - ❖ A detailed description of the depth of excavation, if ground disturbance is expected.
 - ❖ In addition, the project proponent will contact the NAHC for a review of their Sacred Lands File.
- This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR-CUL-3 Pre-field Research: The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the

records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR CUL-6 Treatment of Tribal Cultural Resources: The project proponent, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. The project proponent will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. The project proponent will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities. Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

3.2.8 SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.

4.0 NATURAL SETTING

The project area is located in areas that surround the town of Laytonville Rancheria in northern Mendocino County, California near the town of Laytonville (Figures 1 and 2). The elevation of the project area ranges from approximately 1600 to 2880 feet above mean sea level and lies within the Coast and Interior Coast Ranges, consisting of many small mountain ranges, forests, rivers, creeks and streams. Many of the ridges are steep and wooded while the valleys are flat and broad. The interior of the Eel River subregion is usually beyond the reach of coastal fog and is subject to drought in the summer months.

Indigenous groups have deep-rooted connections with the land and environment and have adapted their survival strategies and cultural practices to the region's diverse resources (Lightfoot and Parrish 2009). For thousands of years, they created regional economies for harvesting food, medicine, raw materials from local plant and animal communities, and mineral resources such as stone and clay. They followed a yearly hunting and harvesting cycle, using the higher elevations in the summer and the lower elevations in winter. They micromanaged individual species and entire plant communities using corralling, burning, weeding, thinning, pruning, coppicing, harrowing, sowing, transplanting, tilling, and irrigating (Keter 1986).

4.1 Geology

The Coast Range is mapped as Mesozoic sedimentary and meta-sedimentary rocks primarily of the Franciscan Complex which dates to the Cretaceous and Jurassic periods containing sandstone with small amounts of shale, chert, limestone, conglomerate, and serpentinites with blue schist, or eclogite scattered above it (Jennings 1977). Rocks in the Eel River basin are soft sedimentary formations deposited during the Tertiary Era with landslides contributing a great deal to the river's sedimentary load (Alt and Hyndman 2000).

The Coast Range includes two main groupings of rocks: the Franciscan Complex and the Great Valley Sequence. Several large patches of coastal sediment cover sections of the Franciscan rocks and valley floors. Many of the long ridges and valleys are fault slices, moving horizontally within the San Andreas Fault system, making the Coast Range susceptible to occasional earthquakes. Volcanic fields are also present in the Sonoma and Clear Lake regions overlying Franciscan rocks. Volcanic rocks in this area consist mostly of rhyolite and small amounts of basalt. Landslides are also prominent in the Coast Range as evidenced by wrinkled and rumpled surfaces in grassy slopes. Landslides in this area are caused by the deep soils and closely fractured rocks, particularly the serpentinites, which cover the slopes (Alt and Hyndman 2000).

The Franciscan Complex is a complex scramble of sedimentary rocks originally deposited at varying depths in separate sections of the ocean, mixed with ocean floor basalt. Muddy sandstone, or greywacke, is the most abundant rock type. Turbidites, or graded beds of coarse sand and pebbles with clay, are also diagnostic of the Franciscan (Alt and Hyndman 2000). Outcrops of brightly colored rainbow chert provide excellent material for stone tools as evidenced in the archaeological record.

4.2 Flora and Fauna

Vegetation Communities

The natural vegetation of the Northern California Interior Coast Ranges consists of blue oak-foothill pine forest, chaparral, and California prairie. Predominant natural communities are Blue Oak, Mixed Chaparral, and Valley Needlegrass series. Series often found in riparian settings include: Arroyo willow series, Black cottonwood series, Black willow series, Fremont cottonwood series, mixed willow series, Mulefat series, Narrowleaf willow series, Pacific willow series, Red willow series and White alder series.

Foothill Woodland

The Foothill Woodland of the Coast Ranges is commonly referred to as Oak Woodland and is comprised of a mixed community of trees and grasses. Dominant tree species include Blue Oak, *Quercus douglasii*, and Grey Pine, *Pinus sabiniana*; and oak species including Coast Live Oak, *Quercus agrifolia* (Schoenherr 1992).

Mixed Evergreen Forest

As precipitation increases Oak Woodlands merge with Mixed Evergreen Forest composed of conifers and evergreen trees. Douglas Fir, *Pseudotsuga menziesii*, is an important component of this forest along with Tanoak, *Lithocarpus densiflorus*; which was employed by indigenous populations in the preservation and tanning of leather. Pacific Madrone, *Arbutus menziesii*, is also present as its distribution is similar to that of Tanoak. In the Mixed Evergreen Forest open woodlands of Garry Oak often occur in patches reflecting the changes in soil types; thus, vegetation mosaics reflect the soil mosaic, which is associated with the diverse geology of the area (Schoenherr 1992).

Sclerophyll Communities

The interior of the Eel River subregion is beyond the reach of coastal fog and is subject to drought in the summer months. The dominant plant communities of the area have thus evolved protective measures such as thick, waxy cuticles on their leaves in order to reduce water loss under drought conditions (Moratto 1984). These plant communities are referred to as sclerophyll communities and may occur in several vegetation communities including oak forests with grass ground cover, woodlands with grass or chaparral dominating the ground surface, or chaparral in scattered areas mixed with grass and woodland (Cooper 1922; Shelford 1963).

These plant communities dominate the vegetation surrounding the project area. These communities also supplied the needed resources for a variety of fauna. Vegetation communities, especially the riparian corridor would be highly attractive to animals, many utilizing the various grasses as food. The relative availability of fresh water from the Eel River, the Mad River, and the various other creeks and streams along with natural resources would not only attract game, but also humans. The concentration of a mélange of resources along the riparian corridors would supply ample opportunity to exploit many different resources.

Faunal Resources in the Northern California Coast and Interior Coast Ranges

Wildlife of the North Coastal Region is characterized by terrestrial and aquatic resources; the list provided below is developed from the Northern California Coast and Interior Coast Ranges. Faunal taxa that frequent the above vegetation communities include a variety of large and small mammals, waterfowl, a few fish species and invertebrate resources. The variety of fauna is dependent upon the vegetation communities present. The large and small mammals often found near the lake margin environments include mule deer, black-tailed deer, black bear, mountain lion, coyote, bobcat, ground squirrels, cottontails, jack rabbits, kangaroo rats and ringtail. Birds include turkey vultures, eagles, hawks, owls, herons, quail, morning dove, mockingbird, scrub jay, western meadowlark, finches, and sparrows.

All of the above species mentioned were culturally significant to the Cahto who inhabited the project area and vicinity. The adaptation to these environments secured a subsistence resource base that was abundant throughout most of the year. The annual or seasonal round was intricately meshed with the available resources within the North Coastal Region.

5.0 HISTORY OF ARCHAEOLOGICAL RESEARCH AND CULTURAL CHRONOLOGY

The cultural setting of Northwest California is diverse with archaeological evidence documenting tens of thousands of years and Tribal knowledge that spans from time immemorial. Early archaeological research in this region focused on identifying Native American artifact assemblages and delineating a cultural chronology (Elsasser and Heizer 1966, Loud 1918). Later studies broadened the view to address such issues as paleo-environmental reconstruction (Hildebrandt and Hayes 1983), technology and adaptive responses to environment (Levulett and Hildebrandt 1987, Hildebrandt and Hayes 1983, 1984, Hildebrandt and Roscoe 2003, Hildebrandt and Swensen 1985, Whitaker 2005), trade (Hughes 1978, Levulett and Hildebrandt 1987), and the shifting focus from terrestrial to marine resource extraction during the coastal occupation of Northwest California (Levulett 1985, Whitaker 2005).

Early research conducted along the northwest coast includes excavations in Humboldt Bay (Loud 1918); Patrick's Point and Trinidad Bay (Elsasser and Heizer 1966); and at Stone Lagoon by Fredrickson (Milburn et al. 1979). More recently, archaeological deposits have been examined at the mouth of the Mattole River and at Big Flat (Levulett 1985, Whitaker 2005); Spanish Flat and Punta Gorda (Whitaker 2005), Shelter Cove (Levulett 1985), MacKerricher State Park (White 1989; 1991; 2013), and at Fort Bragg and Seaside by (Van Bueren 2008, 2011). The seminal work defining early period assemblages in the North Coast Ranges of California was the Pilot Ridge-South Fork Mountain (PR-SFM) project sponsored by Six Rivers National Forest for logging and road building undertakings (Hildebrandt and Hayes 1983, 1984). These studies have provided insight into some of the major environmental and archaeological trends within the region over the past 8,000 years.

The following summary of the archaeological context of Northwest California is organized largely along the chronological sequence of patterns developed by Fredrickson (Fredrickson 1984; Hildebrandt 2007; King et al. 2016: 48). Temporal periods in this section are derived from the *Cultural Resources Overview for Northwestern California* by Jerome King, William Hildebrandt, and Sharon A. Waechter for the Bureau of Land Management Arcata and Redding Field Offices (King et al. 2016).

Paleoindian Period (13,400-12,800 cal B.P.)

Few sites dating to the Paleoindian Period have been identified in Mendocino County. Recent research presented at a Society for California Archaeology Symposium organized by Nick Angeloff and Mark Castro, reported the presence of two artifacts dating to this period in the North Coast Ranges. These artifacts were found in the Upper Mad River region (Angeloff 2022) and the Upper South Fork Trinity River region (Laugesen and Angeloff 2022). Characteristic artifacts of this period include large, lanceolate, concave-base, fluted projectile points, and chipped stone crescents. No evidence exists for the presence of a developed plant food milling technology. Subsistence adaptation is presumed to have been highly mobile hunting and plant gathering within lacustrine or coastal habitats. Exchange between groups presumably took place on an individual, one-to-one basis, with social groups not being heavily dependent upon exchange (Wallace 1978). Fluted points have been found near Bartle in eastern Siskiyou County, and on the Mendocino coast, but until recently there has been very little evidence for the Paleoindian period reported in Northwestern California as a whole (King et al. 2016:48).

Borax Lake Pattern (10,000-6,300 cal B.P.)

The Borax Lake Pattern, characterized as generalized hunting and gathering by small, highly mobile family groups, defines the Lower Archaic period along the Northwest coast (White and Fredrickson 1992; Harrington 1948). Provisional dates of 3,000 to 6,000 years B.P. were assigned to the Borax Lake Pattern sites at Pilot Ridge- South Fork Mountain (PR-SFM) based on obsidian hydration data, although radiocarbon dates were not obtained (Hildebrandt and Hayes 1983). Subsequent data based on corrected dates documented by Fitzgerald and Hildebrandt (2001) from carbon found in a soil sample at site CA-

HUM-573 on Pilot Ridge, date the pattern to 7120 +/- 50 radiocarbon years. To date, this is one of the earliest archaeological deposits dated in Northwest California.

The assemblage consists of widestem projectile points, typically made of locally available chert, that are relatively large-sized compared to Middle and Upper Archaic projectile points; handstones, milling slabs, and ovoid and dome scrapers. Borax Lake Pattern sites typically contain a similar array of artifact types, implying each served as a base camp where similar activities took place. Obsidian is poorly represented in the pattern; suggesting exchange networks with obsidian rich areas (southern North Coast Ranges, Northeast California) were not well established.

This adaptive pattern corresponded to a significant Xerothermic warming trend that followed the mid-Holocene neoglacial “little ice age,” when higher elevations could have been occupied for a longer portion of the year (Hildebrandt and Hayes 1983). Palynological studies demonstrated that the upland environments within the PR-SFM survey area had been affected by a mid-Holocene warm period with the result of an upward migration of the oak woodland environment (Hildebrandt and Hayes 1983). Borax Lake Pattern sites have been identified in upland areas on Pilot Ridge and South Fork Mountain (Hildebrandt and Hayes 1983, 1984), Tip Top Ridge (Whiteman 2007), and Pine Ridge (Flynn and Roop 1975); along the Trinity River at Cox Bar (Sundahl 1988; Sundahl and Berrien 1986); and along Sulanharas Creek in the Sacramento River watershed (Sundahl 1992; Clewett and Sundahl 1973, 1974, 1977).

Sulanharas Pattern (5,700-4,500 cal B.P.)

This temporal period defined by King et al. (2016), is a poorly understood interval between the Borax Lake and Mendocino patterns. Previously called the ‘Squaw Creek’ pattern, the nomenclature was changed as per the 2021 Order No. 3404 of the Secretary of the Interior and the 2022 Federal Register Bulletin Vol. 87, No. 36 Reconciliation of Derogatory Geographic Names Tribal Consultation. Evidence for this time period in the form of single-component assemblages is lacking both in upland sites and lowland river valley assemblages (King et al. 2016:49-50). However, despite the lack of well-dated single component assemblages, Hildebrandt and Hayes reported finding significant numbers of contracting-stem points during their archaeological work at Pilot Ridge and South Fork Mountain (Hildebrandt and Hayes 1983). These projectile points are notably similar to those of the Sulanharas Pattern of Shasta County. Additionally, they found serrated points designated as the Oregon Series, which are similar to points found at Glade Pattern sites where they occur alongside contracting stem points dating to this temporal interval (King et al. 2016:50). While there is only tentative evidence for this period, King et al. classify this time interval as being provisionally tied to the Sulanharas pattern which occurs further east.

Mendocino Pattern (4,500-1,500 cal B.P.)

The Middle Archaic Period within Northwestern California is represented by the Mendocino Pattern, as proposed by Hildebrandt and Hayes (1983, 1984) based on research at PR-SFM. The Mendocino Pattern is characterized by smaller projectile point forms than those of the Borax Lake Pattern widestem projectile points (Hildebrandt and Hayes 1983). This adaptive pattern was oriented towards use of low-elevation villages located along salmon-bearing streams near acorn crops and occupied by larger concentrations of people during the winter months. This technological change is hypothetically linked to the advent of storage facilities, particularly for fish and acorns to feed the population during the lean winter months (Binford 1980). It represents an adaptive shift where resources were collected and returned to a permanent settlement area, resulting in a variety of functionally different site types that reflect more specialized activities (Binford 1980). This shift coincided with a significant cooling trend, the Neo-glacial, (approximately 3300 years ago) which particularly affected the resource base of interior Northwest California. The variety and productivity of upland resources declined as species were displaced to lower elevations. Some estimates place altitude-specific life-zones as much as 305 meters lower than they are today (Hildebrandt and Hayes 1983).

Mendocino Pattern sites are marked by a greater variety of generally smaller projectile point forms (Willits Series, Trinity Series, and Oregon Series), distinct unifacial flake tools (McKee Uniface), and greater reliance on mortars and pestles (associated with acorn processing) over milling slabs and handstones (Hildebrandt and Hayes 1983, Levulett and Hildebrandt 1987). Middle Period components excavated on the high elevation PR-SFM indicate specialized activities, including Native burning practices. Data from palynological studies support a Native burning interpretation to maintain open prairies that supported wildlife and vegetal resources (Hildebrandt and Hayes 1983).

Initial use of coastal resources is evident by Mendocino Pattern components investigated at sites located at the mouth of the Mattole River (Levulett and Hildebrandt 1987) and the mouth of Randall Creek (Whitaker 2005). Mendocino Pattern time markers and obsidian hydration data support the finding of a Middle Archaic Period component on the northern margin of Humboldt Bay at the Arcata Sports Complex Site (Eidsness 1993). Evidence at these sites indicates that the coastal occupation continued to be sporadic and seasonal through the Middle Archaic Period (Hildebrandt and Hayes 1983).

Tuluwat Pattern (post 1,500 cal B.P.)

This temporal interval, stretching from 1,500 B.P. until the time of non-native incursion, was a time of great demographic, technological, and cultural change, in which the patterns of settlement and subsistence documented in ethnographic times developed. The artifacts and assemblages of this period generally represent a continuation of the patterns described above. Sites dating to this time are found throughout the central North Coast Ranges in moderate density. In general, cultural components are rich in materials; artifact numbers become greater, artifact categories become broader, and tool kit variability higher. Large Trinity side- and corner-notched projectile points are common. Medium-to-large, shouldered, lanceolate points and leaf-shaped points also are present. Mano-metate grinding technology is replaced by bowl mortars and pestles, indicating initial development and elaboration of the “acorn complex” (Basgall 1987). Bone tools (e.g., fishing equipment) are present. Obsidian becomes the preferred tool stone in many parts of the central North Ranges, often manifested by an elaborate obsidian biface reworking industry. This is reflective of greater complexity in exchange systems, characterized by the occurrence of regular, sustained exchange between social groups.

The Upper Archaic Period is marked by the development of non-utilitarian features and artifacts (e.g., beads, pendants, and rock art) that begin to appear in substantial numbers. In particular, shell beads become an important temporal marker, and may be indicators of sustained exchange and social status differentiation. During this period, the growth of sociopolitical complexity is demonstrated by the apparent development of status distinctions based upon wealth, and the emergence of group-oriented religions as evidenced by intergroup trade (Hildebrandt and Hayes 1984).

Exchange networks had become regularized in the Late Period. Trade is documented both archaeologically (Hughes 1978, Levulett and Hildebrandt 1987, Whitaker 2005) and ethnographically (Powers 1877, Loud 1918, Kroeber 1925, Nomland 1935, 1938), with exchange relationships reaching north to Vancouver Island for dentalium shells, east to the Warner Mountains and Medicine Lake Highlands for obsidian, and south to the San Francisco Bay region for obsidian and clam shell disc beads.

On the Mendocino coast, there is evidence of a more terrestrial form of adaptation compared with the more northerly coastal people in the North Coast Ranges, with greater focus on deer and other game, less exploitation of marine mammals, and a lower number of harpoons, plank houses, ceremonial objects, and woodworking tools (King et al 2016:52). Despite these differences in adaptation, the Tulawat Barbed point is still commonly found in coastal sites this far south. A site just north of Fort Bragg was found which is closer to the patterns found further north, which led the excavators to suggest that:

The initial colonization of Northwest California by Tuluwat Pattern people (probably Algic speakers) extended well south of their ultimate range, but retracted back to the more northerly areas (e.g., north of Cape Mendocino) where the presence of offshore rocks and islands allowed the more maritime-oriented subsistence economy to develop and flourish up to historic contact [King et al 2016:52].

Information on Tulawat Pattern sites in the southern interior part of the North Coast Ranges is lacking in comparison with coastal regions, with limited data being available from excavations and most data coming from surface survey, with a few exceptions (King et al 2016:53). A large number of midden deposits have been located by survey in the vicinity of Round Valley, and these along with nearby excavations showed that Tulawat barbed points did extend down into inland Mendocino County, but “overlap with Augustine Pattern materials when moving farther south and are ultimately replaced by Rattlesnake Corner-notched points upon reaching the Sonoma-Mendocino County line” (King et al 2016:53).

Post Contact (150 B.P. to 1900s)

Generally, traditional Native Californian material, economic, social, and ideological culture was disrupted by contact with Russian traders, Spanish sea vessels, non-native settlement, and U.S. government policy. This produced significant depopulation and relocation of Native Californians from most of the lands they occupied as non-native material culture became dominant (Rohde 2005). As a result, Native American populations reacted, and their material culture changed through a system of forced assimilation and acculturation. These pressures resulted in a change in settlement patterns and procurement strategies; as well as a synthesis of adaptive material culture expressed by projectile points and tools made from flaked glass, tin cans converted to uses other than food storage (candle holders, strainers), copper jewelry, and the presence of ceramic and glass beads.

6.0 TRIBAL ETHNOGRAPHIC CONTEXT

The proposed project lies within the traditional territory of the Cahto Tribe. The following brief summary is by no means comprehensive but provides an ethnographic context to aid in understanding the archeological sites discussed in this report. The Cahto (also Kato, Ka-to, Ká-to Po-mo; Cah-to-pomo) are the southernmost Athabaskan group on the Pacific Coast who inhabited the hills and oak savannahs near the upper drainages of the South Fork of the Eel River and the Cahto and Long Valleys of Mendocino County extending north to Twin Rocks, Cummings, and the junction of Rattlesnake Creek with the South Fork of the Eel River; south to the southern end of Long Valley, and west to Jackson Valley (Merriam 1976:129; Myers 1978:244). Kato is a Pomo place word meaning lake. Cahto as a name means "People of the Lake" or "Lake People" referring to an important Cahto village site, *to zilbi* on the shores of a lake in Cahto Valley (Barrett 1908:281; Kroeber 1925:154; Myers 1978:244; Powers 1877:150). Merriam (1976:129) includes the Cahto in his notes on Athabaskan ethnogeography: Kah'-to (*To-chil'-pe Ke'-ah-hahng*) in the Kahto [sp] and Long Valleys.

Cahto territory was surrounded by Yukian speakers and was only separated from the Northern Pomo by a narrow portion of Yuki land. The Yuki influence on the Cahto culture is evident in Cahto basketry, gambling games, men's hairnets, bulb cooking, large dance houses with roof doors, and victory ceremonies. Many Cahto spoke Pomo in addition to their own language (Myers 1978:244). The Cahto are sometimes referred to as Kaipomo or Kato Pomo and were categorized by early ethnographers as a Pomo group; however, they are documented as more linguistically related to the Sinkyone to the north and Wailaki to the northeast (Powers 1877:150; Kroeber 1925:154). The Cahto dialect was considerably distinct from the Wailaki, and the two dialects may have been unintelligible (Myers 1978:244; Kroeber 1925:154).

Traditional Cahto houses were two-foot deep circular excavations with four posts set in a square to support the rafters that were covered with pine or spruce slabs, bark and sometimes mud. The door at the entrance was a narrow opening from the ground to the roof, which sloped to the rear. The living houses were usually inhabited by up to three families. Dances houses with a diameter of about 20 feet were constructed in larger villages. Ceremonies of the Cahto included the Acorn Dance, Feather Dance, and Necum Dance to which neighboring Tribes were often invited (Myers 1978:246).

Kroeber (1925:155) estimated that between 1,000 and 2,000 Cahto lived in this region in approximately 50 village sites in the early 1800s. Each of these villages were led and advised by patriarchal headman. Since most of their territory was covered with dense timber, it is believed that the majority of the Cahto population lived in permanent settlements where the towns of Laytonville, Branscomb, and Cahto are today (Myer 1978:244). Cahto villages are described by Barrett (1908:280-283; Map 1), Merriam (1976:129-132) and Kroeber (1925:154); see Table 1 and Figure 3.

Non-native settlement of northern Mendocino County was highly destructive of indigenous land-management practices and lifeways and replaced a subsistence economy with a monetary one. Social and cultural pressures from this settlement caused significant changes in how the original occupants of the land lived, undermining their ability to provide for themselves and their families and seriously degrading the quality of their lives. In response, many indigenous groups began to take down settler livestock to survive (Van Bueren 2012). Following conflict between indigenous populations and non-native settlers, the 25,000 acre Mendocino Indian Reservation was established in 1855 between the Noyo and Ten Mile Rivers. As this was the first reservation established in northwestern California, indigenous people throughout the northern part of the state were aggregated including greater Mendocino County and Anderson Valley, Ukiah, Round Valley, the Russian River, Sulphur Creek, Bodega Bay, Humboldt County, Pit River, Hat Creek, Butte Creek and the Feather River.

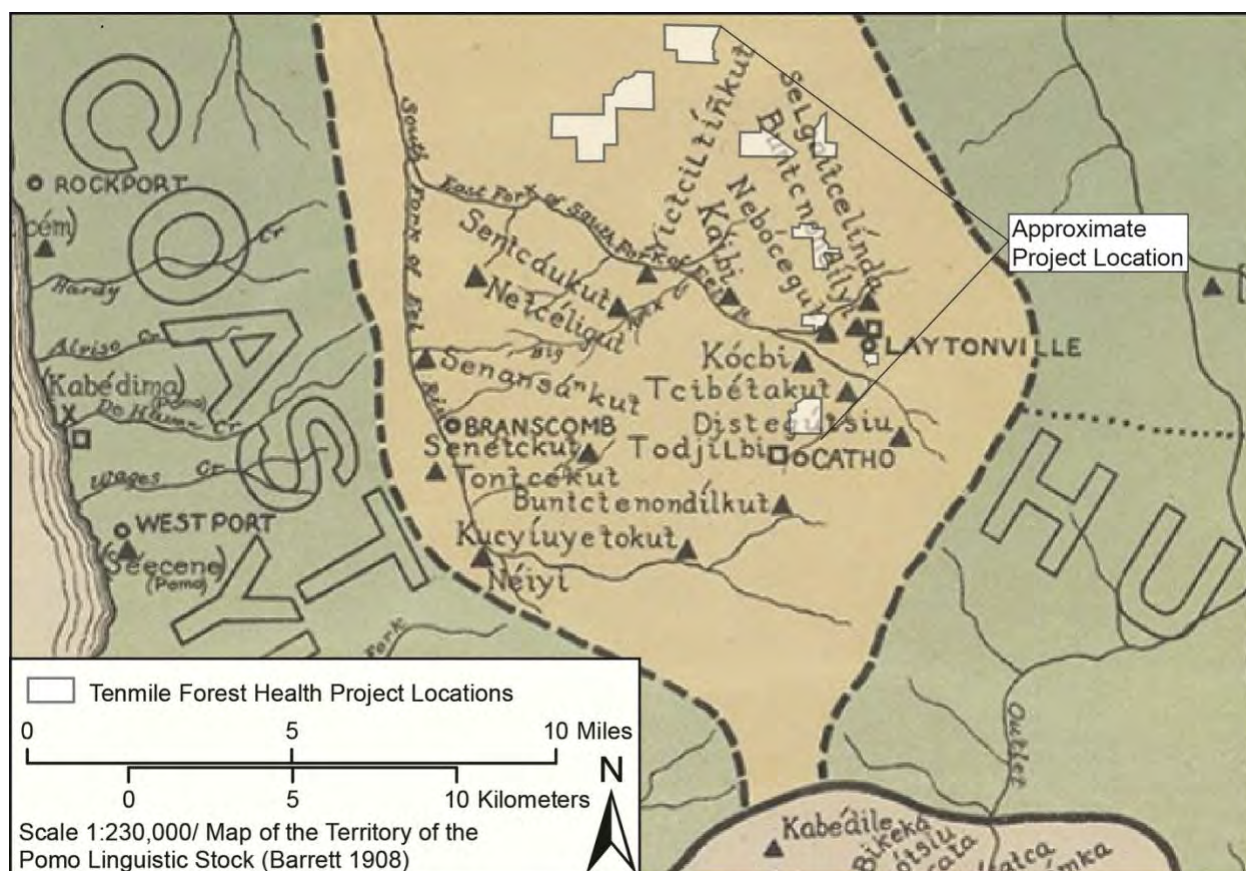
Despite the establishment of the Mendocino Indian Reservation, the Yuki, Pomo, and Cahto were subjected to systematic occupation of their lands, forced slavery, and attempted annihilation. These led to the Mendocino War in 1859 that nearly decimated the indigenous population. Establishment of the Round Valley Indian Reservation on March 30, 1870 did little to improve conditions at that time for the surviving Tribes.

In 1880, there were about 75 Cahto living near the town of Cahto “across what was called Rancheria Creek at the base of Cahto Mountain” (Mayo 1974:3). The Kelsey Census of 1906-1907 documents 24 individuals in 5 households living in Cahto and 26 individuals living in 6 households in Laytonville (Kelsey 1971:70). Many of the individuals listed were informants for ethnographers in the early 1900s, including Barrett, Goddard, and Kroeber (Heizer and Nissen 1973:6). Barrett noted four houses and 14 inhabitants at the village of Cahto and four houses with about 22 inhabitants at two locations near Laytonville (Barrett 1908:280; see Table 1 and Figure 3). The Laytonville Rancheria was purchased from missions by the Secretary of Interior in 1908 for 98 “landless Indians” and consists of 200 acres (Lipps-Michael 1920:12). Following non-native incursion into Cahto territory, the population was reduced to less than 500 people by the 1920s and was concentrated on the Laytonville and Round Valley Rancherias (Kroeber 1925:155).

Today, the federally recognized Cahto Tribe resides on or near the Laytonville Rancheria, with an enrollment of 131 in 2023 (IHBG 2023). For additional information on the Cahto Tribe, please refer to Barrett (1908:281-83, Map 1); Kroeber (1925); Goddard (1909, 1912); Merriam (1976); Myers (1978), and the Cahto Tribal website (cahtotribe-nsn.gov).

Table 1. Ethnohistoric villages in project vicinity (Barrett 1908; Merriam 1976).

Village	Description and Citation
Laytonville	There are two places near the town of Laytonville, one about a quarter of a mile north of the town and one about half a mile west. At the former, there are two houses and about twelve inhabitants, at the latter two houses and about ten inhabitants. Inhabited in 1907 documented by Barrett (1908:280).
tódji _l bi to zilbi	A point about half a mile west of the town of Cahto. This village consists of four houses and about fourteen inhabitants and stands on the site of the former old village of the same name. Inhabited in 1907 documented by Barrett (1908:280) and Kroeber (1925:154) on the west bank of the small creek running from Cahto into the east fork of the south fork of Eel River (Barrett 1908:282).
nebo'cegût nebosh-a-gut	On the Wilson ranch at a point about one mile west of Laytonville (Barrett 1908:282; Merriam 1976:130).
sei _l gaitceli'nda se=gi-che-lin-dah	About three hundred yards east of the house on the “old” John Reed ranch, about one mile north of Laytonville (Barrett 1908:282; Merriam 1976:131).
bûntcnondi'lyi buntch-non-del-ye bunch-non-de-li-e	Just northwest of Laytonville, a short distance from the place now [1907] occupied by the Indians near Laytonville (Barrett 1908:282; Merriam 1976:129).
che-pa-tah-kut	Present Kahto Rancheria (1920-1924) as noted by Merriam (1976:129).
tcibe'takût che-ba-tah-kut	About a mile southwest of the town of Laytonville and about half a mile up the creek which drains Cahto valley from its confluence with the east fork of Eel River (Barrett 1908:282).
distegû'tsiu dis-ta-gut-se-oo	On the western side of Long valley at a point about two miles south-southeast of Laytonville (Barrett 1908:282; Merriam 1976:129).
bûntctenondi'lkût buntch-te-non-dek-kut	On the north bank of the northern branch of the head of the south fork of Eel River at a point about a mile south-southwest of Cahto (Barrett 1908:282) on the north bank of north branch of head of South Fork Eel River (Merriam 1976:129).
ko'cbi kosh-be	About a mile and a half west-southwest of the Laytonville on the southwest bank of the east fork of the south fork of Eel River (Barrett 1908:282; Merriam 1976:130).



7.0 HISTORIC PERIOD OVERVIEW

The Mendocino coast may have been visited by non-native explorers for several centuries before any settlement began. The Russians began exploring and taking advantage of the abundant resources of the coastal area as early as 1803; building and occupying Fort Ross from 1817 to 1842. The Pomo had contact with these explorers most strongly evidenced by salvaged material from shipwrecks found in Pomo sites (Layton 1986). This early contact did not extend beyond the coast to the inland areas of Mendocino County and the project vicinity.

The demand for lumber initiated by the Gold Rush of 1849 saw the first widespread settlement of the region. The virgin forests of coastal California offered some of the readily accessible timber in the state. The first lumber mill in the county was built on Big River near the town of Mendocino around 1851 (Holmes and Lawson 1996; Palmer 1880). Perhaps the first non-native incursion into Cahto territory was Redick McKee's Treaty expedition in 1851, reported in the journal of George Gibbs, who recorded several villages in the Willits area (Heizer 1972:119-121).

Mendocino County was one of California's original 27 counties, created in 1850 by the State Legislature. Because of its small population, Mendocino County was administered by the government of Sonoma County until 1859, when the government was established in a small building on Main Street in Ukiah (Palmer 1880). Due to its relative geographic isolation, non-native settlement in the Laytonville area evolved more slowly. The open valleys suitable for agriculture and ranching and the timber to west eventually drew settlers to the area.

The town of Cahto was located approximately 3 miles southwest of Laytonville on the stagecoach route originally named the Cahto to Camp Grant Trail between Willits, Westport, and Covelo that later connected Eureka to Cloverdale (Mayo 1974:1, 2; Kemp 2020). John P. Simpson and Robert White drained the Cahto Valley by plowing a furrow at the south end of the valley that has washed out into a deep gorge (Mayo 1974:2). They founded the town of Cahto in 1856 with a hotel in 1861 and a store in 1865 (Palmer 1880). The post office operated from 1863 to 1901. The old townsite of Cahto was located on the C.M. Winchester ranch and is now on private property.

The town of Laytonville was founded by Frank B. Layton, who had originally opened a blacksmith business in Cahto, which was a thriving town in the 1860s (Mayo 1974:1). Layton moved his blacksmith shop and residence to Laytonville in 1874 and was soon followed by other business, leaving Cahto. The first post office in Laytonville was established in 1880 followed by the store opened by Viers and Remington (Mayo 1974:1; Figure 9). Fires repeatedly plagued the community from 1181 through 1908 resulting in tremendous losses of homes and business. In 1883, Layton moved his business from the town named after him to Hopland and later Ukiah.

The unincorporated community of Branscomb was founded by Benjamin Franklin Branscomb. He arrived in Jackson Valley in 1880 with his wife Mary Jane Taylor and ten children. Together they established a homestead on 160 acres of land. Branscomb helped found the first school. As more people arrived and settled in the area, Branscomb converted his home into a hotel, established a small grocery store, meat market, and livery stable. The post office first opened in 1894 with Branscomb as the Post Master. Branscomb died in 1921, and the property transferred to his son John Branscomb. Through the mid-20th century, the tremendous timber resources of the area were exploited primarily for redwood shingles and shake (Holmes and Lawson 1996).

The 1860 and 1902 GLO plat maps for the project areas (Figures 9 and 10) show that wagon roads run through the Black Oak Ranch and Varnhagen parcels; however, these are Phase 2 Planning Parcels and were not surveyed during the current investigation (Figure 9). The Fox Creek Road Segment was

identified during the survey on the Lower Tenmile Phase 1 Implementation Parcel and recorded on DPR forms (Appendix C).

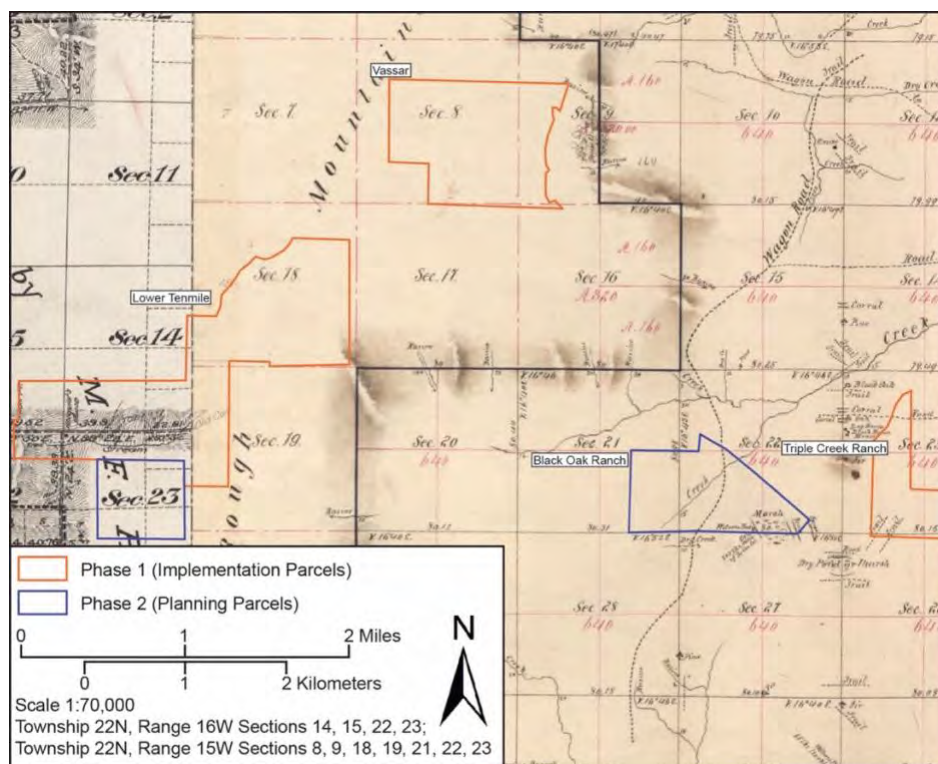


Figure 9. Portion of 1902 (west) and 1860 (east) GLO Plat Maps for the northern Project Areas.

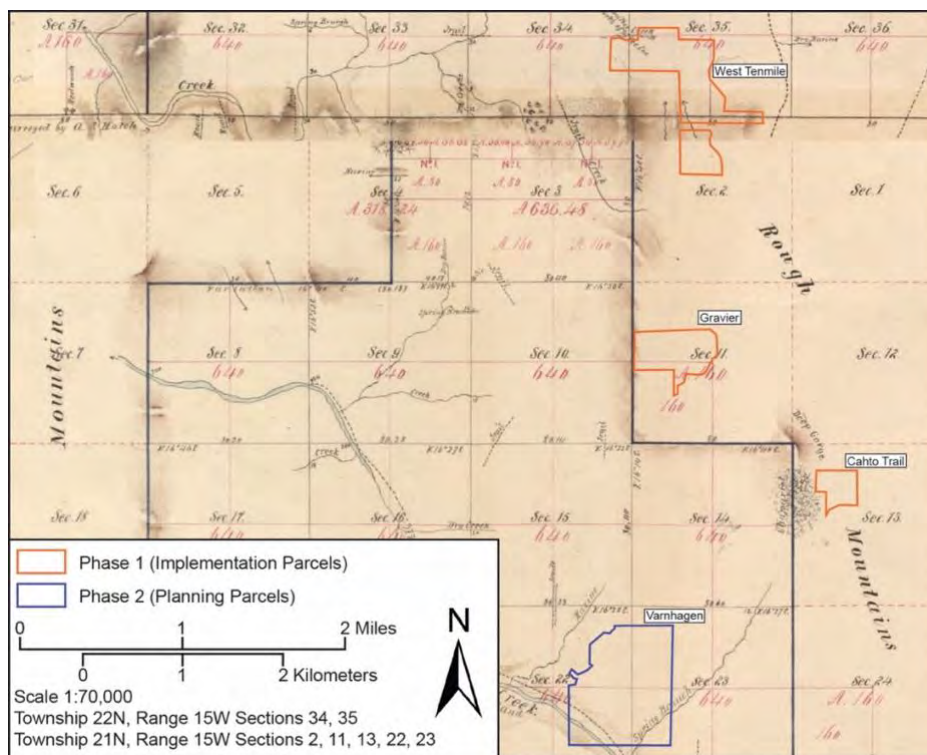


Figure 10. Portion of 1860 GLO Plat Map for the southern Project Areas.

8.0 METHODS AND RESULTS

8.1 Background Archival Research

Background research for the proposed project included an examination of the site records and reports on file at the California Historical Resources Information System's regional Northwest Information Center (NWIC) in Rohnert Park, California. Melinda Salisbury B.A. conducted a record search of the Phase 1 Implementation Parcels and Phase 2 Planning Parcels on December 14, 2023 (IC File #23-0822). The results of this search are presented in Appendix A.

The record search did not include a portion of the Cahto Ranch Phase 2 Planning Parcels nor the areas to the west, east and south of the Varnhagen parcel (APN 014-411-009) that were added to the Cahto Ranch portion of the planning project after January 2024. Prior to the implementation of the project within the Cahto Ranch, an addendum record search shall be performed at the NWIC.

The objectives of the record search were to: 1) determine if any resources have been recorded within the project areas or within 0.5 miles of the project areas and 2) to review reports that either included the project areas or were conducted within 0.5 miles of the project areas. The following inventories were reviewed: the National Register of Historic Places (NRHP), the California Register of Historical Resources, the Office of Historic Preservation Built Environment Resources Directory and the Caltrans Bridge Survey. Following completion of this archaeological study, a copy of this report will be filed with the NWIC.

The NWIC records search revealed four previously recorded archaeological sites and historic-era features within the Phase 1 Parcels and two archaeological sites within the Phase 2 Planning Parcels. Sites identified within the Phase 1 Parcels include one built-environment historic-era feature, a rock wall (Triple Creek Ranch APN 013-570-059), one Native American archaeological site, one multi-component archaeological site (Cahto Trail APN 014-260-032) and one Native American isolated artifact (Lower Tenmile APN 013-560-060). Two Native American archaeological sites have been previously identified within the Phase 2 Planning Parcels (Black Oak Ranch APN 013-560-047). None of these resources have been evaluated for CRHR eligibility.

6.1.1 Lower Tenmile NWIC Record Search Results

Three previous investigations have included portions of the Lower Tenmile project area (Table 2). In 1998, Neri (S-020676 and S-020676a) conducted an archaeological survey and THP review that encompassed small portions of APNs 013-560-060, 013-560-055 and 013-560-049. As a result, Neri (1998 and 1998a) documented three resources within 0.5 miles of the Lower Tenmile project area (Table 3), one of which is within project parcel APN 013-560-060 (P-23-003382). Site P-23-003382 is an isolated Franciscan chert biface/ projectile point base fragment found in the Gravel Bar of Tenmile Creek, and is documented outside the currently proposed treatment area. In 2014 Whatford conducted a large cultural resources study for a fire complex. This study encompasses a small portion of project parcel APN 013-510-049, but did not report the presence of any resources located within 0.5 miles of the current project.

No other investigations or resources are documented within 0.5 miles of the Lower Tenmile project area or within the planning parcel that is directly south (APN 013-510-046).

Table 2. Cultural resources investigations conducted within the Lower Tenmile Project Area and APN 013-510-046 planning parcel.

Report Number	Report Title	Author/ Date	Associated Resources	Associated Project Parcel(s)
S-020676	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Tenmile THP, 1-98-162 MEN	Max A. Neri 1998	P-23-003380 P-23-003381 P-23-003382	013-560-060 013-560-055 013-560-049
S-020676a	Archaeological Review of THP #1-98-162 MEN (Tenmile) (letter report)	Max A. Neri 1998	P-23-003380 P-23-003381 P-23-003382	013-560-060 013-560-055 013-560-049
S-045632	Cultural Resource Narrative for the Lodge Lightning Complex, CA-MEU-007202, Mendocino County, California (letter report)	J. Charles Whatford 2014	30 Resources, all located more than 0.5 miles from the Lower Tenmile project area	013-510-049

Table 3. Cultural Resources documented in and Adjacent to the Lower Tenmile Project Area and APN 013-510-046 planning parcel.

Number/ Trinomial	Site Description	Recording Date(s)	Distance from Project Area
P-23-003380	Multi-component site with a Native American habitation site and a historic era habitation site and mill.	1998 Max Neri	0.01 miles (20 meters) north west of APN 013-560-060
P-23-003381	A sparse to medium density lithic scatter.	1998 Max Neri	0.14 miles (220 meters) north of APN 013-560-060
P-23-003382	A Franciscan chert biface/ projectile point base fragment found in the Gravel Bar of Tenmile Creek.	1998 Max Neri	In 013-560-060, 67 meters north of the treatment area.

6.1.2 Vassar NWIC Record Search Results

Four previous investigations have included portions of the Vassar project area (Table 4) and no resources have been documented in the project area or within 0.5 miles of the project area. In 2008 three studies were conducted for proposed drainage system repairs on Highway 101 from Willits to Legget. These included an historic property survey (Wulf 2008, S-034425), an archaeological survey (Wulf 2008, S-034425) and a literature search (Fine 2008, S-034425b). These studies encompassed a small portion of project parcel APN 013-540-052, but did not report the presence of any resources. In 2014 Whatford conducted a large cultural resources study for a fire complex. This study encompasses a small portion of project parcel APN 013-540-013, but did not report the presence of any resources located within 0.5 miles of the current project.

Five other investigations have been conducted within 0.5 miles of, but outlying the Vassar project area (Appendix A).

Table 4. Cultural resources investigations conducted within the Vassar Project Area.

Report Number	Report Title	Author/ Date	Associated Resources	Associated Project Parcel(s)
S-034425	Historic Property Survey Report for the Proposed Drainage System Repairs at 36 Locations on Highway 101 from Willits to Leggett, Mendocino County, California, 01-MEN-101 KP 74.4/136.0 (PM 46.2/84.5). EA 01-40280	Erick Wulf 2008	None	013-540-052
S-034425a	Archaeological Survey Report for the Proposed Drainage System Repairs at 36 Locations on Highway 101 from Willits to Leggett, Mendocino County, California, 01-MEN-101 KP 74.4/136.0 (PM 46.2/84.5) EA 01-40280	Erick Wulf 2008	None	013-540-052
S-034425b	Culvert Rehabilitation Project on U.S. Highway 101 in Mendocino County, California	Joan Fine 2008	None	013-540-052
S-045632	Cultural Resource Narrative for the Lodge Lightning Complex, CA-MEU-007202, Mendocino County, California (letter report)	J. Charles Whatford 2014	30 Resources, all located more than 0.5 miles from the Vassar project area	013-540-013

6.1.3 Triple Creek Ranch NWIC Record Search Results

Four previous investigations have included portions of the Triple Creek Ranch project area (Table 5) and one resource has been documented in the project area. In 1999, Edwards (S-029778) conducted an archaeological survey for timber operations that encompassed the entirety of APN 019-570-59. Edwards (1999) documented six resources as a result of his investigation, however only one is located adjacent to the Triple Creek Ranch project area. This resource is a rock wall (P-23-003515) located along the south eastern boundary of APN 019-570-59 (Table 6). All other resources documented by Edwards (1999) are located more than 0.5 miles from the Triple Creek Ranch project area. Three other investigations covered small areas within APN 019-570-59, however no resources were identified in the Triple Creek Ranch project area or within 0.5 miles as a result.

Seven other investigations have been conducted within 0.5 miles of, but outlying the Triple Creek Ranch project area (Appendix A).

Table 5. Cultural resources investigations conducted within the Triple Creek Ranch Project Area.

Report Number	Report Title	Author/ Date	Associated Resources	Associated Project Parcel(s)
S-029778	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Mitchell NTMP, 1-99NTMP-008 MEN	Glenn T. Edwards 1999	6 resources, only one is within the 0.5 mile buffer: P-23-003515	019-570-59

Table 5. Cultural resources investigations conducted within the Triple Creek Ranch Project Area.

Report Number	Report Title	Author/ Date	Associated Resources	Associated Project Parcel(s)
S-035118	Cultural Resources Constraints Study for the Replacement of 42 Poles on the Garberville-Laytonville 60 kV Transmission Line, Mendocino County, CA	PAR Environmental Services, Inc. 2008	6 resources, all located more than 0.5 miles from the Triple Creek Ranch project area	019-570-59
S-039470	Archaeological Survey Report and Buried Site Sensitivity Study for the Garberville to Laytonville Transmission Line Project, Humboldt and Mendocino Counties, California	Chris Kimsey, Jennifer Thomas, Adrian R. Whitaker, and Philip Kaijankoski 2011	9 Resources, all located more than 0.5 miles from the Triple Creek ranch project area	019-570-59
S-039470a	CPUC Complaint Project, Garberville-Laytonville 60KV- Cultural Resource Investigations (letter report)	Adrian Whitaker 2011	9 resources, all located more than 0.5 miles from the Triple Creek Ranch project area	019-570-59

Table 6. Cultural Resources documented in and Adjacent to the Triple Creek Ranch Project Area.

P Number/ Trinomial	Site Description	Recording Date(s)	Distance from Project Area
P-23-003515	Rock Wall	1998 Greg Checkal	Located adjacent to the treatment area in the south east corner of APN 013-570-059

6.1.4 Black Oak Ranch (Planning Parcels) NWIC Record Search Results

Three previous investigations have included portions of the Black Oak Ranch project area (Table 7). In 2004, Angeloff et. al. (S-028787) reported the results of a cultural resources investigation for a stream restoration project located within both parcels that comprise the Black Oak Ranch project area (APNs 013-560-047 and 013-570-048). Angeloff et. al. (2004) documented one previously identified (P-23-000531) and one newly identified (P-23-003941) Native American archaeological site within APN 013-560-047. Investigations in 2010 by Steele and Roscoe (S-037544) and in 2016 by McCann (S-050059) found no resources as a result.

Nine other investigations have been conducted within 0.5 miles of, but outlying the Black Oak Ranch project area (Appendix A). Collectively, these investigations resulted in the identification of two Native American archaeological sites located within 0.5 miles of, but outlying the Black Oak Ranch project area (Table 8). One of these resources, P-23-001021, is documented just 0.02 miles (approximately 32 meters) north of APN 013-570-048. The other resource, P-23-000530, is documented 0.14 miles (approximately 225 meters) north of APN 013-560-047.

Table 7. Cultural resources investigations conducted within the Black Oak Ranch Project Area.

Report Number	Report Title	Author/ Date	Associated Resources	Associated Project Parcel(s)
S-028787	A Cultural Resources Investigation of the Streeter/Tenmile Creeks Restoration Project, located in Mendocino, California, DF&G #224-R3	Nick Angeloff, Bethaney Weber, and James Roscoe 2004	P-23-000531 P-23-003941	013-560-047 013-570-048

Table 7. Cultural resources investigations conducted within the Black Oak Ranch Project Area.

Report Number	Report Title	Author/ Date	Associated Resources	Associated Project Parcel(s)
S-037544	A Cultural Resources Investigation of the Tenmile Creek Habitat Enhancement and Riparian Revegetation Project located in Mendocino County, California. California Department of Fish and Game Project # R1-162	Matthew Steele and James Roscoe 2010	None	013-570-048
S-050059	Cultural Resources Survey Report for NRCS Project #15FY23-0017: Engber Forest Stand Improvement Project, Mendocino County, California	Robert McCann 2016	None	013-560-047 013-570-048

Table 8. Cultural Resources documented in and adjacent to the Black Oak Ranch Project Area.

P Number/ Trinomial	Site Description	Recording Date(s)	Distance from Project Area
P-23-000530/ CA-MEN-0579	Large midden deposit	1963 Dotta and Moore	0.14 miles (225.3 meters) north of APN 013-560-047
P-23-000531/ CA-MEN-0580	A midden with small stemmed obsidian projectile points	1963 Dotta and Moore 2003 Nick Angeloff	Located in APN 013-560-047
P-23-001021/ CA-MEN-1092	Lithic scatter	1976 Flynn and Roop 1986 Barry Douglas 2001 L. Compas, J. Burton and T. Bakic	0.02 miles (32.2 meters) north of APN 013-570-048
P-23-003941/ CA-MEN-3186	Lithic scatter	2003 Nick Angeloff and Cameron Williams	Located in APN 013-560-047

6.1.5 West Tenmile NWIC Record Search Results

Two previous investigations have included portions of the West Tenmile project area (Table 9) and no resources have been documented in the project area. In 1990, Flaherty (S-011692) conducted an archaeological survey that encompassed small portions of APNs 014-460-003, 014-460-005 and 014-460-006. This was a large study that included 693 discontinuous acres throughout the Laytonville area. Flaherty (1990) did document two resources as a result of his investigation, however neither is located within the West Tenmile project area or within 0.5 miles. In 2010 Steele and Roscoe conducted a cultural resources investigation for a Habitat Enhancement and Riparian Revegetation along the boundary that separates APNs 013-790-020 and 013-200-071 (S-037544). No resources were identified as a result of the Steele and Roscoe (2010) investigation.

Thirty-one other investigations have been conducted within 0.5 miles of, but outlying the West Tenmile project area (Appendix A). Collectively, these investigations resulted in the identification of three Native

American archaeological sites and one isolated artifact located within 0.5 miles of, but outlying the West Tenmile project area (Table 10). All of these resources are documented more than 0.17 miles (approximately 274 meters) from the project.

Table 9. Cultural resources investigations conducted within the West Tenmile Project Area.

Report Number	Report Title	Author/ Date	Associated Resources	Associated Project Parcel(s)
S-011692	An Archaeological Survey of 693 Acres near Laytonville, Mendocino County, California (letter report)	Jay M. Flaherty 1990	2 resources , both located more than 0.5 miles from the West Tenmile project area	014-460-003 014-460-005 014-460-006
S-037544	A Cultural Resources Investigation of the Tenmile Creek Habitat Enhancement and Riparian Revegetation Project located in Mendocino County, California. California Department of Fish and Game Project # R1-162	Matthew Steele and James Roscoe 2010	None	013-790-020 013-200-071

Table 10. Cultural Resources documented in and Adjacent to the West Tenmile Project Area.

P Number/ Trinomial	Site Description	Recording Date(s)	Distance from Project Area
P-23-001271/ CA-MEN-1376	Lithic Scatter	1978 M. R. Clark and S. F. Slater	0.5 miles (804.7 meters) east of APN 013-200-071
P-23-002730/ CA-MEN-2970	Lithic Scatter	1991 M. Byars and R.W. Duddles 2000 Max Neri	0.21 miles (338 meters) west of APN 014-460-006
P-23-003477	Isolated biface and two chert flakes	2000 V.Beard	0.26 miles (418.4 meters) southeast of APN 014-460-006
P-23-006443/ CA-MEN-3873	lithic scatter of chert flaking debris, flake stone tools, and groundstone tools	2020 Alex DeGeorgey, Brianna Byrd	0.17 miles (273.6 meters) northeast of APN 013-790-005

6.1.6 Gravier NWIC Record Search Results

Three previous investigations have included portions of the Gravier project area (Table 11). In 1990, Flaherty (S-011692) conducted an archaeological survey that encompassed small portions of APNs 014-500-039 and 014-500-040. This was a large study that included 693 discontinuous acres throughout the Laytonville area. Flaherty (1990) did document two resources, however neither is located within the Gravier project area or within 0.5 miles. In 1998 Geiger conducted an archaeological investigation for timber operations along the southern border of APN 014-500-039 (S-021382). Jenkins (1998) conducted a record search for the same timber operations (S-021382a). Neither of these investigations identified any resources as a result.

Twenty-five other investigations have been conducted within 0.5 miles of, but outlying the Gravier project area (Appendix A). Collectively, these investigations resulted in the identification of fourteen Native American archaeological sites, one isolated artifact and one multi-component site located within 0.5 miles of, but outlying the Gravier project area (Table 12). The closest site to the project area is described as a lithic scatter with ground stone, located 0.04 miles (approximately 64 meters) north of APN 014-500-039.

All other resources are documented at least 0.10 miles (approximately 161 meters) from the project and most are over 0.25 miles from the project.

Table 11. Cultural resources investigations conducted within the Gravier Project Area.

Report Number	Report Title	Author/ Date	Associated Resources	Associated Project Parcel(s)
S-011692	An Archaeological Survey of 693 Acres near Laytonville, Mendocino County, California (letter report)	Jay M. Flaherty 1990	2 resources, both located more than 0.5 miles from the Gravier project area	014-500-039 014-500-040
S-021382	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Geiger Ranch THP, 1-98-402 MEN (California Department of Forestry)	Erik Geiger 1998	None	014-500-039
S-021382a	5400 Forest Practice Regulation THP 1-98-402 MEN, T.21N R. 15W S.11 MDM, Records Search No: 98-THP-11 (HW)	Richard S. Jenkins 1998	None	014-500-039

Table 12. Cultural Resources documented in and Adjacent to the Garvier Project Area.

P Number/ Trinomial	Site Description	Recording Date(s)	Distance from Project Area
P-23-001005/ CA-MEN-1076/H	Historic-era Wilson Homestead and Native American Rancheria with a cemetery and pre-contact era site.	1975 R. King	0.26 miles (418.4 meters) west of APN 014-500-040
P-23-001878/ CA-MEN-2118	Native American Habitation site with a lithic scatter and animal bone	1987 Mark Gary; Deborah McLearn; Tim Huff; JoAnn	0.28 miles (450.6 meters) west of APN 014-500-040
P-23-002751	Lithic scatter	1991 D. Livingston and E. Walker	0.40 miles (643.7 meters) northwest of APN 014-500-037
P-23-002755	Lithic scatter	1991 D. Livingston and E. Walker	0.37 miles (595.5 meters) northwest of APN 014-500-037
P-23-002756/ CA-MEN-2983	Lithic scatter	1991 D. Livingston and E. Walker	0.30 miles (482.8 meters) northwest of APN 014-500-037
P-23-002758	Lithic scatter	1991 M. Byars and R.W. Duddles 2000 Max Neri	0.27 miles (434.5 meters) north of APN 014-500-039
P-23-002759	Lithic scatter	1991 R.W. Duddles and D. Livingstone	0.36 miles (579.4 meters) northwest of APN 014-500-037
P-23-002760	Lithic scatter	1991 M. Byars and R.W. Duddles 2000 Max Neri	0.44 miles (708.1 meters) northwest of APN 014-500-037

P Number/ Trinomial	Site Description	Recording Date(s)	Distance from Project Area
P-23-002761/ CA-MEN-3861/H	Lithic scatter	1991 M. Jablonowski, D. Livingstone and E. Walker	0.43 miles (692 meters) northwest of APN 014-500-037
P-23-002762	Lithic scatter	1991 R.W. Duddles and M. Byars	0.32 miles (515 meters) north west of APN 014-500-037
P-23-002763/ CA-MEN-2985/H	Chert debitage from Bauer Road Quarry with historic-era and modern fill material (glass, ceramic, metal porcelain doll fragments)	1991 D. Livingston and E. Walker	0.22 miles (354.1 meters) west of APN 014-500-037
P-23-002764	Native American chert quarry	1991 R.W. Duddles, M. Byars, M. Jablonowski and K. Zahniser	0.10 miles (160.9 meters) west of APN 014-500-037
P-23-002765	Sparse lithic scatter	1991 R.W. Duddles and M. Byars 2000 Max Neri 1997 Maria Ribeiro	0.20 miles (321.9 meters) north of APN 014-500-039
P-23-002777/ CA-MEN-2992	Lithic scatter with groundstone	1991 M. Jablonowski and K. Zahniser 2000 Max Neri 1993 Vicki Beard 1997 Maria Ribeiro	0.04 miles (64.4 meters) north of APN 014-500-039
P-23-003940	Isolated red chert flake artifact	2004 Angeloff and Roscoe	0.26 miles (418.4 meters) north of APN 014-500-037
P-23-004486/ CA-MEN-3377	Sparse lithic scatter	2007 James E. Little	0.38 miles (611.6 meters) northeast of APN 014-500-040

6.1.7 Cahto Trail NWIC Record Search Results

Two previous investigations have included portions of the Cahto Trail project area (Table 13). In 1977, Offermann and Fredrickson (S-000537) conducted an archaeological survey that encompasses the entire Cahto Trail project area. Offermann and Fredrickson (1977) identified two resources in APN 014-260-032 (P-23-00001046 and P-23-001059). One of these sites P-23-00001046 is a Multi-component site with a lithic scatter and historic-era refuse scatter located just west of the proposed treatment area. P-23-001059 is a lithic scatter located along the southern edge of the parcel within the proposed treatment area. Thad VanBuren surveyed a small area along the western boundary of APN 014-260-022 in 2001 but found no resources as a result. Twenty-four other investigations have been conducted within 0.5 miles of, but outlying the Cahto Trail project area (Appendix A). Collectively, these investigations resulted in the identification of five Native American archaeological sites located within 0.5 miles of, but outlying the Cahto Trail project Area (Table 14). This parcel was added to the project after the survey was completed.

Table 13. Cultural resources investigations conducted within the Cahto Trail Project Area.

Report Number	Report Title	Author/ Date	Results	Associated Project Parcel(s)
S-000537	An Archaeological Survey of 285 Acres Located Southwest of Laytonville, California.	Janis K. Offermann and David A. Fredrickson 1977	P-23-001046 P-23-001059	014-260-021 014-260-022 014-260-032
S-024424	Archaeological Survey for a Minor Subdivision of the Musgrave Property near Laytonville, Mendocino County, California	Thad Van Bueren 2001	None	014-260-022

Table 14. Cultural Resources documented in and Adjacent to the Cahto Trail Project Area.

P Number/ Trinomial	Site Description	Recording Date(s)	Distance from Project Area
P-23-000490/ CA-MEN-498	Midden Site	1951 R.J.S.	0.18 miles (290 meters) southeast of APN 014-260-032
P-23-001003/ CA-MEN-1073	Lithic Scatter	1976 David A. Fredrickson	0.47 miles (756.4 meters) southwest of APN 014-260-032
P-23-001046/ CA-MEN-1125/H	Multi-component site with a lithic scatter and historic-era refuse scatter	1977 Offermann	In APN 014-260-032, just west of the treatment area
P-23-001059/ CA-MEN-1153	Lithic Scatter with formed tools	1977 J. Milburn	In APN 014-260-032, at the southern edge of the treatment area.
P-23-001227/ CA-MEN-1332	Lithic Scatter with formed tools	1977 C. Kielusiak; G. Greenway	0.49 miles (788.6 meters) southwest of APN 014-260-032
P-23-005330	Buried midden deposit found in the bank of Tenmile Creek	2011 Far Western Anthropological Research Group	0.17 miles (273.6 meters) north of APN 014-260-021
P-23-005923/ CA-MEN-3760	very low-density, very low-diversity chert flaked stone scatter	2016 G. White	0.42 miles (675.9 meters) southwest of APN 014-260-032

6.1.8 Varnhagen (Planning Parcel) NWIC Record Search Results

No previous investigations have included the Varnhagen Parcel (APN 014-411-009) and no resources have been documented within the parcel. Two resources have been documented within 0.5 miles of the parcel (Table 15). These two resources include a multi-component archaeological site documented 0.08 miles north of the parcel and a Native American habitation site documented 0.44 miles west of the site. Nineteen investigations within 0.5 miles but outlying the parcel (Appendix A).

Table 15. Cultural Resources documented in and Adjacent to the Varnhagen Project Area.

P Number/ Trinomial	Site Description	Recording Date(s)	Distance from Project Area
P-23-001880/ CA-MEN-2124/H	Multi-component site with midden, a lithic scatter and an historic-era stage coach stop	1987 Mark Gary, Dr. Thomas Layton, Deborah McLearn, Dwight Simond	0.08 miles (128.7 meters) north of APN 014-411-009
P-23-001974/ CA-MEN-2247	Native American habitation site with a large deposit of midden	1989 S.A. Waechter 1990 S.A. Waechter	0.44 miles (708.1 meters) west of APN 014-411-009

8.2 Correspondence with Native American Tribal Representatives

Based on knowledge of the project area and Tribal affiliations, Roscoe met with the Cahto Tribal Council to discuss project protocol and coordination on November 17, 2023. Verne Wilson, Tribal Monitor for the Cahto Tribe agreed to participate in the cultural study and guide the field survey.

RA contacted the Native American Heritage Commission (NAHC), in a letter on January 15, 2024, to request the results of a Sacred Lands File records (SLF) search and a list of Native American tribal representatives and interested individuals who should be contacted for more information. The NAHC responded on January 25, 2024, stating that the results of the SLF records search were negative however, this does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites. The NAHC attached a list of Native American Tribes who may also have knowledge of cultural resources in the project area. This list included representatives of the Cahto Tribe, Coyote Valley Band of Pomo Indians, Guidiville Rancheria of California, Hopland Band of Pomo Indians, Manchester Band of Pomo Indians of the Manchester Rancheria, Yokayo Tribe, Noyo River Indian Community, Pinoleville Pomo Nations, Potter Valley Tribe, Redwood Valley or Little River Band of Pomo Indians, Robinson Rancheria of Pomo Indians, Round Valley Reservation/Covelo Indian Community, and Sherwood Valley Rancheria of Pomo. Research Associate Melinda Salisbury sent letters to these representatives on behalf of Mr. Roscoe on February 5, 2024. These letters included a description of the activities used (e.g., mastication, chipping) and associated acreages, a map of the treatment area at a sufficient scale to indicate the spatial extent of activities, a request for information regarding potential impacts to cultural resources from the proposed treatment and a detailed description of where ground disturbance is expected. All Tribal notifications also included the information that representatives of the Cahto Tribe's Laytonville Rancheria are participating in the investigation and a tribal member is working with RA during the field surveys. Records of this correspondence is presented in Appendix B.

Valeria Stanley, THPO of the Sherwood Valley Tribe responded on February 5, 2024, via email that the Tribe would not be formally responding as the project area is not within their traditional territory and deferred to the Cahto Tribe.

8.3 Archaeological Field Survey Methods and Results

James Roscoe M.A. conducted the archaeological survey of the Treatment Areas in the Phase 1 Implementation Parcels on January 29, February 25 and 26, May 10 and 11, and June 3, 4, and 18, 2024. Mr. Roscoe was accompanied by Research Associates Jarrett Lowery, B.A., Matthew Bouffard, B.S., Mary Carlquist, B.A., Brian Amparan, B.A., Jacqueline Farrington, B.A., and Michael Roscoe, B.A. The crew was guided through the Project Area by Cahto Tribe representative, Verne Wilson of the Laytonville Rancheria. The field crew employed a mixed strategy survey, with intensive efforts focused on areas of high sensitivity and cursory efforts focused on areas of moderate to low sensitivity (steep slopes over 30%).

Historical resource sensitivity was determined based on the background research which indicated that Native American archaeological sites in the area are generally found on flats along the main river or on its important tributaries, and along ridgelines which were used as travel routes and gathering areas. Historic-era resources could include remnants of the homesteading and ranching activities that began here in the mid to late 1800's. These resources are typically found in the region along the river or on flat terraces close to water, as well as along established travel routes. Areas with slopes greater than 30% were generally omitted from the field survey, as these areas are unlikely to contain archaeological or historical sites that would qualify for listing on the CRHR. This resulted in identification of 346.7 acres that were deemed to be of greater than 30% slope and were excluded from pedestrian survey but were visually examined when possible, by at least one crew member. Approximately 68 acres of treatment area were not surveyed within the West Tenmile and Cahto Trail project areas. This was due to parcels being inaccessible or because treatment areas were not yet defined at the time of the survey.

The intensive field survey encompassed 626 of the Treatment Areas within the Phase 1 Implementation Parcels utilizing systematic parallel and zig-zag transect methods spaced between 10 and 20 meters apart (Figures 4 and 5). Surveyors also employed intuitive survey methods in areas with high sensitivity or where archaeological resources were encountered, covering 100% of the area in these vicinities. Survey Conditions in the project area were fair to good. The area had a mix of forested areas covered by leaf litter and one open meadow covered by dry grasses and shrubs. These efforts resulted in the identification of seven archaeological resources in the Phase 1 Implementation Parcel Treatment Areas: one isolated artifact, one historic-era road segment, three sparse lithic scatters, one chert quarry, and one pre-contact habitation site. (Table 16, Appendix C).

Previously Identified Sites located inside or Adjacent to the Proposed Treatment Areas in Phase 1 Implementation Parcels

P-23-003515 is a rock wall originally recorded in 1998 and located on the southeast boundary of a proposed treatment area on the Triple Creek Ranch APN 013-570-059 parcel. The site was not observed during the current investigation and is most likely aligned with the property boundary, just outside of the treatment area.

P-23-001059/CA-MEN-1153 is a lithic scatter with formed tools originally recorded in 1977. The site is located on the Cahto Trail APN 014-260-032 within a treatment area that was added to Phase 1 after the field survey had been completed. The site was not observed during the current investigation. RA recommends further field survey of the added Phase 1 treatment areas.

P-23-001046/CA-MEN/1125/H is a multi-component site with a lithic scatter and historic-era refuse scatter. The site is also located on the Cahto Trail APN 014-260-032 within a treatment area that was added to Phase 1 after the field survey had been completed. The site was not observed during the current investigation. RA recommends further field survey of the added Phase 1 treatment areas.

Table 16. Previously documented and newly identified Cultural Resources in the Project Phase 1 Parcels.

P Number/ Trinomial/	Site Description	Recording Date(s)	Associated Project Area and APN	Site Observed (Y/N)	Site in proposed treatment area (Y/N)	Eligibility
P-23-003515	Rock Wall	1998 Greg Checkal	Triple Creek Ranch APN 013-570-059	N	N, adjacent, but not inside treatment area	7R -Identified in Reconnaissance Level Survey: Not evaluated.
P-23-001046/ CA-MEN-1125/H	Multi-component site with a lithic scatter and historic-era refuse scatter	1977 Offermann	Cahto Trail APN 014-260-032	N- area not surveyed	Y, added after survey was completed	7R -Identified in Reconnaissance Level Survey: Not evaluated.
P-23-001059/ CA-MEN-1153	Lithic Scatter with formed tools	1977 J. Milburn	Cahto Trail APN 014-260-032	N- area not surveyed	Y, added after survey was completed	7R -Identified in Reconnaissance Level Survey: Not evaluated.
Fox Creek Road Segment	430 foot segment of former wagon road, shown on 1902 GLO	2024 J. Roscoe	Lower Tenmile APN 013-510-049	Y-site documented	Y	Recommended not eligible
Lower Tenmile Quarry Site	lithic scatter	2024 J. Roscoe	Lower Tenmile APN 013-560-055	Y-site documented	Y	Recommended Potentially eligible
Triple Creek Lithic Scatter	lithic scatter	2024 J. Roscoe	Triple Creek Ranch APN 013-570-059	Y-site documented	Y	Recommended not eligible
Gravier Isolate	Isolated artifact, chert tool	2024 J. Roscoe	Gravier APN 014-500-039	Y-site documented	Y	Categorically not eligible
Gravier Habitation Site	lithic scatter and midden	2024 J. Roscoe	Gravier APN 014-500-040	Y-site documented	Y	Recommended Potentially eligible
West Tenmile Lithic Scatter North	lithic scatter	2024 J. Roscoe	West Tenmile APN 013-790-027	Y-site documented	Y	Recommended not eligible
West Tenmile Lithic Scatter South	lithic scatter	2024 J. Roscoe	West Tenmile APN 013-790-028	Y-site documented	Y	Recommended not eligible

Newly Recorded Sites in the Phase 1 Implementation Parcel Treatment Areas in (Site Records in Appendix C)

Fox Creek Road Segment

A 420 foot east-west road segment was identified along the south side of Fox Creek. The segment is cut approximately 2 feet into the north facing slope above the creek and is 6 to 7 feet wide. The creek is approximately 100 feet down-slope from the road. A review of the GLO Map of Township 22N, Range 16W (Mt. Diablo B.M.) from 1902 indicates that this segment may have connected roads to the east and west. To the west of the identified road segment, an east to west road travels along the south side of Fox Creek, originating from Wilderness Lodge and the South Fork Eel River. The Fox Creek Road shown on the 1902 GLO map intersects with a north/ south road that ties in with Branscomb road to the south. To the east of the

identified road segment, is an east-west road that connects to a larger road that travels along Tenmile Creek, intersecting with US 101 (former wagon road), approximately 4 miles to the east. In 1902, this eastern road passed just south of Ahlquist's House (1902 GLO). Additional background research found no information about Ahlquist.

Gravier Habitation Site

This habitation site was identified along the north side of Little Case Creek and includes a large lithic scatter with approximately 50 chert flakes all in secondary and tertiary stages of reduction, bifacially worked flake tools, ground stone, a large hopper mortar and a hand-stone/ chopper. A loci of midden with locally darkened soil and a higher concentration of artifacts is present along the southern boundary of the site, just above (north of) the creek. The site measures approximately 115 meters north to south by 100 meters east to west. The midden area measures approximately 25 meters north to south by 75 meters east to west.

***Noted Find- Gravier Isolate**

A small chert bifacially worked flake tool was identified isolated, and no associated archaeological deposit was observed in the vicinity. The artifact measures 2.5cm by 3cm. The isolated artifact was noted but not recorded as it does not appear to be part of a nearby feature or archaeological site and is categorically ineligible for listing on the CRHR.

Lower Tenmile Quarry Site

A lithic scatter measuring approximately 72 meters north to south and 80 meters east to west was identified on the terrace just south of Tenmile Creek and an unnamed private road. The site is comprised of a mix of wooded and open meadow areas and contains approximately 30 lithic artifacts including primary, secondary and tertiary chert flakes as well as bifacially worked chert cobbles (cores). One bifacially worked flake tool was identified. A large rock outcrop at the north west corner of the site appears to be the source for the chert material. The primary concentration of lithic artifacts is in the north east corner of the site.

Triple Creek Lithic Scatter

This site contains a scatter of approximately 40 chert flakes found in a forested area east of a private road, on a ridge above Stapp Creek. Identified flakes were all in secondary and tertiary stages of reduction. One bifacially worked flake tool measuring 11.5cm by 3.5cm was also observed. This site measures approximately 75 meters north to south and 40 meters east to west. The site and vicinity have been heavily disturbed by previous historic activities and logging operations.

West Tenmile Lithic Scatter North

A small lithic scatter measuring approximately 12.5 meters north to south and 14 meters east to west was identified along the north side of Tenmile Creek Road on a terrace above the confluence of Tenmile Creek and an unnamed tributary. The confluence is approximately 130 meters north of the site. The site contains approximately eighteen chert flakes all in the tertiary stage of reduction, as well as two formed tool fragments. The two tool fragments are a red chert biface tip measuring 5cm long and 3cm at its widest point where it is broken and a grey/ green chert bifacially worked base that is ovular in shape and measures approximately 3cm in length and is 3.5 cm at its widest point. The site and vicinity have been heavily disturbed by previous historic activities and logging operations.

West Tenmile Lithic Scatter South

A lithic scatter measuring approximately 30 meters north to south and 24 meters east to west was identified in a wooded area along Tenmile Creek Road on a terrace above the confluence of Tenmile Creek and an unnamed tributary. The confluence is approximately 200 meters north east of the site. Approximately 20 chert flakes were observed in this location, all in secondary and tertiary stages of production. No formed tools were observed. The site and vicinity have been heavily disturbed by previous historic activities and logging operations.

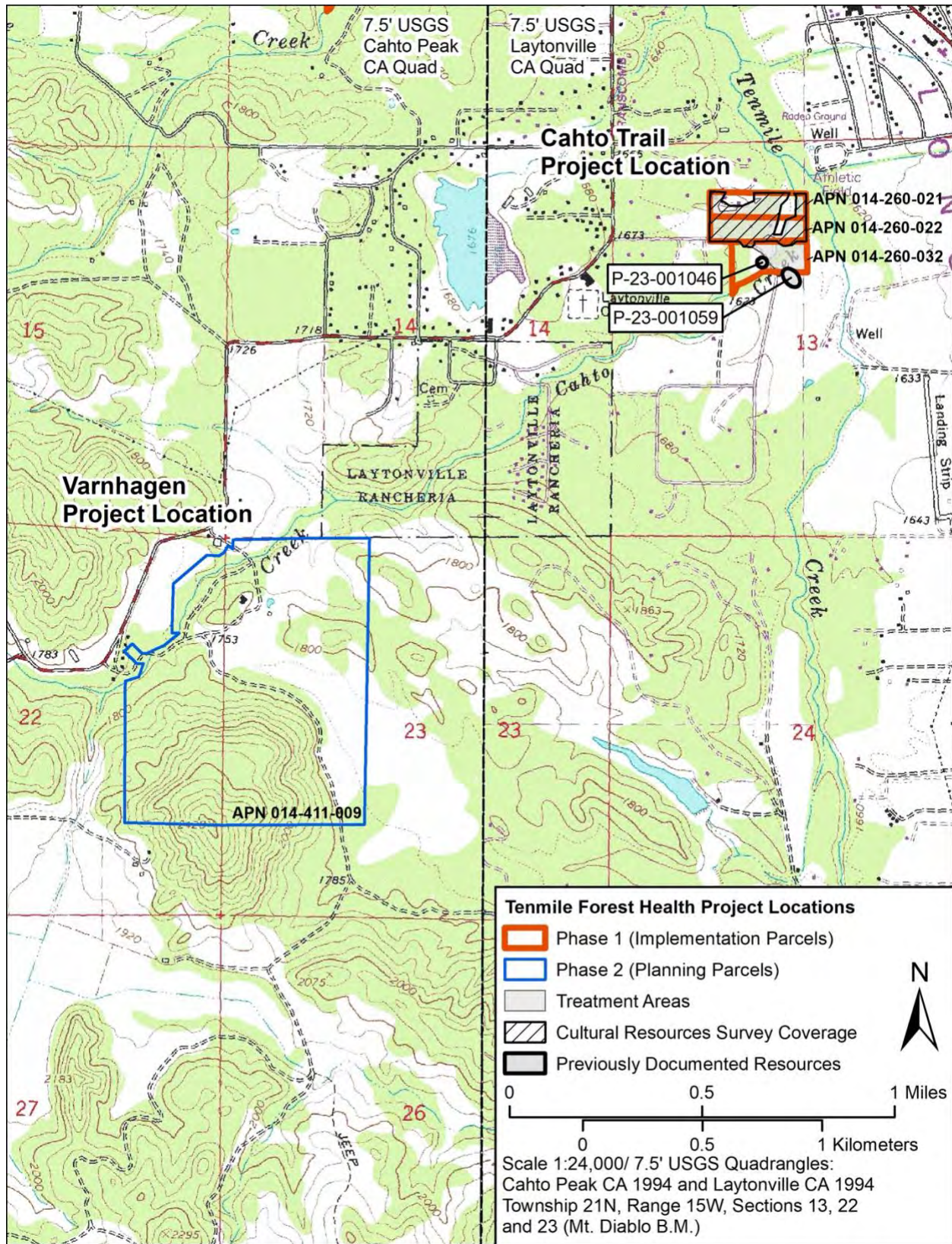
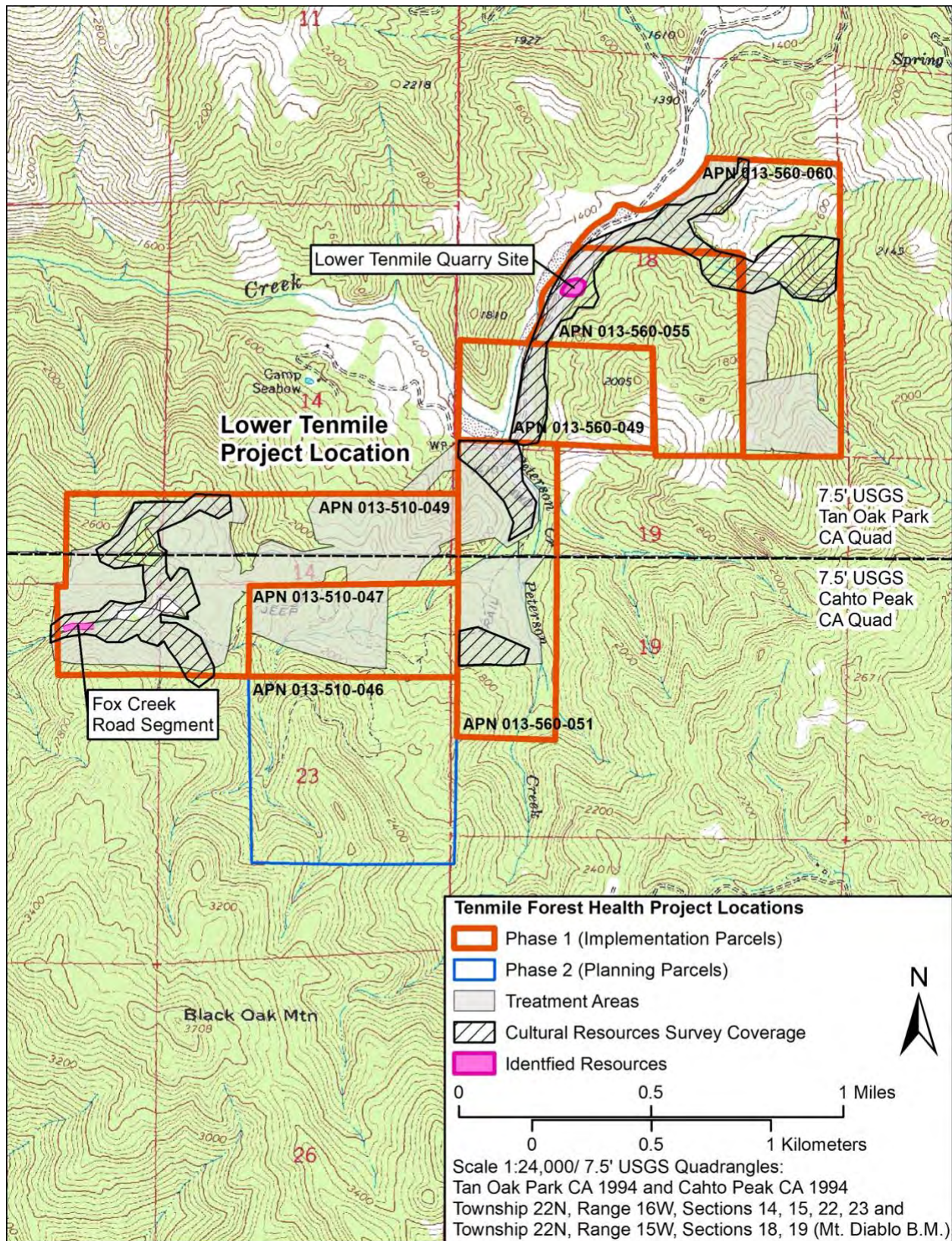


Figure 11. Cultural Resources Survey Coverage and Resource Location in the Cahto Trail and Varnhagen Parcels.



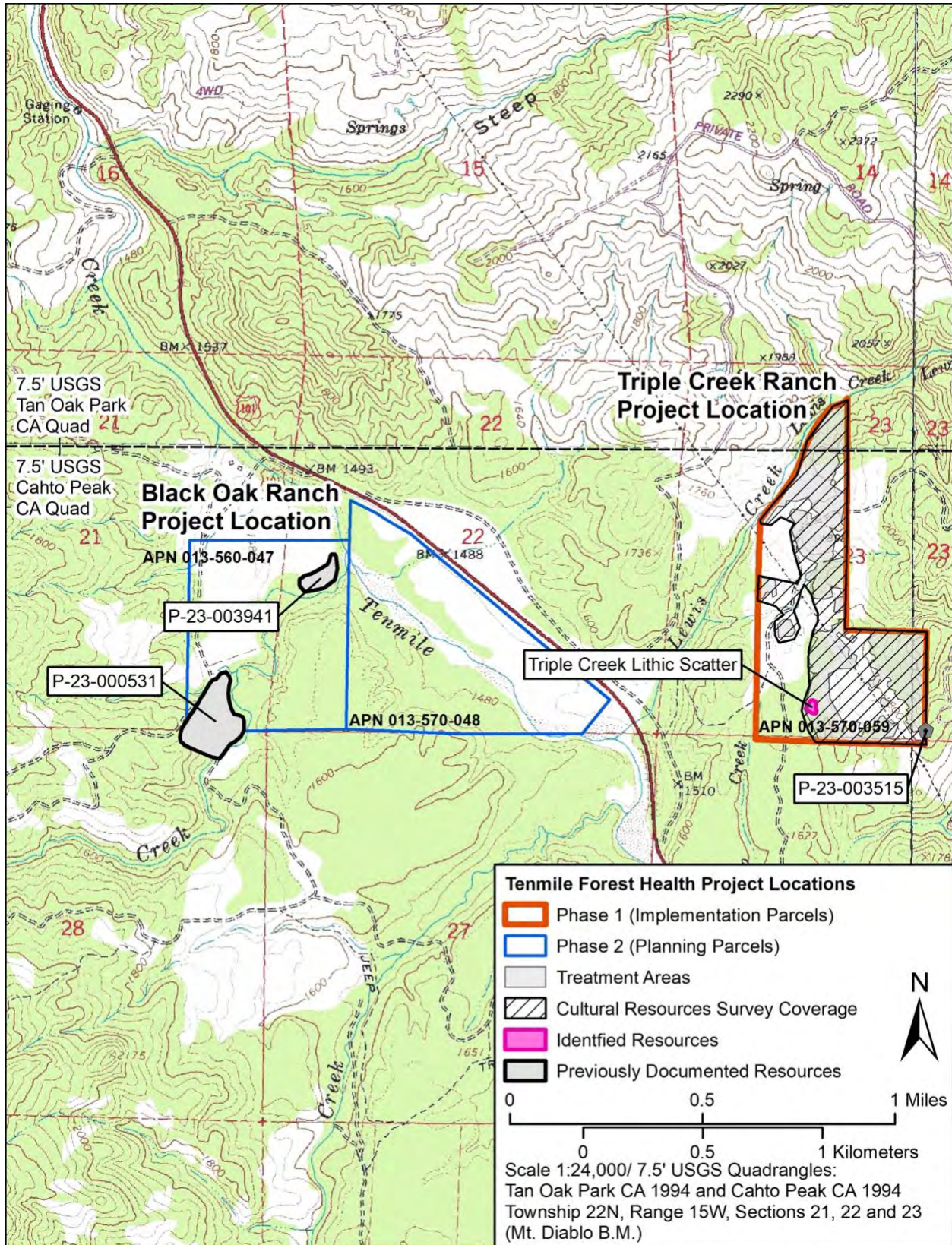
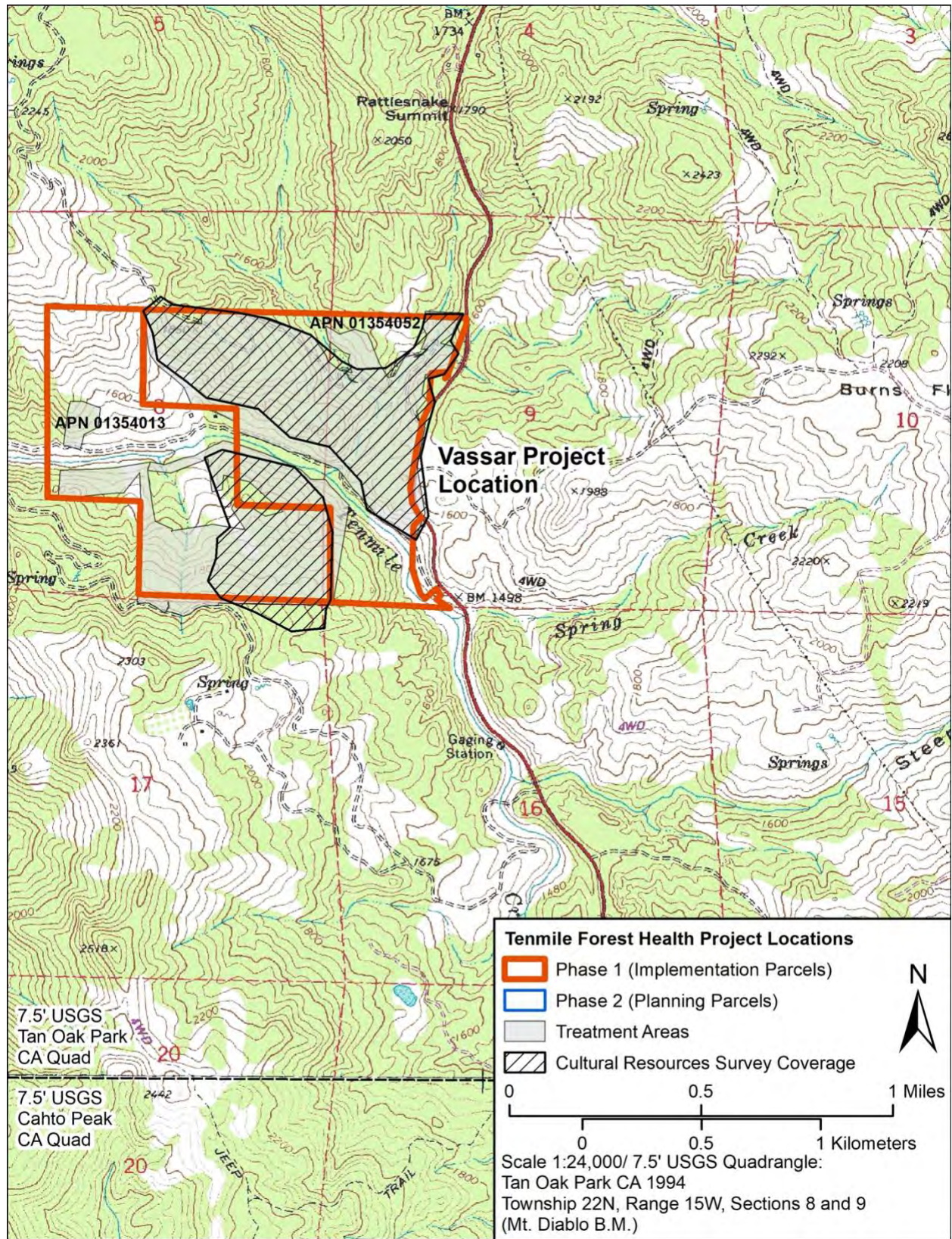


Figure 13. Cultural Resources Survey Coverage and Resource Location in the Triple Creek and Black Oak Ranch Parcels.



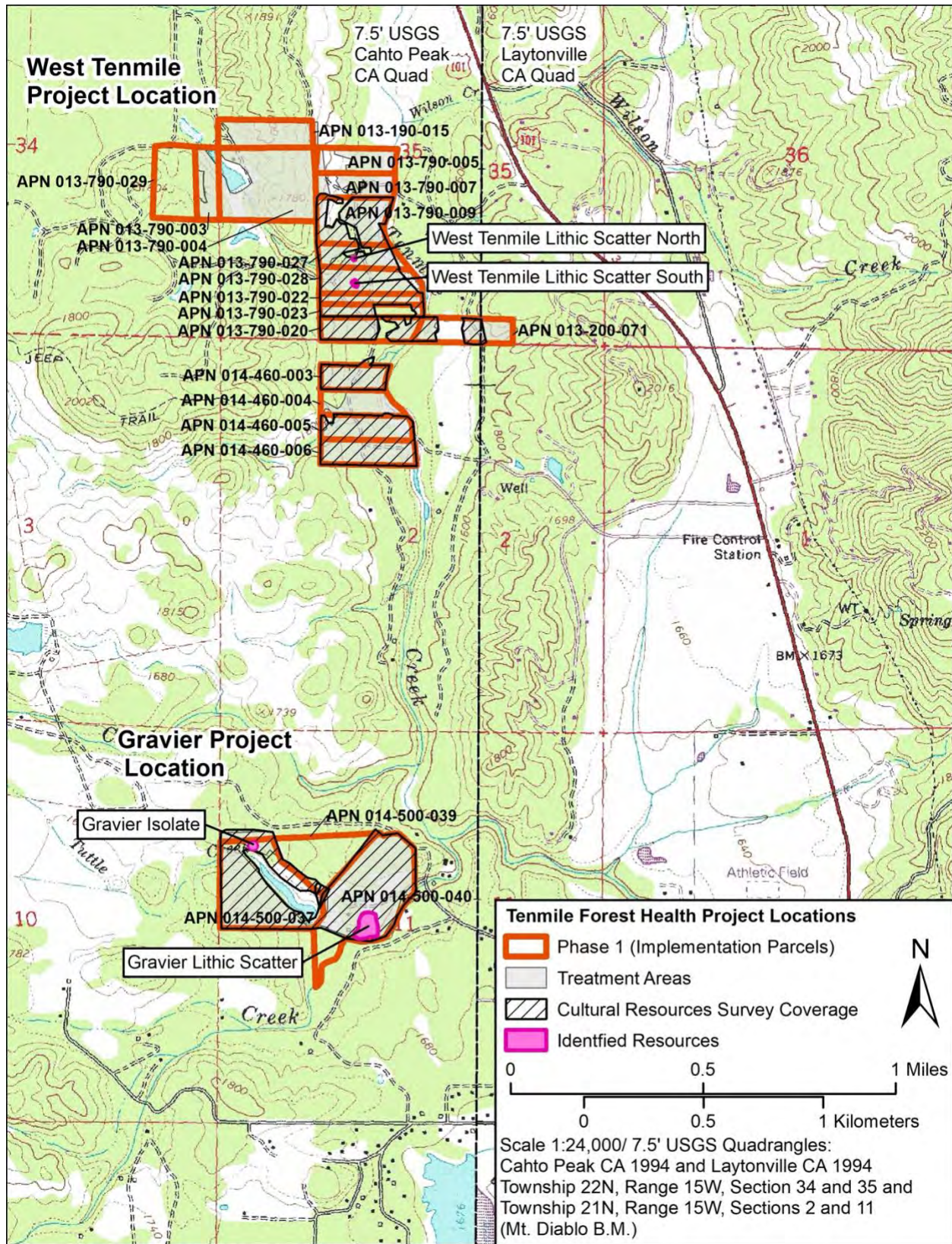


Figure 15. Cultural Resources Survey Coverage and Resource Location in the West Ten Mile and Gravier Parcels.

9.0 CONCLUSIONS AND RECOMMENDATIONS

RA recommends that the one isolated find (Gravier Isolate), the Fox Creek Road Segment, and three lithic scatter sites (Triple Creek Lithic Scatter, West Tenmile Lithic Scatter North, and West Tenmile Lithic Scatter South) identified within the current project area are not historical resources that would qualify for listing on the CRHR (Table 16).

The Gravier Isolate is a chert/CCS bifacially worked flake tool that does not appear to be part of a nearby feature or archaeological site. The presence of this artifact does indicate that the area was well utilized by the Native American inhabitants, however it is not diagnostic of a specific type or time period and as an isolated artifact, is categorically ineligible for the CRHR.

The Fox Creek Road Segment is shown on the 1902 GLO map intersecting with a north/ south road that ties in with Branscomb road to the south. Additional background research found no further information about the road. The road is not associated with any events or individuals important in local or national history; is not diagnostic of a specific type or time period that would yield data; and the site does not retain integrity; therefore, the site does not contain the necessary qualities to be considered eligible for the CRHR.

The 3 small sparse lithic scatters (Triple Creek Lithic Scatter, West Tenmile Lithic Scatter North, and West Tenmile Lithic Scatter South) were identified in areas that have been heavily disturbed by previous historic activities and logging operations. The artifacts identified in the lithic scatters are not associated with any events or individuals important in local or national history; they are not diagnostic of a specific type or time period that would yield data; and the sites do not retain integrity therefore the sites do not contain the necessary qualities to be considered eligible for the CRHR.

RA recommends that the Fox Creek Road Segment, Triple Creek Lithic Scatter, West Tenmile Lithic Scatter North, and West Tenmile Lithic Scatter South are not eligible for listing on the CRHR criteria:

- A. This investigation has not identified any association with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States, nor do the identified artifacts provide enough information to convey such associations.
- B. This investigation has not identified any association with the lives of persons important to local, California, or national history, nor do the identified artifacts provide enough information to convey such associations.
- C. Artifacts identified in the Triple Creek Lithic Scatter, West Tenmile Lithic Scatter North, and West Tenmile Lithic Scatter South do not represent the work of a master or possess high artistic values. The one distal biface fragment identified is not diagnostic of a specific type or time period.
- D. Artifacts identified in the Triple Creek Lithic Scatter, West Tenmile Lithic Scatter North, and West Tenmile Lithic Scatter South have not yielded and are not likely to yield information important to the pre-history of the local area, California, or the nation, as again they are not diagnostic of a specific type or time period, and were identified in a heavily disturbed context.

The Gravier Habitation Site and the Lower Tenmile Quarry Site are recommended as potentially eligible for listing on the CRHR as they may contain data that would yield information important to the pre-history of the local area and California and both sites retain integrity necessary for listing on the CRHR. The Gravier Habitation Site and the Lower Tenmile Quarry Site are recommended eligible for listing on the CRHR for the following criteria:

- A. This investigation has not identified any association with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California

or the United States, nor do the identified artifacts provide enough information to convey such associations.

- B. This investigation has not identified any association with the lives of persons important to local, California, or national history, nor do the identified artifacts provide enough information to convey such associations.
- C. Artifacts identified in the Gravier Habitation Site and the Lower Tenmile Quarry Site do not represent the work of a master or possess high artistic values. The one distal biface fragment identified is not diagnostic of a specific type or time period.
- D. The Gravier Habitation Site and the Lower Tenmile Quarry Site may yield information important to the pre-history of the local area, California, or the nation, as more work at these sites may reveal that they are diagnostic of a specific type or time period. Quarry sites have the potential to answer questions about how lithic materials were sourced locally and distributed and the presence of midden at the Gravier Habitation Site suggests an intact subsurface component to the site that if excavated may reveal temporal association.

Two archaeological sites identified within the Phase 1 Parcel Treatment Areas as a result of this investigation, the Lower Tenmile Quarry Site and Gravier Habitation Site, are recommended as potentially eligible for inclusion on the CRHR under Criterion D. No other historical or unique archeological resources (CEQA Guidelines Sections 15064.5 (a) and 21083.2 (g)) or tribal cultural resources (California Public Resources Code Section 21074), were identified within the proposed project areas during this investigation. Two previously recorded sites are located within the Cahto Trail project area in APN 014-260-032, however this parcel was not surveyed because it was added to the project after the pedestrian survey had been completed.

A representative of the Cahto Tribe, Verne Wilson, was present during the field. Correspondence with the Cahto Tribe resulted in recommendations for a cultural monitor present during proposed work related to this project. Roscoe and Associates recommends that prior to project implementation, a monitoring plan should be drafted in consultation with the Cahto Tribe to determine the specifics of post-implementation recording requirements, how discoveries will be addressed, and how collections will be curated or reburied.

Current project plans do not propose any ground disturbing activities within the documented site boundaries, therefore RA recommends that the project will not cause substantial adverse changes to these resources. If project plans change to include ground disturbing activities within the site boundaries, further cultural investigations and Tribal consultations are recommended. RA recommends that pedestrian field surveys should be conducted within the treatment areas that were not covered by this investigation because they were either added to the project after the pedestrian survey was completed or due to limited private land access. These areas should be surveyed by a qualified archaeologist who meets the Secretary of Interior's Professional Qualifications Standards for Archaeology prior to project implementation, including the Cahto Trail Parcel (APN 014-260-032) and the West Ten Mile parcels (APNs 013-790-029, 013-790-003, 013-790-004, 013-190-015, 013-790-005, 013-790-007 and 014-460-004) .

Despite a thorough investigation, project activities always have the potential to inadvertently uncover archaeological material or human remains. In the event that materials or remains are unearthed, the following pages offer recommendations to ensure potential project impacts on inadvertently discovered resources are eliminated or reduced to less than significant levels.

9.1 Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources (*CalVTP* Mitigation Measure CUL-2)

As specified by the *CalVTP* Standard Project Requirements and Mitigation Measures for Archaeological, Historical, and Tribal Cultural Resources, if any prehistoric or historic-era subsurface archaeological

features or deposits, including locally darkened soil (“midden”), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures.

If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural resource), the archaeologist will work with the project proponent to develop appropriate procedures to protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.

9.2 Inadvertent Discovery of Human Remains

If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Mendocino County coroner will be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

10.0 PROFESSIONAL QUALIFICATIONS

James Roscoe, M.A., oversaw all aspects of the investigation and meets the Secretary of Interior's Professional Qualifications Standards for Archaeology (Title 36 Code of Federal Regulations Part 61, and 48 Federal Regulation 44716). Mr. Roscoe has over 45 years of experience conducting historical resource and historic property investigations throughout California. Melinda Salisbury B.A who has approximately 16 years of experience and Jennifer Burns Whiteman, M.A. with approximately 30 years of experience, conducting historical resource and historic property investigations throughout California teamed on the project. Ms. Salisbury assisted Mr. Roscoe with the CHRIS record search and correspondence with Native American tribal representatives, and Ms. Whiteman assisted with background archaeological, historical and ethnographic research and report production. Research Associates Jarrett Lowery, B.A., Matthew Bouffard B.S., Mary Carlquist, B.A., Brian Amparan B.A., Jaqueline Farrington, B.A., and Michael Roscoe B.A. assisted with the field investigation.

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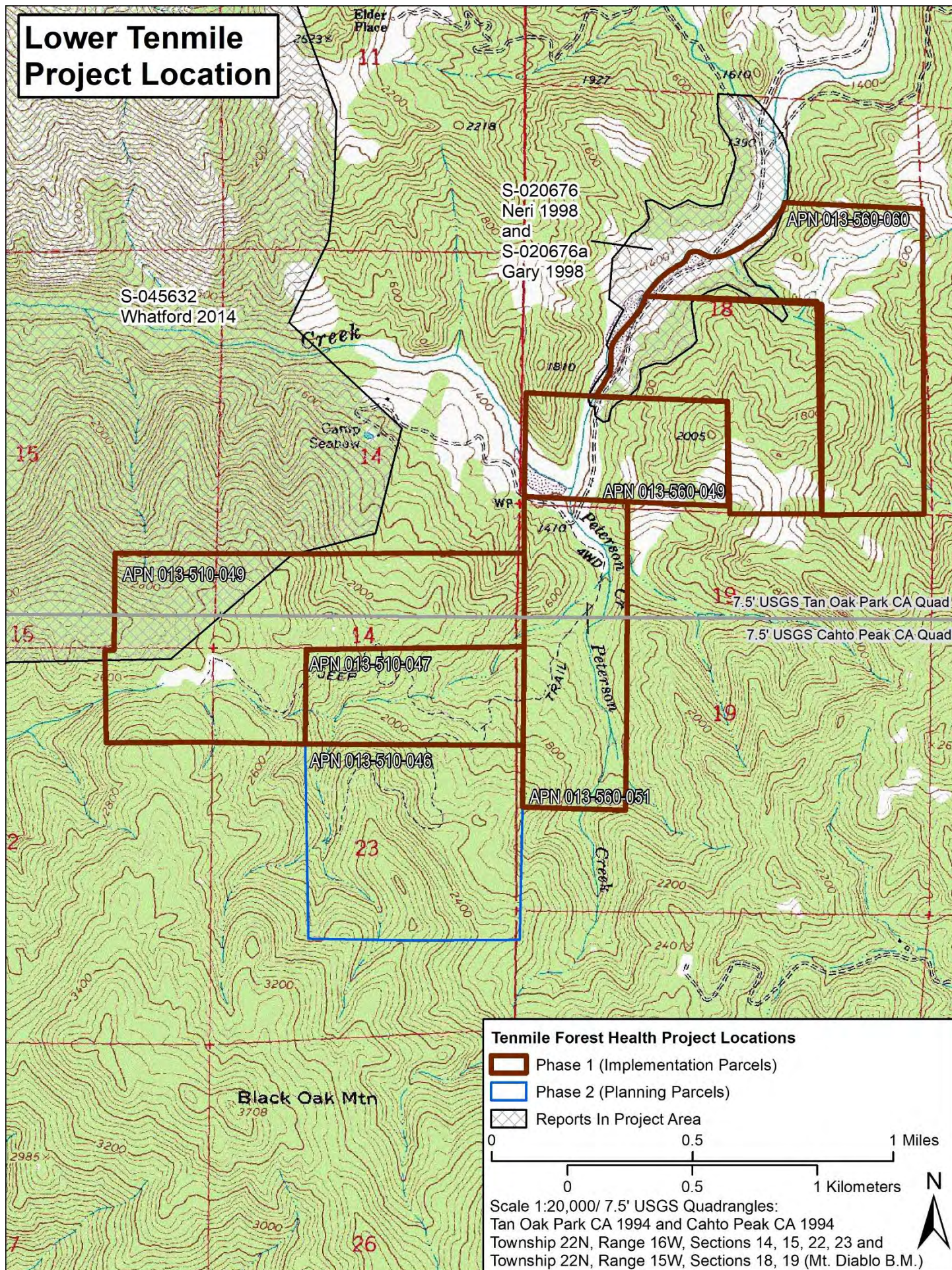
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APPENDIX A
Record Search Results

REPORTS

Lower Tenmile Project Location



Vassar, Black Oak Ranch and Triple Creek Ranch Project Locations

APN 013-540-052 S-034425 Wulf 2008 and S-034425a Wulf 2008 and S-034425b Fine 2008

APN 013-540-013

Vassar

S-045632 Whatford 2014

7.5' USGS Tan Oak Park CA Quad

7.5' USGS Cahto Peak CA Quad

S-029778 Edwards 1999

S-039470 Kimsey et al 2010 and S-039470a Whitaker 2011

S-035118 PAR 2008

APN 013-530-047

S-028787 Angeloff et al. 2004

APN 013-570-043

S-050059 McCann 2016

Black Oak Ranch

S-037544 Steele and Roscoe 2010

Tripple Creek Ranch

APN 013-570-059

S-055530

Tenmile Forest Health Project Locations

- Phase 1 (Implementation Parcels)
- Phase 2 (Planning Parcels)
- Reports In Project Area

0 0.5 1 Miles

0 0.5 1 Kilometers

Scale 1:30,000/ 7.5' USGS Quadrangles: Tan Oak Park CA 1994 and Cahto Peak CA 1994 Township 22N, Range 15W, Sections 8, 9, 21, 22, 23 (Mt. Diablo B.M.)

Scale 1:30,000/ 7.5' USGS Quadrangles:
Tan Oak Park CA 1994 and Cahto Peak CA 1994
Township 22N, Range 15W, Sections 8, 9, 21, 22, 23
(Mt. Diablo B.M.)

West Tenmile and Gravier Project Locations

7.5' USGS Cahto Peak CA Quad

7.5' USGS Laytonville CA Quad

S-055530
DeGeorgey 2021

APN 013-790-005

APN 013-790-007

APN 013-790-009

APN 013-790-027

APN 013-790-028

APN 013-790-022

APN 013-790-023

APN 013-790-020

S-037544
Steele and Roscoe 2010

APN 013-200-071

APN 014-460-004

APN 014-460-003

APN 014-460-005

APN 014-460-006

S-011692
Flaherty 1992

S-039470
Kimsey et al 2011
and
S-039470a
Whitaker 2011

Fire Control
Station

S-011692
Flaherty 1992

APN 014-500-039

APN 014-500-040

APN 014-500-037

S-021382
Geiger 1998
and
S-021382a
Jenkins 1998

S-011692
Flaherty 1992

Athletic Field

High
School

Laytonville

Tenmile Forest Health Project Locations

Phase 1 (Implementation Parcels)

Phase 2 (Planning Parcels)

Reports In Project Area

0 0.5 1 Miles

0 0.5 1 Kilometers

Scale 1:20,000/ 7.5' USGS Quadrangles:
Cahto Peak CA 1994 and Laytonville CA 1994
Township 22N, Range 15W, Section 35 and
Township 21N, Range 15W, Section 11
(Mt. Diablo B.M.)



Cahto Trail and Varmhagen Project Locations

7.5' USGS Cahto Peak CA Quad

7.5' USGS Laytonville CA Quad

S-024424
Van Bueren 2001

APN 014-260-021
APN 014-260-022

S-000537
Offermann and
Fredrickson 1977

LAYTONVILLE
RANCHERIA

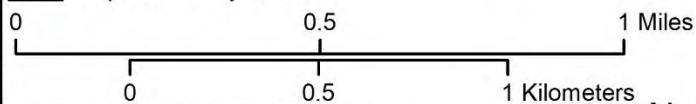
LAYTONVILLE
RANCHERIA

APN 014-411-009

Varmhagen

Tenmile Forest Health Project Locations

- Phase 1 (Implementation Parcels)
- Phase 2 (Planning Parcels)
- Reports In Project Area



Scale 1:20,000/ 7.5' USGS Quadrangles:
Cahto Peak CA 1994 and Laytonville CA 1994
Township 21N, Range 15W, Section 13, 14, 22,
and 23 (Mt. Diablo B.M.)



Lower Ten	Vasser	Triple Creek	Black Oak	West Ten	Gravier	Cahto Trail	Rancheria	Varmhagen	Label	OtherID
	SA	SA	SA	SA					S-000054	Laytonville Widening: Evaluation of Impact Upon Archaeological Resources of the Proposed Widening of Highway 101 North and South of Laytonville, Mendocino County
				SA	SA	SA	SA	SA	S-000151	An Archaeological Reconnaissance of the Proposed Laytonville Wastewater Disposal Project.
						PA	SA		S-000537	An Archaeological Survey of 285 Acres Located Southwest of Laytonville, California.
				SA	SA	SA	SA	SA	S-000542	An Archaeological Survey of Portions of the Proposed Laytonville County Water District Sewerage Facilities, Mendocino County, California.
		SA	SA						S-000763	An Archaeological Site Survey of a Proposed Passing Lane Project, 01-MEN-101 74.8/77.7 01201-153401
						SA	PA		S-000945	An Archaeological Survey and Cultural Resource Evaluation of Six Northern California Rancherias (Susanville, Cortina, Colusa, Rumsey, Laytonville, and Sherwood Valley Rancherias)
				SA	SA	SA	SA	SA	S-001119	Archaeological reconnaissance of the Coleman property near Laytonville in Mendocino County (letter report)
				SA	SA	SA	SA	SA	S-001120	An archaeological reconnaissance of a 20.83 acre parcel just outside Laytonville (letter report)
				SA	SA	SA	SA	SA	S-001121	Archaeological Reconnaissance of the Richard and Eva Kyle Property North of Laytonville, Mendocino County, California.
		SA	SA						S-001326	Archaeological Reconnaissance Survey Report for Shoulder Widening for Bicycles from 8.5 to 7.7 Miles South of Rattlesnake Creek Bridge No. 10-27, on Route 101 in Mendocino County, 01-Men-101-72.9/73.7
		SA	SA	SA					S-002166	Cultural Resource Survey Report, Application 26255, Lorraine R. Woodruff, P.O. Box 399, Laytonville, CA., 95454.
				SA	SA	SA	SA	SA	S-002202	Archaeological Survey Report for Proposed Widening and Channelization of Route 101, 0.5 Mile South of Laytonville at Harwood Road, Mendocino County, 01-MEN-101
				SA	SA	SA	SA	SA	S-006247	An Archaeological Survey of a Proposed Lot Split of Approximately 20 Acres Along Branscomb Road, City of Laytonville, Mendocino County, California (MS 206-78)
				SA					S-006979	Historic Property Survey Report for a Proposed Widening on Highway 101, from Long Valley Creek Bridge No.10-99 to 1.7 Miles North of Laytonville, in Mendocino County, 01-MEN-101-64.7/70.7 01101-197720
		SA	SA	SA					S-009059	Historic Property Survey Report for a Proposed Resurfacing and Widening Project on Highway 101 from Huntsman Way to 5.0 Miles North of Laytonville in Mendocino County, 01-MEN-101-70.7/74.8 01-197730
				SA	SA	SA	SA	SA	S-009688	Historic Property Survey Report for Proposed Branscomb Road (County Road 429) Realignment Project near Laytonville, Mendocino County, California
				PA	PA				S-011692	An Archaeological Survey of 693 Acres near Laytonville, Mendocino County, California (letter report)
	SA								S-012937	Report on Construction Impact to CA-Men-1092, 1-Men-101-74.8/77.8 01-202423
				SA	SA	SA	SA	SA	S-013240	Cultural Resources Reconnaissance of 50 Acres near Laytonville, Mendocino County, California
				SA	SA	SA	SA	SA	S-017343	A Cultural Resources Study of a Portion of the Rathke Property at 165 Mulligan Road, Laytonville, Mendocino County, California
				SA	SA				S-019472	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California
				SA	SA				S-019588	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California
PA									S-020676	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Tenmile THP, 1-98-162 MEN
					PA				S-021382	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Geiger Ranch THP, 1-98-402 MEN (California Department of Forestry)
						SA			S-021885	Archaeological Monitoring of a Sewer Line Trenching Project on Ramsey Road, Laytonville, Mendocino County, California (letter report)
					SA				S-022532	A Cultural Resources Survey of a Little 28-Acre Parcel Northwest of Laytonville, Mendocino County, California
						PA	SA		S-024424	Archaeological Survey for a Minor Subdivision of the Musgrave Property near Laytonville Mendocino County, California
				SA	SA	SA	SA	SA	S-026359	A Cultural Resources Study of the Bergstedt Property, near Laytonville, Mendocino County, California
				SA	SA				S-026500	Confidential Archaeological Addendum, Alder Springs Ranch NTMP, 1-01-NTMP-24 (California Department of Forestry)
				SA	SA	SA	SA	SA	S-028261	Archeological and Historical Resources Survey and Impact Assessment, Swanson, THP# 1-94-142 (California Department of Forestry)

Lower Ten	Vasser	Triple Creek	Black Oak	West Ten	Gravier	Cahto Trail	Rancheria	Varmhagen	Label	OtherID
				SA					S-028302	Archaeological and Historical Resources Survey and Impact Assessment, A Supplemental Report for a Timber Harvesting Plan, Smythe/Weaver THP, Project # 1-94-094 MEN (California Department of Forestry)
				SA	SA			SA	S-028769	A Cultural Resources Investigation of the Alder Springs Ranch Fencing Project, located in Mendocino, California, DF&G #026-R3
			PA						S-028787	A Cultural Resources Investigation of the Streeter/Ten Mile Creeks Restoration Project, located in Mendocino, California, DF&G #224-R3
PA		PA	PA						S-029778	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Mitchell NTMP, 1-99NTMP-008 MEN
						SA	SA		S-030472	Archaeological Survey for the Klopper Minor Subdivision at 1234 Branscomb Road near Laytonville, California. Assessor's Parcel 014-260-14.
				SA					S-031166	Phase One Archaeological Inventory of APN 013-180-07, near Laytonville, Mendocino County, California
				SA	SA	SA	SA	SA	S-032700	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Everett THP, THP # 1-98-274 MEN
				SA	SA	SA	SA	SA	S-033752	Confidential Archaeological and Historical Resources Survey and Impact Assessment, A Supplemental Report for a Timber Harvesting Plan, Calder THP, THP # 1-96-383 MEN (California Department of Forestry)
						SA			S-034129	A Cultural Resources Evaluation of Several Parcels Being Rezoned for Multifamily Housing, Mendocino Planning Team, Mendocino County, California
					SA				S-034144	An Archaeological Survey Report for the Whitley/Frost Modified Timber Harvesting Plan, Mendocino County, California
	PA		SA						S-034425	Historic Property Survey Report for the Proposed Drainage System Repairs at 36 Locations on Highway 101 from Willits to Leggett, Mendocino Co, Ca
	SA	PA	SA						S-035118	Cultural Resources Constraints Study for the Replacement of 42 Poles on the Garberville-Laytonville 60 KV Transmission Line, Mendocino County, CA
						SA	SA	SA	S-035167	A Cultural Resources Survey for the Community Water Storage Tank Project, Laytonville Rancheria, Mendocino County, California
				PA					S-037544	A Cultural Resources Investigation of the Ten Mile Creek Habitat Enhancement and Riparian Revegetation Project located in Mendocino County, California. California Department of Fish and Game Project # R1-162
				SA	SA	SA	SA	SA	S-038573	An Archaeological Survey Report for the Whitley Timber Harvesting Plan, Mendocino County, California, THP# 11-071 MEN
				SA					S-038762	Cultural Resource Reconnaissance of 19+/- Acres Near Laytonville, Mendocino County, California (APNs 013-200-63 & 014-020-35)
	SA								S-038865	Cultural Resources Inventory of Caltrans District 1 Rural Conventional Highways in Del Norte, Humboldt, Mendocino and Lake Counties, Contract No. 01A1056, Expenditure Authorization No. 01-453608
		PA	SA						S-039470	Archaeological Survey Report and Buried Site Sensitivity Study for the Garberville to Laytonville Transmission Line Project, Humboldt & Mendocino Counties, Ca
						SA			S-045464	A Cultural Resources Survey of the Property at 44720 Hwy 101, Laytonville, Mendocino County, California
PA	PA								S-045632	Cultural Resource Narrative for the Lodge Lightning Complex, CA-MEU-007202, Mendocino County, California - (letter report)
				SA	SA				S-048194	Cultural Resources Survey Report for NRCS Project 13FY23-0002: Proposed Fuel Break, Forest Stand Improvement, and Erosion Control n Cahto Tribe Lands, Mendocino County, California
							PA		S-048270	Inspection of Unanticipated Archaeological Discovery, Cahto Creek Riparian Restoration Project (letter report)
						SA			S-049203	Archaeological Survey of Assessor Parcel 014-160-12 in Laytonville, California
							PA		S-050057	Cultural Resources Survey Report for NRCS Project 15FY23-0012: Cahto Tribe of Laytonville Rancheria Forest Stand Improvement Project, Mendocino County, California
			PA						S-050059	Cultural Resources Survey Report for NRCS Project #15FY23-0017: Engber Forest Stand Improvement Project, Mendocino County, California
				SA	SA	SA	SA	SA	S-055235	Cultural Resources Section 106 Review Form, Agreement 749104201UY, Mendocino County, California
				SA					S-055530	Archaeological Survey Report, 48650 Highway 101 North, Laytonville, Mendocino County, California, APN 013-180-01 & 013-190-23

Report Detail: S-000054

Identifiers

Report No.: S-000054

Other IDs:

Cross-refs:

Citation information

Author(s): Darlena K. Blucher

Year: 1974 (May)

Title: Laytonville Widening: Evaluation of Impact Upon Archaeological Resources of the Proposed Widening of Highway 101 North and South of Laytonville, Mendocino County

Affiliation: Humboldt State University

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 2.5 li mi

Disclosure: Not for publication

Collections: No

General notes

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-23-000414	CA-MEN-000401/H	Laytonville 2
P-23-000786	CA-MEN-000851	[none]

No. resources: 2

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/7/2005	nwic-main	
<i>Last modified:</i> 6/16/2017	rinerg	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
4/7/2005	jay	Appended records from NWICmain bibliographic database.
5/31/2017	hagell	added month
<i>Record status:</i> Verified		

Report Detail: S-000151

Identifiers

Report No.: S-000151

Other IDs:

Cross-refs:

Citation information

Author(s): Ronald F. King and David A. Fredrickson

Year: 1975 (Jun)

Title: An Archaeological Reconnaissance of the Proposed Laytonville Wastewater Disposal Project.

Affiliation: California State College, Sonoma

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 120 ac + 10.5 li mi

Disclosure: Not for publication

Collections: No

General notes

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-23-001004	CA-MEN-001075	Site 1
P-23-001005	CA-MEN-001076/H	Site 2
P-23-002999	CA-MEN-001147	

No. resources: 3

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/7/2005	nwic-main	
<i>Last modified:</i> 6/16/2017	rinerg	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
4/7/2005	jay	Appended records from NWICmain bibliographic database.
<i>Record status:</i> Verified		

Report Detail: S-000537

Identifiers

Report No.: S-000537

Other IDs:

Cross-refs:

Citation information

Author(s): Janis K. Offermann and David A. Fredrickson

Year: 1977 (Jun)

Title: An Archaeological Survey of 285 Acres Located Southwest of Laytonville, California.

Affiliation: The Anthropology Laboratory, Sonoma State College

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 285 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-23-001046	CA-MEN-001125/H	Goat's Paradise
P-23-001059	CA-MEN-001153	The Cool Breeze Site

No. resources: 2

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address: Address

City

Laytonville

Assessor's parcel no.

Zip code

PLSS:

Database record metadata

Date

User

Entered: 4/7/2005

nwic-main

Last modified: 6/19/2017

hagell

IC actions: Date

User

Action taken

4/7/2005

jay

Appended records from NWICmain bibliographic database.

6/19/2017

hagell

edited affiliation

Record status: Verified

Report Detail: S-000542

Identifiers

Report No.: S-000542

Other IDs:

Cross-refs:

Citation information

Author(s): Thomas M. Origer and David A. Fredrickson

Year: 1977 (May)

Title: An Archaeological Survey of Portions of the Proposed Laytonville County Water District Sewerage Facilities, Mendocino County, California.

Affiliation: The Anthropology Laboratory, Sonoma State College

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 33 ac + c 8300 li ft

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	Trinomial	Name
P-23-001053	CA-MEN-001146	[none]

No. resources: 1

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address	City	Assessor's parcel no.	Zip code
	Laytonville		

PLSS:

Database record metadata

Date	User	Action taken
Entered: 4/7/2005	nwic-main	
Last modified: 6/16/2017	rinerg	
IC actions: Date	User	Action taken
4/7/2005	jay	Appended records from NWICmain bibliographic database.
2/11/2016	hagell	added affiliation

Record status: Verified

Report Detail: S-000763

Identifiers

Report No.: S-000763

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
Caltrans		EA 01201-153401

Cross-refs:

Citation information

Author(s): Charla M. Meacham

Year: 1977 (Nov)

Title: An Archaeological Site Survey of a Proposed Passing Lane Project, 01-MEN-101 74.8/77.7 01201-153401

Affiliation: California Department of Transportation

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 2.9 li mi

Disclosure: Not for publication

Collections: No

General notes

Historic roads of varying ages

Associated resources

No. resources: 0

Has informals: Yes

Location information

County(ies): Mendocino

USGS quad(s): Tan Oak Park

Address:

PLSS:

Database record metadata

	<i>Date</i>	<i>User</i>	
<i>Entered:</i>	4/7/2005	nwic-main	
<i>Last modified:</i>	8/30/2021	rinerg	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	8/3/2021	vickeryn	Added month and collections. Changed record status to "database complete".
	8/30/2021	rinerg	add CalTrans EA identifier
<i>Record status:</i>	Verified		

Report Detail: S-000945

Identifiers

Report No.: S-000945

Other IDs:	Type	Name
	OHP PRN	BIA990211A
	Voided	ASC #151

Cross-refs:

Citation information

Author(s): Gregory Greenway

Year: 1978 (Mar)

Title: An Archaeological Survey and Cultural Resource Evaluation of Six Northern California Rancherias (Susanville, Cortina, Colusa, Rumsey, Laytonville, and Sherwood Valley Rancherias)

Affiliation: Archeological Study Center, California State University, Sacramento

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 49 ac

Disclosure: Not for publication

Collections: No

General notes

This report extends into a county outside the NWIC service area (Lassen County).

Associated resources

Primary No.	Trinomial	Name
P-06-000078	CA-COL-000055	[none]
P-06-000079	CA-COL-000056	[none]
P-06-000080	CA-COL-000057H	
P-23-001003	CA-MEN-001073	Cahto Bluff
P-23-001226	CA-MEN-001331	L1
P-23-001227	CA-MEN-001332	L2
P-23-001228	CA-MEN-001333/H	SV1
P-23-001229	CA-MEN-001334	SV2
P-23-001230	CA-MEN-001335	SV3
P-23-001231	CA-MEN-001336	SV4
P-23-001232	CA-MEN-001337	SV5
P-23-001233	CA-MEN-001338	SV6
P-23-001234	CA-MEN-001339	SV7
P-23-001235	CA-MEN-001340	SV8
P-57-000103	CA-YOL-000128/H	Old Dibble Ranch

No. resources: 15

Has informals: No

Location information

County(ies): Colusa, Mendocino, Yolo

USGS quad(s): Cahto Peak, Colusa, Guinda, Laytonville, Moulton Weir, Salt Canyon

Address:

PLSS:

Database record metadata

Date	User	
Entered: 4/7/2005	nwic-main	
Last modified: 1/26/2023	rinerg	

IC actions:	Date	User	Action taken
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	9/6/2016	hagell	edited other identifier
	1/26/2023	rinerg	add quad location: 'Salt Canyon'; update GIS to include the Cortina Rancheria

Report Detail: S-000945

in Section 34 T14N R04W.

Record status: Verified

Report Detail: S-001119

Identifiers

Report No.: S-001119

Other IDs:

Cross-refs:

Citation information

Author(s): Miley P. Holman and Matthew R. Clark

Year: 1978 (Jun)

Title: Archaeological reconnaissance of the Coleman property near Laytonville in Mendocino County (letter report)

Affiliation: Holman & Associates

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 40 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak, Laytonville

Address:

PLSS: T21N R15W Sec. 26 MDBM

Database record metadata

	<i>Date</i>	<i>User</i>	
<i>Entered:</i>	4/7/2005	nwic-main	
<i>Last modified:</i>	7/21/2017	hagell	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
<i>Record status:</i>	Verified		

Report Detail: S-001120

Identifiers

Report No.: S-001120

Other IDs:

Cross-refs:

Citation information

Author(s): Miley P. Holman and Matthew R. Clark

Year: 1978 (Jun)

Title: An archaeological reconnaissance of a 20.83 acre parcel just outside Laytonville (letter report)

Affiliation: Holman & Associates

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 20.83 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

Database record metadata

	<i>Date</i>	<i>User</i>	
<i>Entered:</i>	4/7/2005	nwic-main	
<i>Last modified:</i>	8/30/2021	rinerg	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	5/8/2020	hagell	added month, edited title
	8/3/2021	vickeryn	Changed record status to "database complete".
<i>Record status:</i>	Verified		

Report Detail: S-001121

Identifiers

Report No.: S-001121

Other IDs:

Cross-refs:

Citation information

Author(s): Miley P. Holman and Matthew R. Clark

Year: 1978 (Jun)

Title: Archaeological Reconnaissance of the Richard and Eva Kyle Property North of Laytonville, Mendocino County, California.

Affiliation: Holman & Associates

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: 38 ac

Disclosure: Not for publication

Collections: Unknown

General notes

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-23-001271	CA-MEN-001376	KP-1

No. resources: 1

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/7/2005	nwic-main	
<i>Last modified:</i> 8/30/2021	rinerg	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
4/7/2005	jay	Appended records from NWICmain bibliographic database.
8/3/2021	vickeryn	Added month. Changed record status to "database complete".

Record status: Verified

Report Detail: S-001326

Identifiers

Report No.: S-001326

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
	Voided	S-13052
	Caltrans	01101-188401

Cross-refs: See also S-013052

Citation information

Author(s): Cherie McCown and Jean E. Tooker

Year: 1978 (Nov)

Title: Archaeological Reconnaissance Survey Report for Shoulder Widening for Bicycles from 8.5 to 7.7 Miles South of Rattlesnake Creek Bridge No. 10-27, on Route 101 in Mendocino County, 01-Men-101-72.9/73.7

Affiliation: Caltrans

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 0.75 li mi

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/7/2005	nwic-main	
<i>Last modified:</i> 12/10/2020	rinerg	
<i>IC actions:</i>	<i>Date</i>	<i>User</i> <i>Action taken</i>
	4/7/2005	jay Appended records from NWICmain bibliographic database.
	12/8/2020	davisc rec res=no; collections=no
<i>Record status:</i> Verified		

Report Detail: S-002166

Identifiers

Report No.: S-002166

Other IDs: Type

Name

Agency Nbr

Application 26255

Cross-refs:

Citation information

Author(s): William E. Soule

Year: 1980 (Jul)

Title: Cultural Resource Survey Report, Application 26255, Lorraine R. Woodruff, P.O. Box 399, Laytonville, CA., 95454.

Affiliation: California Water Resources Control Board, Division of Water Rights

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 50 ac

Disclosure: Not for publication

Collections: No

Sub-desig.: a

Author(s): William E. Soule

Year: 1981 (Oct)

Title: Archeological survey of additional POU for Application 26255

Affiliation: California Water Resources Control Board, Division of Water Rights

Report type(s): Archaeological, Field study

Inventory size: c 20 ac

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 10-24

General notes

Associated resources

Primary No.	Trinomial	Name
P-23-000524	CA-MEN-000569	[none]
P-23-000529	CA-MEN-000578	[none]

No. resources: 2

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS: T22N R15W Sec. 26, 35 MDBM

Database record metadata

Date	User
Entered: 4/7/2005	nwic-main
Last modified: 12/10/2020	rinerg

IC actions: Date	User	Action taken
4/7/2005	jay	Appended records from NWICmain bibliographic database.
4/3/2019	shuddec	PDF verified
10/22/2019	hagell	added month, collections, P#s, & additional citation 'a'.
12/8/2020	davisc	T/R/Sec
12/10/2020	rinerg	add page #'s to additional citation 'a'

Report Detail: S-002166

Record status: Verified

Report Detail: S-002202

Identifiers

Report No.: S-002202

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
Caltrans		01101-193801

Cross-refs:

Citation information

Author(s): Barry Douglas and Cherie McCown

Year: 1979 (Nov)

Title: Archaeological Survey Report for Proposed Widening and Channelization of Route 101, 0.5 Mile South of Laytonville at Harwood Road, Mendocino County, 01-MEN-101 PM 68.9/69.1 01101-193801

Affiliation: California Department of Transportation, District 01

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

Database record metadata

	<i>Date</i>	<i>User</i>	
<i>Entered:</i>	4/7/2005	nwic-main	
<i>Last modified:</i>	6/19/2017	hagell	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	6/19/2017	hagell	added other identifier. Edited title
<i>Record status:</i>	Verified		

Report Detail: S-006247

Identifiers

Report No.: S-006247

Other IDs: Type

Name

Submitter

83-10-4C

Cross-refs:

Citation information

Author(s): Gloria L. Flaherty

Year: 1983 (Oct)

Title: An Archaeological Survey of a Proposed Lot Split of Approximately 20 Acres Along Branscomb Road, City of Laytonville, Mendocino County, California (MS 206-78)

Affiliation: Archeological Services

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c. 20 ac.

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak, Laytonville

Address: Address

City

Assessor's parcel no.

Zip code

720 Branscomb Road

Laytonville

PLSS: T21N R15W Sec. 11 MDBM

Database record metadata

Date

User

Entered: 4/7/2005

nwic-main

Last modified: 9/21/2018

moored

IC actions: Date

User

Action taken

4/7/2005

jay

Appended records from NWICmain bibliographic database.

9/19/2018

zavalat

disclosure and collections set; attributes given; month added to report date; affiliation added; address and Cahto Peak quad added to location tab

Record status: Verified

Report Detail: S-006979

Identifiers

Report No.: S-006979

Other IDs:	Type	Name
Caltrans		01101-197720

Cross-refs:

Citation information

Author(s):

Year: 1985 (Feb)

Title: Historic Property Survey Report for a Proposed Widening on Highway 101, from Long Valley Creek Bridge No.10-99 to 1.7 Miles North of Laytonville, in Mendocino County, 01-MEN-101-64.7/70.7 01101-197720

Affiliation: Caltrans District 01

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c. 6 li. mi.

Disclosure: Not for publication

Collections: No

Sub-desig.: a

Author(s): Barry Douglas

Year: 1984 (Nov)

Title: Archaeological Survey Report for a Proposed Widening on Highway 101 from Long Valley Creek Bridge No. 10-99 to 1.7 miles North of Laytonville, in Mendocino County, 01-MEN-101-64.7/70.7 01101-197720

Affiliation: California Department of Transportation, District 1

Report type(s): Archaeological, Field study

Inventory size: c 6 li mi

No. pages: 88

Disclosure: Not for publication

Collections: No

PDF Pages: 7-104

General notes

Associated resources

Primary No.	Trinomial	Name
P-23-000413	CA-MEN-000399	Heizer & Treganza "Laytonville"
P-23-000414	CA-MEN-000401/H	Laytonville 2
P-23-000432	CA-MEN-000431	[none]
P-23-000433	CA-MEN-000432	[none]
P-23-000489	CA-MEN-000497	[none]
P-23-000491	CA-MEN-000499	[none]
P-23-000496	CA-MEN-000504	[none]
P-23-000786	CA-MEN-000851	[none]
P-23-000808	CA-MEN-000873	Men-873
P-23-001737	CA-MEN-001953	[none]
P-23-001738	CA-MEN-001954	[none]
P-23-001739	CA-MEN-001955	(3)
P-23-005641		[none]

No. resources: 13

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville, Longvale

Address:

Report Detail: S-006979

PLSS:

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/7/2005	nwic-main	
<i>Last modified:</i> 5/24/2022	rinerg	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
4/7/2005	jay	Appended records from NWICmain bibliographic database.
6/14/2017	moored	Removed duplicate copy of the archaeological survey report from the PDF, associated with a few missing P#s, added affiliation and attributes to additional citation 'a'
6/19/2017	hagell	added other identifier. Edited title
5/24/2022	rinerg	add quad location: 'Longvale'
<i>Record status:</i> Verified		

Report Detail: S-009059

Identifiers

Report No.: S-009059

Other IDs:	Type	Name
Caltrans		01-197730

Cross-refs:

Citation information

Author(s): J.E. Thorne and Barry Douglas

Year: 1987 (Mar)

Title: Historic Property Survey Report for a Proposed Resurfacing and Widening Project on Highway 101 from Huntsman Way to 5.0 Miles North of Laytonville in Mendocino County, 01-MEN-101-70.7/74.8 01-197730

Affiliation: Caltrans

No. pages:

No. maps:

Attributes: Archaeological, Architectural/historical, Field study, Other research

Inventory size: c 4 li mi

Disclosure: Not for publication

Collections: No

Sub-design.: a

Author(s): Barry Douglas

Year: 1987 (Feb)

Title: Archaeological Survey Report for a Proposed Widening on Highway 101 from Huntsman Way to 4.0 Miles North of Laytonville in Mendocino County, 01-MEN-101-70.7/74.8 01-197730

Affiliation: Caltrans

Report type(s): Archaeological, Field study

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 6-61

General notes

Associated resources

Primary No.	Trinomial	Name
P-23-000524	CA-MEN-000569	[none]
P-23-001021	CA-MEN-001092	ARS-76-19
P-23-001737	CA-MEN-001953	[none]

No. resources: 3

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak, Laytonville, Tan Oak Park

Address:

PLSS:

Database record metadata

Date	User	
Entered: 4/7/2005	nwic-main	
Last modified: 12/14/2020	hagell	

IC actions:	Date	User	Action taken
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	3/25/2016	cabrera	Moved original main citation to "a"
	12/8/2020	davisc	recorded res=yes; attr-archit/hist, archaeol, field study; other research

Report Detail: S-009059

12/14/2020	hagell	edited other identifier
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Record status: Verified

Report Detail: S-009688

Identifiers

Report No.: S-009688

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
	Voided	S-11595
	Voided	S-10819

Cross-refs: See also S-010819

See also S-011595

Citation information

Author(s): Robert Jones

Year: 1990 (Feb)

Title: Historic Property Survey Report for Proposed Branscomb Road (County Road 429) Realignment Project near Laytonville, Mendocino County, California

Affiliation: Earthcraft Planning Services

No. pages:

No. maps: 6

Attributes: Architectural/historical, Management/planning

Inventory size:

Disclosure: Not for publication

Collections: Yes

Sub-desig.: a

Author(s): Katherine Flynn

Year: 1987 (Apr)

Title: Archaeological Survey of Branscomb Road between M.P. 21.3 and 22.5, west of Laytonville, Mendocino County, ARS 87-03

Affiliation: Archaeological Resource Service

Report type(s): Archaeological, Field study

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 6-12

Sub-desig.: b

Author(s): Sharon A. Waechter

Year: 1989 (Jun)

Title: Archaeological Survey of Portions of The Proposed Branscomb Road (County Road 429) Realignment Project near Laytonville, Mendocino County, California

Affiliation: Consulting Archaeologist

Report type(s): Archaeological, Field study

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 7-20

Report Detail: S-009688

Sub-desig.: c

Author(s): Sharon A. Waechter

Year: 1990 (Mar)

Title: Archaeological Test Excavations at CA-MEN-2247 on Branscomb Road (County Road 429) Southwest of Laytonville, Mendocino County, California

Affiliation: Consulting Archaeologist

Report type(s): Archaeological, Excavation

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 21-121

Sub-desig.: d

Author(s): Sharon A. Waechter

Year: 1990 (Mar)

Title: National Register of Historic Places Request for Determination of Effect for Prehistoric Site CA-MEN-2247 Branscomb Road (County Road 429) Northwestern Mendocino County, California

Affiliation: Consulting Archaeologist

Report type(s): Architectural/historical

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 122-126

Sub-desig.: e

Author(s): Sharon A. Waechter

Year: 1990 (Feb)

Title: National Register for Historic Places Request for Determination of Eligibility for Prehistoric Site CA-MEN-2247 Branscomb Road (County Road 429) Northwestern Mendocino County, California

Affiliation: Consulting Archaeologist

Report type(s): Architectural/historical

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 127-133

Sub-desig.: f

Author(s): Sharon A. Waechter

Year: 1989 (Nov)

Title: Preliminary Report on the Archaeological Test Excavations at CA-MEN-2247 Near Laytonville, Mendocino County, California

Affiliation: Consulting Archaeologist

Report type(s): Archaeological, Excavation

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 134-154

General notes

Report Detail: S-009688

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-23-001974	CA-MEN-002247	Branscomb Road #1

No. resources: 1
Has informals: No

Location information

County(ies): Mendocino
USGS quad(s): Cahto Peak
Address:
PLSS:

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/7/2005	nwic-main	
<i>Last modified:</i> 7/12/2021	riner	

<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	3/28/2016	cabrala	Voided S-11595 and "a" and "b" (now c,d,e)
	3/28/2016	cabrala	Voided S-10819 (now b)
	3/28/2016	cabrala	Moved original main citation to "a"
	4/29/2019	barnettb	PDF Verified. Oversized pages have been scanned and added to PDF
	7/12/2021	riner	hasResources=Yes; collections=Yes; add Voided ID & 'see also' for S-10819 & S-11595

Record status: Verified

Report Detail: S-011692

Identifiers

Report No.: S-011692

Other IDs:

Cross-refs:

Citation information

Author(s): Jay M. Flaherty

Year: 1990 (Feb)

Title: An Archaeological Survey of 693 Acres near Laytonville, Mendocino County, California (letter report)

Affiliation: Archaeological Services, Inc.

No. pages:

No. maps: 1

Attributes: Archaeological, Field study

Inventory size: c 693 ac

Disclosure: Not for publication

Collections: No

General notes

Reference to CA-MEN-1089 may be a typographical error, MEN-1089 is approx 33 miles SSW of MEN-1086, in the Mendocino 7.5' quad, and the sentence beginning "We can only assume:..." is intended to refer to MEN-1086

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-23-001015	CA-MEN-001086/H	CA-MEN-1086
P-23-002721		AS #1

No. resources: 2

Has informals: Yes

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/7/2005	nwic-main	
<i>Last modified:</i> 5/18/2023	muchb	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
4/7/2005	jay	Appended records from NWICmain bibliographic database.
4/30/2019	barnettb	PDF Verified. Oversized pages have been scanned and added to PDF
<i>Record status:</i> Verified		

Report Detail: S-012937

Identifiers

Report No.: S-012937

Other IDs:	Type	Name
Caltrans		01-202423

Cross-refs:

Citation information

Author(s): Barry Douglas

Year: 1988 (Jul)

Title: Report on Construction Impact to CA-Men-1092, 1-Men-101-74.8/77.8 01-202423

Affiliation: California Department of Transportation, District 1

No. pages:

No. maps:

Attributes: Archaeological, Field study, Management/planning

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	Trinomial	Name
P-23-001021	CA-MEN-001092	ARS-76-19

No. resources: 1

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

Date	User	Action taken
Entered: 4/7/2005	nwic-main	
Last modified: 8/27/2021	rinerg	
IC actions: Date	User	Action taken
4/7/2005	jay	Appended records from NWICmain bibliographic database.
3/6/2017	hagell	added other identifiers, attributes, month. Edited affiliation.
8/3/2021	vickeryn	Added month, collections. Changed record status to "database complete".
Record status: Verified		

Report Detail: S-013240

Identifiers

Report No.: S-013240

Other IDs:

Cross-refs:

Citation information

Author(s): Jay M. Flaherty

Year: 1991 (Oct)

Title: Cultural Resources Reconnaissance of 50 Acres near Laytonville, Mendocino County, California

Affiliation: Archaeological Services, Inc.

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 50 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS: T21N R15W Sec. 14 MDBM

Database record metadata

	<i>Date</i>	<i>User</i>	
<i>Entered:</i>	4/7/2005	nwic-main	
<i>Last modified:</i>	7/1/2021	rinerg	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	8/7/2019	moored	added collections
	7/1/2021	rinerg	hasResources=No
<i>Record status:</i>	Verified		

Report Detail: S-019472

Identifiers

Report No.: S-019472

Other IDs:

Cross-refs:

Citation information

Author(s): Jay M. Flaherty

Year: 1991 (Apr)

Title: Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California

Affiliation: Archaeological Services, Inc.

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 2178 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	Trinomial	Name
P-23-001015	CA-MEN-001086/H	CA-MEN-1086
P-23-002454	CA-MEN-002739	FS 1
P-23-002709		FS 2; M-2
P-23-002710		FS 4
P-23-002711	CA-MEN-002962	FS 5; M-4
P-23-002712		FS 6/H
P-23-002713	CA-MEN-002963	FS 7
P-23-002714		FS13
P-23-002715	CA-MEN-002964	FS 15
P-23-002716		VOID See P-23-002717
P-23-002717	CA-MEN-002965	FS 17
P-23-002718		FS18
P-23-002719	CA-MEN-002966	FS 20
P-23-002720		FS 21
P-23-002721		AS #1
P-23-002722		FS 24
P-23-002723		FS25
P-23-002724	CA-MEN-002967	FS-26
P-23-002725		FS27
P-23-002726	CA-MEN-002968	FS 28
P-23-002727		FS 29
P-23-002728		FS 30
P-23-002729	CA-MEN-002969	FS 32
P-23-002730	CA-MEN-002970	FS 33
P-23-002731		FS 34
P-23-002732		F.S. 35/Historic
P-23-002733		FS 36
P-23-002734	CA-MEN-002971	FS37
P-23-002735		FS38
P-23-002736		FS39
P-23-002737	CA-MEN-002972	FS 41
P-23-002738	CA-MEN-002973	FS42
P-23-002739	CA-MEN-002974	FS43
P-23-002740	CA-MEN-002975	FS44
P-23-002741	CA-MEN-002976	FS45
P-23-002742		FS46
P-23-002743		FS47

Report Detail: S-019472

P-23-002744	CA-MEN-002977	FS48
P-23-002745	CA-MEN-002978	FS49
P-23-002746	CA-MEN-002979	FS50
P-23-002747	CA-MEN-002980	FS51
P-23-002748		FS53
P-23-002749		FS 55 (FS62 combined)
P-23-002750	CA-MEN-002981	FS58
P-23-002751		FS61
P-23-002752		FS63
P-23-002753	CA-MEN-003860/H	FS64/H
P-23-002754	CA-MEN-002982	FS66
P-23-002755		FS67
P-23-002756	CA-MEN-002983	FS69
P-23-002757	CA-MEN-002984	FS 70
P-23-002758		FS76
P-23-002759		FS79
P-23-002760		FS80
P-23-002761	CA-MEN-003861/H	FS75
P-23-002762		FS81
P-23-002763	CA-MEN-002985/H	FS83/H
P-23-002764		FS 85
P-23-002765		FS 87
P-23-002766	CA-MEN-002986/H	FS 89
P-23-002767		FS 90
P-23-002768		FS91
P-23-002777	CA-MEN-002992	FS 88; M-95

No. resources: 63

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

Date	User
Entered: 4/7/2005	nwic-main
Last modified: 6/25/2021	rinerg

IC actions:	Date	User
	4/7/2005	jay
	6/22/2021	rinerg

Action taken

Appended records from NWICmain bibliographic database.

month=Apr; hasResources=Yes; many of the resources listed in report are unmapped (unprocessed?); collections=No

Record status: Verified

Report Detail: S-017343

Identifiers

Report No.: S-017343

Other IDs:

Cross-refs:

Citation information

Author(s): Thomas M. Origer

Year: 1995 (Sep)

Title: A Cultural Resources Study of a Portion of the Rathke Property at 165 Mulligan Road, Laytonville, Mendocino County, California

Affiliation: Tom Origer & Associates

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 5 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-23-001046	CA-MEN-001125/H	Goat's Paradise

No. resources: 1

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

<i>Address:</i>	<i>Address</i>	<i>City</i>	<i>Assessor's parcel no.</i>	<i>Zip code</i>
	165 Mulligan Road	Laytonville	014-026-016	

PLSS:

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/7/2005	nwic-main	
<i>Last modified:</i> 6/16/2017	rinerg	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>
	4/7/2005	jay
<i>Record status:</i> Verified		Action taken

Appended records from NWICmain bibliographic database.

Report Detail: S-019472

Identifiers

Report No.: S-019472

Other IDs:

Cross-refs:

Citation information

Author(s): Jay M. Flaherty

Year: 1991 (Apr)

Title: Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California

Affiliation: Archaeological Services, Inc.

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 2178 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	Trinomial	Name
P-23-001015	CA-MEN-001086/H	CA-MEN-1086
P-23-002454	CA-MEN-002739	FS 1
P-23-002709		FS 2; M-2
P-23-002710		FS 4
P-23-002711	CA-MEN-002962	FS 5; M-4
P-23-002712		FS 6/H
P-23-002713	CA-MEN-002963	FS 7
P-23-002714		FS13
P-23-002715	CA-MEN-002964	FS 15
P-23-002716		VOID See P-23-002717
P-23-002717	CA-MEN-002965	FS 17
P-23-002718		FS18
P-23-002719	CA-MEN-002966	FS 20
P-23-002720		FS 21
P-23-002721		AS #1
P-23-002722		FS 24
P-23-002723		FS25
P-23-002724	CA-MEN-002967	FS-26
P-23-002725		FS27
P-23-002726	CA-MEN-002968	FS 28
P-23-002727		FS 29
P-23-002728		FS 30
P-23-002729	CA-MEN-002969	FS 32
P-23-002730	CA-MEN-002970	FS 33
P-23-002731		FS 34
P-23-002732		F.S. 35/Historic
P-23-002733		FS 36
P-23-002734	CA-MEN-002971	FS37
P-23-002735		FS38
P-23-002736		FS39
P-23-002737	CA-MEN-002972	FS 41
P-23-002738	CA-MEN-002973	FS42
P-23-002739	CA-MEN-002974	FS43
P-23-002740	CA-MEN-002975	FS44
P-23-002741	CA-MEN-002976	FS45
P-23-002742		FS46
P-23-002743		FS47

Report Detail: S-019472

P-23-002744	CA-MEN-002977	FS48
P-23-002745	CA-MEN-002978	FS49
P-23-002746	CA-MEN-002979	FS50
P-23-002747	CA-MEN-002980	FS51
P-23-002748		FS53
P-23-002749		FS 55 (FS62 combined)
P-23-002750	CA-MEN-002981	FS58
P-23-002751		FS61
P-23-002752		FS63
P-23-002753	CA-MEN-003860/H	FS64/H
P-23-002754	CA-MEN-002982	FS66
P-23-002755		FS67
P-23-002756	CA-MEN-002983	FS69
P-23-002757	CA-MEN-002984	FS 70
P-23-002758		FS76
P-23-002759		FS79
P-23-002760		FS80
P-23-002761	CA-MEN-003861/H	FS75
P-23-002762		FS81
P-23-002763	CA-MEN-002985/H	FS83/H
P-23-002764		FS 85
P-23-002765		FS 87
P-23-002766	CA-MEN-002986/H	FS 89
P-23-002767		FS 90
P-23-002768		FS91
P-23-002777	CA-MEN-002992	FS 88; M-95

No. resources: 63

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

Date	User
Entered: 4/7/2005	nwic-main
Last modified: 6/25/2021	rinerg

IC actions:	Date	User
	4/7/2005	jay
	6/22/2021	rinerg

Action taken

Appended records from NWICmain bibliographic database.

month=Apr; hasResources=Yes; many of the resources listed in report are unmapped (unprocessed?); collections=No

Record status: Verified

Report Detail: S-019588

Identifiers

Report No.: S-019588

Other IDs:

Cross-refs: See also S-026500

Citation information

Author(s): Vicki R. Beard

Year: 1993 (Nov)

Title: Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California

Affiliation: Tom Origer & Associates

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: Yes

General notes

On 9/11/1997, trinomials CA-MEN-002740 through CA-MEN-002796 were voided. Caution should be exercised when referring to those particular trinomials as contained within this report. (NWIC, yanagig, 4/24/2019)

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-23-001015	CA-MEN-001086/H	CA-MEN-1086
P-23-002454	CA-MEN-002739	FS 1
P-23-002709		FS 2; M-2
P-23-002710		FS 4
P-23-002711	CA-MEN-002962	FS 5; M-4
P-23-002712		FS 6/H
P-23-002713	CA-MEN-002963	FS 7
P-23-002714		FS13
P-23-002715	CA-MEN-002964	FS 15
P-23-002716		VOID See P-23-002717
P-23-002717	CA-MEN-002965	FS 17
P-23-002718		FS18
P-23-002719	CA-MEN-002966	FS 20
P-23-002720		FS 21
P-23-002721		AS #1
P-23-002722		FS 24
P-23-002723		FS25
P-23-002724	CA-MEN-002967	FS-26
P-23-002725		FS27
P-23-002726	CA-MEN-002968	FS 28
P-23-002727		FS 29
P-23-002728		FS 30
P-23-002729	CA-MEN-002969	FS 32
P-23-002730	CA-MEN-002970	FS 33
P-23-002731		FS 34
P-23-002732		F.S. 35/Historic
P-23-002733		FS 36
P-23-002734	CA-MEN-002971	FS37
P-23-002735		FS38
P-23-002736		FS39
P-23-002737	CA-MEN-002972	FS 41
P-23-002738	CA-MEN-002973	FS42
P-23-002739	CA-MEN-002974	FS43
P-23-002740	CA-MEN-002975	FS44

Report Detail: S-019588

P-23-002741	CA-MEN-002976	FS45
P-23-002742		FS46
P-23-002743		FS47
P-23-002744	CA-MEN-002977	FS48
P-23-002745	CA-MEN-002978	FS49
P-23-002746	CA-MEN-002979	FS50
P-23-002747	CA-MEN-002980	FS51
P-23-002748		FS53
P-23-002749		FS 55 (FS62 combined)
P-23-002750	CA-MEN-002981	FS58
P-23-002751		FS61
P-23-002752		FS63
P-23-002753	CA-MEN-003860/H	FS64/H
P-23-002754	CA-MEN-002982	FS66
P-23-002755		FS67
P-23-002756	CA-MEN-002983	FS69
P-23-002757	CA-MEN-002984	FS 70
P-23-002758		FS76
P-23-002759		FS79
P-23-002760		FS80
P-23-002761	CA-MEN-003861/H	FS75
P-23-002762		FS81
P-23-002763	CA-MEN-002985/H	FS83/H
P-23-002764		FS 85
P-23-002765		FS 87
P-23-002766	CA-MEN-002986/H	FS 89
P-23-002767		FS 90
P-23-002768		FS91
P-23-002777	CA-MEN-002992	FS 88; M-95
P-23-003206	CA-MEN-002740	Voided - see P-23-002711
P-23-003207	CA-MEN-002741	Voided - see P-23-002713
P-23-003208	CA-MEN-002742	Voided - see P-23-002715
P-23-003209	CA-MEN-002743	VOID see P-23-002717
P-23-003210	CA-MEN-002744	Voided - see P-23-002719
P-23-003211	CA-MEN-002745	Voided - See P-23-002724
P-23-003212	CA-MEN-002746	Voided - see P-23-002726
P-23-003213	CA-MEN-002747	Voided - see P-23-002729
P-23-003214	CA-MEN-002748	Voided - see P-23-002730
P-23-003215	CA-MEN-002749	VOIDED P-23-003215 - see P-2
P-23-003216	CA-MEN-002750	Voided - see P-23-002737
P-23-003217	CA-MEN-002751	Voided - see P-23-002738
P-23-003218	CA-MEN-002752	VOIDED: Subsumed P-23-00273
P-23-003219	CA-MEN-002753	VOIDED: Subsumed by 002740
P-23-003220	CA-MEN-002754	voided: see P-23-002741
P-23-003221	CA-MEN-002755	VOIDED: See P-23-002744
P-23-003222	CA-MEN-002756	VOIDED: See P-23-002745
P-23-003223	CA-MEN-002757	
P-23-003224	CA-MEN-002758	VOIDED: See Also P-23-002747
P-23-003225	CA-MEN-002759	Voided: See P-23-002750
P-23-003226	CA-MEN-002760	VOIDED: See P-23-002754, P-2
P-23-003227	CA-MEN-002761	VOIDED: See P-23-002756
P-23-003228	CA-MEN-002762	VOIDED: See P-23-002757
P-23-003229	CA-MEN-002763	VOIDED: See P-23-002763, P-2
P-23-003230	CA-MEN-002764	VOID - See P-23-002766
P-23-003231	CA-MEN-002765	VOIDED: See P-23-002736
P-23-003232	CA-MEN-002766	VOIDED: See P-23-002737
P-23-003233	CA-MEN-002767	VOIDED: See P-23-002738
P-23-003234	CA-MEN-002768	VOIDED: See P-23-002739
P-23-003235	CA-MEN-002769	VOIDED: See P-23-002740

Report Detail: S-019588

P-23-003236	CA-MEN-002770	Never assigned
P-23-003237	CA-MEN-002771	VOIDED: See P-23-002742
P-23-003238	CA-MEN-002772	VOIDED: See P-23-002743
P-23-003239	CA-MEN-002773	VOIDED: Not assigned
P-23-003240	CA-MEN-002774	VOIDED: See P-23-002754
P-23-003241	CA-MEN-002775	VOIDED: See P-23-002746
P-23-003242	CA-MEN-002776	never assigned
P-23-003243	CA-MEN-002777	VOIDED
P-23-003244	CA-MEN-002778	VOIDED: See P-23-002750
P-23-003245	CA-MEN-002779	VOIDED: See P-23-002751
P-23-003246	CA-MEN-002780	VOIDED: See P-23-002752
P-23-003247	CA-MEN-002781	VOIDED: See P-23-002753
P-23-003248	CA-MEN-002782	VOIDED: See P-23-002754
P-23-003249	CA-MEN-002783	Voided P#, Never Assigned
P-23-003250	CA-MEN-002784	VOIDED: See P-23-002756
P-23-003251	CA-MEN-002785	VOIDED: See P-23-002757
P-23-003252	CA-MEN-002786	VOIDED: See P-23-002761
P-23-003253	CA-MEN-002787	Voided P#, Never Assigned
P-23-003254	CA-MEN-002788	VOIDED: See P-23-002759
P-23-003255	CA-MEN-002789	VOIDED: See P-23-002760
P-23-003256	CA-MEN-002790	VOIDED: See P-23-002762
P-23-003257	CA-MEN-002791	VOIDED: See P-23-002763
P-23-003258	CA-MEN-002792	VOIDED: See P-23-002764
P-23-003259	CA-MEN-002793	VOIDED: See P-23-002765
P-23-003260	CA-MEN-002794	VOIDED: See P-23-002777
P-23-003261	CA-MEN-002795	VOIDED: See P-23-002766
P-23-003262	CA-MEN-002796	VOIDED: See P-23-002767

No. resources: 120

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

Date	User
Entered: 4/7/2005	nwic-main
Last modified: 10/21/2022	ruyball

IC actions: Date	User
4/7/2005	jay
4/24/2019	yanagig

Action taken

Appended records from NWICmain bibliographic database.

Added General note about block of voided trinomials associated with this report.

Record status: Database Complete

Report Detail: S-020676

Identifiers

Report No.: S-020676

Other IDs:	Type	Name
	CAL FIRE	1-98-162-MEN
	Voided	S-20407

Cross-refs: See also S-020407

Citation information

Author(s): Max A. Neri

Year: 1998 (May)

Title: Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Tenmile THP, 1-98-162 MEN

Affiliation: North Coast Resource Management

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

Sub-desig.: a

Author(s): Mark Gary

Year: 1998 (Jun)

Title: Archaeological Review of THP #1-98-162 MEN (Ten Mile) (letter report)

Affiliation: California Department of Forestry and Fire Protection

Report type(s): Archaeological, Field study

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 15-15

General notes

Isolated iron axe head

Associated resources

Primary No.	Trinomial	Name
P-23-003380		Tenmile THP Site-01/H
P-23-003381		Tenmile THP Site-02
P-23-003382		Tenmile THP Isolate-01

No. resources: 3

Has informals: Yes

Location information

County(ies): Mendocino

USGS quad(s): Tan Oak Park

Address:

PLSS:

Database record metadata

	Date	User	
Entered:	4/7/2005	nwic-main	
Last modified:	3/29/2021	rinerg	
IC actions:	Date	User	Action taken
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	11/5/2014	rinerg	cleaned for THP/CFMOU/CALFIRE attributes and identifiers

Report Detail: S-020676

3/17/2021	vickeryn	Added additional citation 'a'. It was once S-20407, which has been voided.
3/23/2021	shuddec	changed report attributes from 'cfmou' to 'archaeological' and 'field study'

Record status: Verified

Report Detail: S-021382

Identifiers

Report No.: S-021382

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
	CAL FIRE	1-98-402-MEN
	Voided	S-21229
	Voided	S-21921 (duplicate)

Cross-refs: See also S-021229

See also S-021921

Citation information

Author(s): Erik Geiger

Year: 1998 (Oct)

Title: Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Geiger Ranch THP, 1-98-402 MEN (California Department of Forestry)

Affiliation: Harwood Products, Inc.

No. pages:

No. maps:

Attributes: CF MOU

Inventory size: c 20 ac

Disclosure: Not for publication

Collections: No

Sub-desig.: a

Author(s): Richard S. Jenkins

Year: 1998 (Dec)

Title: 5400 Forest Practice Regulation THP 1-98-402 MEN, T.21N R. 15W S.11 MDM, Records Search No: 98-THP-11 (HW)
Archaeological Review (letter report)

Affiliation: California Department of Forestry and Fire Protection

Report type(s): Archaeological, Field study

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 9-10

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

	<i>Date</i>	<i>User</i>	
<i>Entered:</i>	4/7/2005	nwic-main	
<i>Last modified:</i>	6/8/2022	rinerg	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	11/5/2014	rinerg	cleaned for THP/CFMOU/CALFIRE attributes and identifiers
	6/8/2022	rinerg	affiliation=Harwood Products, Inc.; hasResources=No; collections=No;

Report Detail: S-021382

subsume S-21229 as citation 'a' (Jenkins arch field survey of THP)

Record status: Verified

Report Detail: S-021885

Identifiers

Report No.: S-021885

Other IDs:

Cross-refs:

Citation information

Author(s): Nelson B. Thompson

Year: 1978 (Oct)

Title: Archaeological monitoring of a sewer line trenching project on Ramsey Road, Laytonville, Mendocino County, California (letter report)

Affiliation: The Anthropology Laboratory, Sonoma State College

No. pages:

No. maps:

Attributes: Archaeological, Field study, Monitoring

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

5 chert flakes were found.

Associated resources

No. resources: 0

Has informals: Yes

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

Database record metadata

	<i>Date</i>	<i>User</i>	
<i>Entered:</i>	4/7/2005	nwic-main	
<i>Last modified:</i>	9/12/2019	hagell	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	6/19/2017	hagell	edited affiliation, notes
<i>Record status:</i>	Verified		

Report Detail: S-024424

Identifiers

Report No.: S-024424

Other IDs:

Cross-refs:

Citation information

Author(s): Thad Van Bueren

Year: 2001 (Jun)

Title: Archaeological Survey for a Minor Subdivision of the Musgrave Property near Laytonville, Mendocino County, California

Affiliation:

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 5 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak, Laytonville

Address: Address

1210 Branscomb Road

City

Laytonville

Assessor's parcel no.

14-26-17

Zip code

PLSS:

Database record metadata

Date

User

Entered: 4/7/2005

nwic-main

Last modified: 6/19/2017

hagell

IC actions: Date

User

Action taken

4/7/2005

jay

Appended records from NWICmain bibliographic database.

6/14/2017

moored

Database Incomplete: No Affiliation Submitted

6/19/2017

hagell

edited title

Record status: Verified

Report Detail: S-026359

Identifiers

Report No.: S-026359

Other IDs: Type

Name

Submitter

File No. 02-078S

Cross-refs:

Citation information

Author(s): Robert Douglass

Year: 2002 (Aug)

Title: A Cultural Resources Study of the Bergstedt Property, near Laytonville, Mendocino County, California

Affiliation: Tom Origer & Associates

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 23 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

Date

User

Entered: 4/7/2005

nwic-main

Last modified: 7/1/2021

rinerg

IC actions: Date

User

Action taken

4/7/2005

jay

Appended records from NWICmain bibliographic database.

7/1/2021

rinerg

hasResources=No; collections=No; remove quad location: Laytonville

Record status: Verified

Report Detail: S-026500

Identifiers

Report No.: S-026500

Other IDs:	Type	Name
	CAL FIRE	1-01NTMP-24

Cross-refs: See also S-019588

Citation information

Author(s): Maximillian Neri

Year: 2001 (May)

Title: Confidential Archaeological Addendum, Alder Springs Ranch NTMP, 1-01-NTMP-24 (California Department of Forestry)

Affiliation: North Coast Resource Management

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 2294 ac

Disclosure: Not for publication

Collections: No

General notes

PDF includes a copy of S-19588; The paper copy of the report at the NWIC is missing pages 443, 457, 480-482, 560-565, 591; resources need more processing [GR 2021-06-24];

Associated resources

Primary No.	Trinomial	Name
P-23-001014	CA-MEN-001085	M-62
P-23-001298	CA-MEN-001403	VOIDED: SEE P-23-003761
P-23-001299	CA-MEN-001404	VOIDED: SEE P-23-003761
P-23-001301	CA-MEN-001406H	Mill Creek Ranches B/H
P-23-002454	CA-MEN-002739	FS 1
P-23-002520	CA-MEN-002898	Pebble Chert Quarry
P-23-002634		NF Alder Springs Site 1
P-23-002709		FS 2; M-2
P-23-002710		FS 4
P-23-002711	CA-MEN-002962	FS 5; M-4
P-23-002712		FS 6/H
P-23-002715	CA-MEN-002964	FS 15
P-23-002716		VOID See P-23-002717
P-23-002717	CA-MEN-002965	FS 17
P-23-002718		FS18
P-23-002719	CA-MEN-002966	FS 20
P-23-002720		FS 21
P-23-002721		AS #1
P-23-002722		FS 24
P-23-002724	CA-MEN-002967	FS-26
P-23-002726	CA-MEN-002968	FS 28
P-23-002727		FS 29
P-23-002728		FS 30
P-23-002729	CA-MEN-002969	FS 32
P-23-002730	CA-MEN-002970	FS 33
P-23-002731		FS 34
P-23-002732		F.S. 35/Historic
P-23-002733		FS 36
P-23-002735		FS38
P-23-002737	CA-MEN-002972	FS 41
P-23-002738	CA-MEN-002973	FS42
P-23-002739	CA-MEN-002974	FS43
P-23-002740	CA-MEN-002975	FS44
P-23-002741	CA-MEN-002976	FS45

Report Detail: S-026500

P-23-002742		FS46
P-23-002743		FS47
P-23-002744	CA-MEN-002977	FS48
P-23-002745	CA-MEN-002978	FS49
P-23-002746	CA-MEN-002979	FS50
P-23-002747	CA-MEN-002980	FS51
P-23-002748		FS53
P-23-002749		FS 55 (FS62 combined)
P-23-002750	CA-MEN-002981	FS58
P-23-002753	CA-MEN-003860/H	FS64/H
P-23-002757	CA-MEN-002984	FS 70
P-23-002758		FS76
P-23-002760		FS80
P-23-002765		FS 87
P-23-002766	CA-MEN-002986/H	FS 89
P-23-002767		FS 90
P-23-002777	CA-MEN-002992	FS 88; M-95
P-23-003401		ASR Conversion Isolate-01
P-23-003402		ASR Conversion Site-01
P-23-003403		ASR Conversion Site-02
P-23-003404		ASR Conversion Site-03
P-23-003405		ASR Conversion Site-04
P-23-003406		ASR Conversion Site-05
P-23-003407		ASR Conversion Site-06
P-23-003408		ASR Conversion Site-07
P-23-003409		ASR Conversion Site-08/H
P-23-003410		ASR Conversion Site-09
P-23-003729		NF Alder Springs Site 3
P-23-003730		M-73
P-23-003731		M-74
P-23-003732		M-77
P-23-003733		M-78
P-23-003734		M-79
P-23-003735		M-81
P-23-003736		M-83
P-23-003737		M-85
P-23-003738		M-86
P-23-003739		M-87
P-23-003740		M-88
P-23-003741		M-89
P-23-003742		M-90
P-23-003743		M-91
P-23-003744		M-92
P-23-003745		M-93
P-23-003746		M-94
P-23-003747		M-98
P-23-003748		M-99
P-23-003749		M-100
P-23-003761	CA-MEN-003132	Mill Creek Ranches #3
P-23-006375		M-84

No. resources: 84

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Report Detail: S-026500

Database record metadata

	<i>Date</i>	<i>User</i>	
<i>Entered:</i>	4/7/2005	nwic-main	
<i>Last modified:</i>	10/6/2022	rinerg	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	11/5/2014	rinerg	cleaned for THP/CFMOU/CALFIRE attributes and identifiers
	6/23/2021	rinerg	add P-23-003401 thru P-23-003410; collections=No
	6/24/2021	rinerg	add general note about missing hardcopy pages
	10/6/2022	rinerg	the copy of S-19588 starts on p. 96 of the PDF
<i>Record status:</i>	Database Complete		

Report Detail: S-028261

Identifiers

Report No.: S-028261

Other IDs: Type

Name

CAL FIRE

THP #1-94-142 MEN

Cross-refs:

Citation information

Author(s): James E Little

Year: 1994 (Mar)

Title: Archeological and Historical Resources Survey and Impact Assessment, Swanson, THP #1-94-142 MEN

Affiliation: Harwood Products

No. pages:

No. maps:

Attributes: CF MOU

Inventory size: c 12 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak, Laytonville

Address:

PLSS: T22N R15W Sec. 35 MDBM

Database record metadata

Date	User	
Entered: 4/7/2005	nwic-main	
Last modified: 12/14/2020	hagell	
IC actions: Date	User	Action taken
4/7/2005	jay	Appended records from NWICmain bibliographic database.
11/5/2014	rinerg	cleaned for THP/CFMOU/CALFIRE attributes and identifiers
12/8/2020	davisc	T/R/Sec; recorded res=no; added affiliation; collections=no
12/10/2020	rinerg	add quad: 'Cahto Peak'
12/14/2020	hagell	edited other identifier, title

Record status: Verified

Report Detail: S-028302

Identifiers

Report No.: S-028302

Other IDs: Type

Name

CAL FIRE

THP #1-94-094 MEN

Cross-refs:

Citation information

Author(s): James E. Little

Year: 1994 (Feb)

Title: Archaeological and Historical Resources Survey and Impact Assessment, Smythe/Weaver THP, THP #1-94-094 MEN

Affiliation: Harwood Products Inc

No. pages:

No. maps:

Attributes: CF MOU

Inventory size: c 35 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS: T22N R15W Sec. 26, 27, 34, 35 MDBM

Database record metadata

Date

User

Entered: 4/7/2005

nwic-main

Last modified: 12/14/2020

hagell

IC actions: Date

User

Action taken

4/7/2005

jay

Appended records from NWICmain bibliographic database.

11/5/2014

rinerg

cleaned for THP/CFMOU/CALFIRE attributes and identifiers

12/8/2020

davisc

T/R/Sec; added affil; recorded res=no; collections=no

12/14/2020

hagell

edited other identifier, title

Record status: Verified

Report Detail: S-028769

Identifiers

Report No.: S-028769

Other IDs:	Type	Name
	Agency Nbr	DF&G #026-R3

Cross-refs:

Citation information

Author(s): Bethaney Weber, Nick Angeloff, and James Roscoe

Year: 2004 (Feb)

Title: A Cultural Resources Investigation of the Alder Springs Ranch Fencing Project, located in Mendocino, California, DF&G #026-R3

Affiliation: Cultural Resources Facility, Center for Indian Community Development, Humboldt State University

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 2 li mi

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	Trinomial	Name
P-23-002753	CA-MEN-003860/H	FS64/H
P-23-002760		FS80
P-23-003940		Alder Springs Isolate #1

No. resources: 3

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

Date	User	Action taken
Entered: 4/7/2005	nwic-main	
Last modified: 5/22/2023	muchb	
IC actions: Date	User	Action taken
4/7/2005	jay	Appended records from NWICmain bibliographic database.
8/8/2019	moored	Added collections
5/19/2023	rinerg	hasResources=Yes; add P-23-002760 & P-23-002753

Record status: Verified

Report Detail: S-028787

Identifiers

Report No.: S-028787

Other IDs:	Type	Name
	Agency Nbr	DF&G #224-R3

Cross-refs:

Citation information

Author(s): Nick Angeloff, Bethaney Weber, and James Roscoe

Year: 2004 (Mar)

Title: A Cultural Resources Investigation of the Streeter/Ten Mile Creeks Restoration Project, located in Mendocino, California, DF&G #224-R3

Affiliation: Cultural Resources Facility, Center for Indian Community Development, Humboldt State University

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 2 li mi

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	Trinomial	Name
P-23-000531	CA-MEN-000580	[none]
P-23-003941	CA-MEN-003186	Labyrinth Site

No. resources: 2

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

Date	User	Action taken
Entered: 4/7/2005	nwic-main	
Last modified: 9/10/2021	rinerg	
IC actions: Date	User	Action taken
4/7/2005	jay	Appended records from NWICmain bibliographic database.
12/14/2016	hagell	added other identifier, collections, & P#
9/10/2021	rinerg	hasResources=Yes

Record status: Verified

Report Detail: S-029778

Identifiers

Report No.: S-029778

Other IDs:	Type	Name
	CAL FIRE	1-99NTMP-008 MEN

Cross-refs:

Citation information

Author(s): Glenn T. Edwards

Year: 1999 (Apr)

Title: Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Mitchell NTMP, 1-99NTMP-008 MEN

Affiliation: GTE & Associates

No. pages:

No. maps:

Attributes: CF MOU

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

The area around CA-MEN-2343 (P-23-002057) was surveyed, but there was no evidence of the resource in the surveyed areas.

Associated resources

Primary No.	Trinomial	Name
P-23-000524	CA-MEN-000569	[none]
P-23-000529	CA-MEN-000578	[none]
P-23-000530	CA-MEN-000579	[none]
P-23-001021	CA-MEN-001092	ARS-76-19
P-23-002057	CA-MEN-002343	Lewis Creek
P-23-003515		Rock Wall

No. resources: 6

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak, Iron Peak, Laytonville, Tan Oak Park

Address:

PLSS: T22N R15W Sec. 2, 3, 4, 9, 10, 11, 14, 15, 16, 21, 22, 23, 26 MDBM

Database record metadata

Date	User	
Entered: 4/21/2005	leigh	
Last modified: 12/10/2020	rinerg	
IC actions: Date	User	Action taken
11/5/2014	rinerg	cleaned for THP/CFMOU/CALFIRE attributes and identifiers
3/6/2017	hagell	added other identifier, month, affiliation, note
12/8/2020	davisc	recorded res=yes; added res-P-23-524, 529, 530; collections=no
Record status: Verified		

Report Detail: S-030472

Identifiers

Report No.: S-030472

Other IDs:

Cross-refs:

Citation information

Author(s): Thad M. Van Bueren

Year: 2005 (Aug)

Title: Archaeological Survey for the Klopper Minor Subdivision at 1234 Branscomb Road near Laytonville, California.
Assessor's Parcel 014-260-14.

Affiliation:

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 10 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak, Laytonville

Address: Address

1234 Branscomb Road

PLSS: T21N R15W

City

Laytonville

Assessor's parcel no.

014-260-14

Zip code

Database record metadata

Date

User

Entered: 9/22/2005

kellyn

Last modified: 6/19/2017

hagell

IC actions: Date

User

Action taken

6/14/2017

moored

Database Incomplete: No Affiliation Submitted

Record status: Verified

Report Detail: S-031166

Identifiers

Report No.: S-031166

Other IDs:

Cross-refs:

Citation information

Author(s): Alex DeGeorgey

Year: 2006 (Jan)

Title: Phase One Archaeological Inventory of APN 013-180-07, Near Laytonville, Mendocino County, California

Affiliation: Sentinel Archaeological Research, LLC

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 40 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address: Address

City

Laytonville

Assessor's parcel no.

013-180-07

Zip code

PLSS: T22N R15W Sec. 26 MDBM

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 3/7/2006	kellyn	
<i>Last modified:</i> 12/14/2020	hagell	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
8/8/2019	moored	Added collections
12/8/2020	davisc	recorded res=yes; added rec res=P-23-524
12/10/2020	rinerg	resource mentioned only as record search, removed P-23-000524
12/14/2020	hagell	edited title
<i>Record status:</i> Verified		

Report Detail: S-032700

Identifiers

Report No.: S-032700

Other IDs: Type

Name

CAL FIRE

THP #1-98-274 MEN

Cross-refs:

Citation information

Author(s): Thomas E. Smythe

Year: 1998 (Jul)

Title: Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Everett THP, THP # 1-98-274 MEN

Affiliation: Harwood Products Inc.

No. pages:

No. maps:

Attributes: CF MOU

Inventory size: c 15 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address:

PLSS: T21N R15W Sec. 13 MDBM

Database record metadata

Date

User

Entered: 4/13/2007

guldenj

Last modified: 6/19/2017

hagell

IC actions: Date

User

Action taken

11/5/2014

rinerg

cleaned for THP/CFMOU/CALFIRE attributes and identifiers

Record status: Verified

Report Detail: S-033752

Identifiers

Report No.: S-033752

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
CAL FIRE		1-96-383-MEN

Cross-refs:

Citation information

Author(s): Lee Susan

Year: 1996 (Aug)

Title: Confidential Archaeological and Historical Resources Survey and Impact Assessment, A Supplemental Report for a Timber Harvesting Plan, Calder THP, THP # 1-96-383 MEN (California Department of Forestry)

Affiliation: Summit Forestry

No. pages:

No. maps:

Attributes: CF MOU

Inventory size: c 20 ac

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak, Laytonville

Address:

PLSS:

Database record metadata

	<i>Date</i>	<i>User</i>	
<i>Entered:</i>	12/13/2007	guldenj	
<i>Last modified:</i>	4/19/2022	rinerg	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	11/5/2014	rinerg	cleaned for THP/CFMOU/CALFIRE attributes and identifiers
	5/8/2019	shuddec	added collections and affiliation
	4/19/2022	YanagiG	Completed db.
<i>Record status:</i>	Verified		

Report Detail: S-034129

Identifiers

Report No.: S-034129

Other IDs: Type

Name

Submitter

A.R.S. Project 07-051

Cross-refs:

Citation information

Author(s): William Roop

Year: 2007 (Oct)

Title: A Cultural Resources Evaluation of Several Parcels Being Rezoned for Multifamily Housing, Mendocino Planning Team, Mendocino County, California

Affiliation: Archaeological Resource Service

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Several historic houses and buildings, and a scatter of chert and obsidian tools & flakes were noted but not recorded.

Associated resources

No. resources: 0

Has informals: Yes

Location information

County(ies): Mendocino

USGS quad(s): Elledge Peak, Hopland, Laytonville, Ukiah

Address	City	Assessor's parcel no.	Zip code
south side of Branscomb Road	Laytonville	014-090-38	
		014-090-37	
46340 Fisherman Drive		014-020-08	
		014-080-09	
		014-020-24	
311 Lake Mendocino Drive	North Ukiah	169-130-77	
141 East Lovers Lane		170-100-02	
1650 South State Street		170-100-10	
Ford Road		001-360-39	
1550 South State Street	South Ukiah	003-430-60	
1558 South State Street		003-430-55	
1568 South State Street		003-430-53	
109 Jefferson Lane		003-430-51	
211 Jefferson Lane		003-430-21	
1610 South State Street		180-200-01	
2100 South State Street		180-190-03	
145 Fircrest Drive		180-190-12	
175 Fircrest Drive		190-190-11	
2140 South State Street		180-190-05	
2146 South State Street		180-190-06	
2200 South State Street		180-190-07	
		180-190-08	
2240 South State Street		180-190-09	
2260 South State Street		180-190-10	
2270 South State Street		180-130-19	
		180-130-03	

Report Detail: S-034129

2280 South State Street	180-130-20
2850 South State Street	180-130-04
2900 South State Street	184-120-10
2950 South State Street	184-120-11
3000 South State Street	184-120-09
3150 South State Street	184-110-19
	184-140-02
	184-140-14
	184-140-15
	184-140-16
3160 South State Street	184-140-03
3200 South State Street	184-140-04
Main Street, State Hwy 175	Hopland
1101 Highway 175	Old Hopland

PLSS:

Database record metadata

<i>Date</i>	<i>User</i>	
Entered: 4/3/2008	guldenj	
Last modified: 7/20/2016	hagell	
IC actions: <i>Date</i>	<i>User</i>	<i>Action taken</i>
7/20/2016	hagell	added note
Record status: Verified		

Report Detail: S-034144

Identifiers

Report No.: S-034144

Other IDs: Type

Name

CAL FIRE

THP #1-07-026 MEN

Cross-refs:

Citation information

Author(s): James E. Little

Year: 2007 (Mar)

Title: An Archaeological Survey Report for the Whitley/Frost Modified Timber Harvesting Plan, Mendocino County, California

Affiliation: Harwood Products

No. pages:

No. maps:

Attributes: CF MOU

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.

Trinomial

Name

P-23-004486

CA-MEN-003377

Whitley Site

No. resources: 1

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

Database record metadata

Date

User

Entered: 4/1/2008

guldenj

Last modified: 9/17/2021

akmenkalnsj

IC actions: Date

User

Action taken

11/5/2014

rinerg

cleaned for THP/CFMOU/CALFIRE attributes and identifiers

6/14/2019

hagell

edited other identifier, title. Added affiliation

8/4/2021

vickeryn

Changed record status to "database complete".

9/17/2021

akmenkalnsj

Verified

Record status: Verified

Report Detail: S-034425

Identifiers

Report No.: S-034425

Other IDs:	Type	Name
Caltrans		EA 01-40280

Cross-refs:

Citation information

Author(s): Erick Wulf

Year: 2008 (Jan)

Title: Historic Property Survey Report for the Proposed Drainage System Repairs at 36 Locations on Highway 101 from Willits to Leggett, Mendocino County, California, 01-MEN-101 KP 74.4/136.0 (PM 46.2/84.5). EA 01-40280

Affiliation: Caltrans, District 3

No. pages:

No. maps:

Attributes: Architectural/historical, Field study, Management/planning

Inventory size:

Disclosure: Not for publication

Collections: No

Sub-design.: a

Author(s): Erick Wulf

Year: 2008 (Jan)

Title: Archaeological Survey Report for the Proposed Drainage System Repairs at 36 Locations on Highway 101 from Willits to Leggett, Mendocino County, California, 01-MEN-101 KP 74.4/136.0 (PM 46.2/84.5) EA 01-40280

Affiliation: Caltrans, District 3

Report type(s): Archaeological, Field study

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 64-148

Sub-design.: b

Author(s): Joan Fine

Year: 2008 (Jan)

Title: Culvert Rehabilitation Project on U.S. Highway 101 in Mendocino County, California

Affiliation: Department of Transportation, Office of Environmental Management

Report type(s): Literature search

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 149-154

General notes

Segments of U.S. 101, culverts, a shed, and 1 bridge are mentioned in the ASR.

Associated resources

No. resources: 0

Has informals: Yes

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak, Laytonville, Leggett, Longvale, Tan Oak Park, Willits

Address:

Report Detail: S-034425

PLSS:

Database record metadata

	<i>Date</i>	<i>User</i>	
<i>Entered:</i>	4/30/2008	guldenj	
<i>Last modified:</i>	11/5/2018	hagell	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	9/24/2014	mikulikc	Updated database and added additional citation.
	10/2/2014	neala	GISed
	4/14/2018	moored	added additional citation 'b'
<i>Record status:</i>	Verified		

Report Detail: S-035118

Identifiers

Report No.: S-035118

Other IDs:

Cross-refs:

Citation information

Author(s):

Year: 2008 (Jun)

Title: Cultural Resources Constraints Study for the Replacement of 42 Poles on the Garberville-Laytonville 60 kV Transmission Line, Mendocino County, CA

Affiliation: PAR Environmental Services, Inc.

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-23-000431	CA-MEN-000430/H	[none]
P-23-004614		S-GL-20/11A
P-23-004615		S-GL-24/4A
P-23-004616		S-GL-21/5
P-23-004624		S-GL-35/9
P-23-004675		S-GL-23/2

No. resources: 6

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak, Laytonville, Tan Oak Park

Address:

PLSS:

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 12/10/2008	hagell	
<i>Last modified:</i> 5/18/2020	hagell	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
6/14/2017	moored	Database Incomplete: No Author Submitted
5/18/2020	hagell	edited title
<i>Record status:</i> Verified		

Report Detail: S-035167

Identifiers

Report No.: S-035167

Other IDs:

Cross-refs:

Citation information

Author(s): Janine M. Loyd and Thomas M. Origer

Year: 2008 (Jul)

Title: A Cultural Resources Survey for the Community Water Storage Tank Project, Laytonville Rancheria, Mendocino County, California

Affiliation: Tom Origer & Associates

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections:

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

Date

User

Entered: 2/2/2009

guldenj

Last modified: 9/30/2009

guldenj

IC actions:

Record status:

Report Detail: S-037544

Identifiers

Report No.: S-037544

Other IDs:

Cross-refs:

Citation information

Author(s): Matthew Steele and James Roscoe

Year: 2010 (Jan)

Title: A Cultural Resources Investigation of the Ten Mile Creek Habitat Enhancement and Riparian Revegetation Project located in Mendocino County, California. California Department of Fish and Game Project # R1-162

Affiliation: Cultural Resources Facility, Humboldt State University

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c .6 li mi

Disclosure: Not for publication

Collections: No

General notes

One Isolate (a schist chopper tool) mentioned at location N-1.

Associated resources

No. resources: 0

Has informals: Yes

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

	<i>Date</i>	<i>User</i>	
<i>Entered:</i>	11/3/2010	guldenj	
<i>Last modified:</i>	9/16/2021	rinerg	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>	<i>Action taken</i>
	8/4/2021	vickeryn	Changed record status to "database complete".
<i>Record status:</i>	Verified		

Report Detail: S-038573

Identifiers

Report No.: S-038573

Other IDs:	Type	Name
	CAL FIRE	11-071-MEN

Cross-refs:

Citation information

Author(s): Thomas E. Smythe

Year: 2011 (Jul)

Title: An Archaeological Survey Report for the Whitley Timber Harvesting Plan, Mendocino County, California, THP 1-11-071 MEN

Affiliation: Harwood Products

No. pages:

No. maps:

Attributes: CF MOU

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	Trinomial	Name
P-23-001005	CA-MEN-001076/H	Site 2
P-23-004486	CA-MEN-003377	Whitley Site

No. resources: 2

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

Database record metadata

Date	User	Action taken
Entered: 2/6/2012	blacke	
Last modified: 9/17/2021	akmenkalnsj	
IC actions: Date	User	Action taken
11/5/2014	rinerg	cleaned for THP/CFMOU/CALFIRE attributes and identifiers
10/16/2019	intern02	Updated collection information
8/4/2021	vickeryn	Changed record status to "database complete".
9/17/2021	akmenkalnsj	Verified

Record status: Verified

Report Detail: S-038762

Identifiers

Report No.: S-038762

Other IDs:

Cross-refs:

Citation information

Author(s): Jay M. Flaherty

Year: 2011 (Sep)

Title: Cultural Resource Reconnaissance of 19+/- Acres Near Laytonville, Mendocino County, California (APNs 013-200-63 & 014-020-35)

Affiliation: Archaeological Services, Inc.

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address: Address

City

Assessor's parcel no.

Zip code

013-200-63

014-020-35

PLSS:

Database record metadata

Date

User

Entered: 4/17/2012

guldenj

Last modified: 9/17/2021

akmenkalnsj

IC actions: Date

User

Action taken

8/4/2021

vickeryn

Added collections. Changed record status to "database complete".

9/17/2021

akmenkalnsj

Verified

Record status: Verified

Report Detail: S-038865

Identifiers

Report No.: S-038865

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
	Caltrans	EA #01-453608
	Voided	S-38863
	Voided	S-38864
	Other	Contract No. 01A1056

Cross-refs: See also S-033511

See also S-038863

See also S-038864

Citation information

Author(s): Laura Leach-Palm, Paul Brady, Pat Mikkelsen, Libby Seil, Darla Rice, Bryan Larson, Joseph Freeman, and Julia Costello

Year: 2011 (May)

Title: Cultural Resources Inventory of Caltrans District 1 Rural Conventional Highways in Del Norte, Humboldt, Mendocino and Lake Counties, Contract No. 01A1056, Expenditure Authorization No. 01-453608

Affiliation: Far Western Anthropological Research Group; JRP Historical Consulting, LLC; Foothill Resources Ltd.

No. pages: 1149

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

Sub-design.: a

Author(s): Jack Meyer, Philip Kaijankoski, and Jeffrey S. Rosenthal

Year: 2011 (May)

Title: A Geoarchaeological Overview and Assessment of Northwest California: Cultural Resources Inventory of Caltrans District 1, Rural Conventional Highways: Del Norte, Humboldt, Mendocino, and Lake Counties

Affiliation: Far Western Anthropological Research Group, Inc.

Report type(s): Other research

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 576-829

Sub-design.: b

Author(s): Shelly Tiley and Shannon Tushingham

Year: 2011 (May)

Title: Volume I: Report and Appendices A-E, Native American Ethnogeography, Traditional Resources, and Contemporary Communities and Concerns: Cultural Resource Inventory of Caltrans District 1, Rural Conventional Highways: Del Norte, Humboldt, Mendocino, and Lake Counties

Affiliation: Tiley Research; Far Western Anthropological Research Group

Report type(s): Other research

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 830-1149

General notes

This study refers to numerous historic-era highway features. Appendix F of S-38865b (confidential tables and maps of ethnographic cultural resources) was not included in this copy of the report.

Report Detail: S-038865

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-08-000006	CA-DNO-000001/H	Yurok - Omen
P-08-000007	CA-DNO-000002	O-menhipu'r - north
P-08-000012	CA-DNO-000007/H	O-menhipu'r - south
P-08-000036	CA-DNO-000032	DNo-S8
P-08-000042	CA-DNO-000038	Gust-Chu-Meh
P-08-000045	CA-DNO-000041	Seytuninlet (Point of Rock)
P-08-000079	CA-DNO-000077H	Monkey Creek Ridge Top Trail
P-08-000214	CA-DNO-000214/H	Steiger/Porta Homestead
P-08-000258	CA-DNO-000263H	Joseph DeMartin Barn Site
P-08-000363		467 Plank Road
P-08-000364		Projectile Point #1
P-08-000365		Projectile Point #2
P-08-000419		Voided: see P-08-000550, -0005
P-08-000551	CA-DNO-000423H	JDN-010; Old Redwood Highway
P-12-000083	CA-HUM-000025	Loud 25
P-12-000084	CA-HUM-000026	Loud 26, Lekaliwil, Sgekeliwisk
P-12-000175	CA-HUM-000118	Patrick's Point #4
P-12-000182	CA-HUM-000125	Ma'ats
P-12-000184	CA-HUM-000127	Osloqw
P-12-000185	CA-HUM-000128	Paar
P-12-000186	CA-HUM-000129/H	Tsa'hpekw
P-12-000187	CA-HUM-000130	Hergwer
P-12-000188	CA-HUM-000131	Ore'qw
P-12-000194	CA-HUM-000169	Tsurai
P-12-000202	CA-HUM-000177	MM-1 -- First Night Out Site; MM
P-12-000212	CA-HUM-000187	CA-HUM-187
P-12-000229	CA-HUM-000204/H	Hlel-tin; Hlah Tung
P-12-000250	CA-HUM-000228	HD-1
P-12-000251	CA-HUM-000229	DHD-2
P-12-000252	CA-HUM-000230	HD-3
P-12-000255	CA-HUM-000235	Ora-w
P-12-000256	CA-HUM-000236	GCRSP #1
P-12-000367	CA-HUM-000357	Cloud Hands Organic Farm
P-12-000369	CA-HUM-000359/H	"Panamenik", Karok Town
P-12-000370	CA-HUM-000360	Possibly "Chinas", a Karok villag
P-12-000387	CA-HUM-000379	[none]
P-12-000463	CA-HUM-000457/H	VD-3
P-12-000464	CA-HUM-000458	STA-121
P-12-000465	CA-HUM-000459	[none]
P-12-000623	CA-HUM-000622	[none]
P-12-000702	CA-HUM-000711	Void; see P-12-000256
P-12-000821	CA-HUM-000833H	Dry Lagoon SP Site #7
P-12-001074	CA-HUM-000363	Contour 340
P-12-001102	CA-HUM-000844	BV-1
P-12-001103	CA-HUM-000845	LV-1
P-12-001104	CA-HUM-000846	LV-2
P-12-001105	CA-HUM-000847	LV-3
P-12-001106	CA-HUM-000848	LV-4
P-12-001107	CA-HUM-000849	LV-5
P-12-001152	CA-HUM-000944H	Orleans Bar Gold Mining Co. (O
P-12-001824	CA-HUM-001099	Project Area #1 Site
P-12-001825	CA-HUM-001100	H 1
P-12-002407	CA-HUM-001217H	JHU-035
P-12-002408	CA-HUM-001218H	JHU-041
P-12-002409	CA-HUM-001219H	JHU-039
P-12-002410	CA-HUM-001220H	JHU-038
P-12-002411	CA-HUM-001221H	JHU-037

Report Detail: S-038865

P-12-002448	CA-HUM-001227/H	FS 05-10-52-13
P-12-002473		JHU-012
P-12-002475	CA-HUM-001337H	JHU-021
P-12-002477		JHU-013
P-12-002518	CA-HUM-001108H	JHU-022
P-12-002559		JHU-002; Fernbridge Tractor & E
P-12-002565		JHU-008; 5391 State Route 36
P-12-002568		JHU-007
P-12-002575		JHU-032
P-12-002581		Butte Creek 2 (Update)
P-12-002582		Butte Creek 1
P-12-002583		FH-006
P-12-002585	CA-HUM-001130H	JHU-023
P-12-002597		FH-002H
P-12-002598	CA-HUM-001153H	JHU-031
P-12-002600		FH-103H
P-12-002604	CA-HUM-001155H	JHU-009
P-12-003054		Humboldt Lagoons State Park Vi
P-12-003124		Van Duzen River Bridge #4-97
P-12-003167	CA-HUM-001502H	JHU-025
P-12-003168	CA-HUM-001501H	JHU-050
P-12-003169	CA-HUM-001500H	JHU-051
P-12-003170	CA-HUM-001499H	JHU-030
P-12-003171	CA-HUM-001498H	JHU-053
P-12-003172		JHU-071
P-12-003312	CA-HUM-001589H	Old Redwood Highway
P-12-003313		FH-104H
P-12-003319		JHU-020
P-12-003470		Shell Redeposit
P-12-003502		Diablo Stoves
P-12-003803		Bridge 04 0225
P-17-000006	CA-LAK-000261	The Houx Site; Fredrickson "A"
P-17-000007	CA-LAK-000262	Fredrickson "B"
P-17-000073	CA-LAK-000038	[none]
P-17-000234	CA-LAK-000212	Mauldin 144
P-17-000264	CA-LAK-000243	Mauldin 176
P-17-000265	CA-LAK-000244	Mauldin 177
P-17-000289	CA-LAK-000271	[none]
P-17-000290	CA-LAK-000272	CA-LAK-272/Full Circle Field 2
P-17-000392	CA-LAK-000380	The Mostin Site
P-17-000446	CA-LAK-000435/H	Diwi'lem
P-17-000449	CA-LAK-000438	[none]
P-17-000484	CA-LAK-000498	Voided, see P-17-002401
P-17-000516	CA-LAK-000550	C-12
P-17-000517	CA-LAK-000551	K-45, U
P-17-000518	CA-LAK-000553	K-47
P-17-000604	CA-LAK-000705	[none]
P-17-000605	CA-LAK-000706	CA-LAK-706
P-17-000631	CA-LAK-000732	Quarry Site
P-17-000653	CA-LAK-000765	Bread Stone Site
P-17-000675	CA-LAK-000787	Junction Site
P-17-000853	CA-LAK-001020/H	Alter Brothers Homestead
P-17-000855	CA-LAK-001022	C-14
P-17-000856	CA-LAK-001023	Oak View, CO-4
P-17-000920	CA-LAK-001092/H	Henry Alter Homestead
P-17-001359	CA-LAK-001789	Jack's Site
P-17-001382		Old Country Road to Middletown
P-17-001489	CA-LAK-000480	Glenhaven East
P-17-001490	CA-LAK-000481/H	Indian Beach Resort

Report Detail: S-038865

P-17-001492	CA-LAK-000483	Branscomb Co-13
P-17-001500	CA-LAK-000496	K-32
P-17-001517	CA-LAK-000552	Site S (Old Quarry Site)
P-17-001591	CA-LAK-000827	Bo' tcauel Site
P-17-001890	CA-LAK-001788/H	Twenty-ninth and C Site
P-17-001982	CA-LAK-001894	Paradise bank Site; C-59
P-17-001984	CA-LAK-001896	Highway 20 Roadcut
P-17-001985	CA-LAK-001897	Orchard Shores
P-17-001986	CA-LAK-001898	Can View Site
P-17-001987	CA-LAK-001899	C-76
P-17-001988	CA-LAK-001900	Shoul Street
P-17-001989	CA-LAK-001901	Leeched Midden
P-17-001990	CA-LAK-001902	C-82
P-17-001991	CA-LAK-001903	Voided:see P-17-000920
P-17-001992	CA-LAK-001904	C-84
P-17-001998		Site AK
P-17-001999	CA-LAK-001910	Site AM
P-17-002002		Davies NTMP Site-01
P-17-002043		GR2000-22
P-17-002080	CA-LAK-001954	C-11
P-17-002081	CA-LAK-001955	C-13
P-17-002082	CA-LAK-001956	Void, see: P-17-000653
P-17-002101	CA-LAK-001961	Site 1
P-17-002201		Hoberg's Resort
P-17-002222		Garcia Prehistoric #1
P-17-002348	CA-LAK-002196H	SR 29-28
P-17-002371		DT-TEMP 2
P-17-002401	CA-LAK-002076/H	LAK-497-498
P-17-002480		FL-100
P-17-002481		FLI-103
P-17-002508		C-110
P-17-002509		C-594
P-17-002510		FL-001H
P-17-002511		FL-002H
P-17-002512		FL-003H
P-17-002514		FL-101
P-17-002515		FL-102H
P-17-002516		FL-103H
P-17-002517		FLI-003
P-17-002518		FLI-004
P-17-002519		FLI-005
P-17-002520		FLI-006
P-17-002521		FLI-008
P-17-002522		FLI-009
P-17-002523		FLI-101
P-17-002524		FLI-102H
P-17-002525	CA-LAK-002194H	JLK-003
P-17-002526		JLK-004
P-17-002527	CA-LAK-002195H	JLK-005
P-17-002530		Oaks West Bank
P-17-002540		FLI-100H
P-23-000009	CA-MEN-002827	Garnet Rock
P-23-000269	CA-MEN-000198	198
P-23-000387	CA-MEN-000320	Voided; See P-23-000590
P-23-000413	CA-MEN-000399	Heizer & Treganza "Laytonville"
P-23-000432	CA-MEN-000431	[none]
P-23-000433	CA-MEN-000432	[none]
P-23-000448	CA-MEN-000453	Metkuyakolselem
P-23-000488	CA-MEN-000496	Chipping Station

Report Detail: S-038865

P-23-000540	CA-MEN-000589	[none]
P-23-000590	CA-MEN-000643/H	Eel River Work Center
P-23-000797	CA-MEN-000862	Site 7
P-23-000800	CA-MEN-000865/H	Cane'l
P-23-001045	CA-MEN-001123	Cypress Court
P-23-001266	CA-MEN-001371	Chamberlain Creek; JSF 13
P-23-001515	CA-MEN-001628	FER-1
P-23-001645	CA-MEN-001802	Midden Deposit
P-23-001739	CA-MEN-001955	(3)
P-23-001890	CA-MEN-002134H	The Skunk Railroad
P-23-002004	CA-MEN-002280/H	Galloway School Site
P-23-002364	CA-MEN-002671/H	Lions Gate Site
P-23-002397	CA-MEN-002708H	Floodgate Extension
P-23-002451	CA-MEN-002867H	1878 Wagon Road
P-23-002503	CA-MEN-002890H	Caspar, South Fork & Eastern R
P-23-002699	CA-MEN-002952H	Summit Tunnel
P-23-002708	CA-MEN-002961	LSA-MEN-S-1
P-23-002919	CA-MEN-000516	[none]
P-23-002938	CA-MEN-000548	tsaka'mo
P-23-002939	CA-MEN-000549	[none]
P-23-003326		Westport Cemetery
P-23-003338	CA-MEN-003091H	Union Landing
P-23-003552		Gualala Mill Railway
P-23-003575	CA-MEN-003079H	WVS-1
P-23-003604	CA-MEN-003087/H	Spring Ranch
P-23-003663	CA-MEN-003111H	Northwestern Pacific Railroad
P-23-003702	CA-MEN-003126H	PM8 Site
P-23-003705		Bo'dono; Elledge Valley Baby Ro
P-23-003870	CA-MEN-003162H	Roth-2
P-23-003994	CA-MEN-003205H	Dora-1
P-23-004063		Cole Brothers Chute
P-23-004227	CA-MEN-003303/H	Big River Mill Site
P-23-004258		Whitesboro, Historic Mill Town
P-23-004335	CA-MEN-003338	Day Ranch 1
P-23-004467	CA-MEN-003366	LRB-1
P-23-004526	CA-MEN-003718H	Site 4; Bill Owens Road
P-23-004613	CA-MEN-003551H	ASC 85-07-01; Abandoned High
P-23-004636		Voided, see P-23-003663
P-23-004773		Brewery Gulch-1
P-23-005014		FM-001
P-23-005015		FM-001H
P-23-005016		FM-008H
P-23-005017		FM-010H
P-23-005018		FM-100H
P-23-005019		FMI-007
P-23-005020		FMI-201
P-23-005021	CA-MEN-003532H	JMN-001
P-23-005022		JMN-003
P-23-005023	CA-MEN-003533H	JMN-004
P-23-005024	CA-MEN-003534H	JMN-012
P-23-005025		JMN-020
P-23-005026	CA-MEN-003535H	JMN-021
P-23-005027		JMN-022
P-23-005028		JMN-023
P-23-005029		JMN-024
P-23-005030		JMN-025
P-23-005031		JMN-026
P-23-005032		JMN-027
P-23-005033		JMN-028

Report Detail: S-038865

P-23-005034	CA-MEN-003536H	JMN-029
P-23-005035		JMN-048
P-23-005036	CA-MEN-003537H	JMN-054
P-23-005037		Little River Cemetery

No. resources: 238

Has informals: Yes

Location information

County(ies): Del Norte, Humboldt, Lake, Mendocino

USGS quad(s): Albion, Arcata South, Bartlett Mtn, Benmore Canyon, Blue Lake, Boonville, Bridgeville, Broken Rib Mountain, Burbeck, Childs Hill, Clearlake Highlands, Clearlake Oaks, Cloverdale, Cold Spring, Comptche, Covelo East, Cow Mountain, Crescent City, Detert Reservoir, Dinsmore, Dos Rios, Elk, Elledge Peak, Eureka, Fern Canyon, Ferndale, Fish Lake, Fort Bragg, Fortuna, Garberville, Gasquet, Greenough Ridge, Gualala, Hales Grove, High Divide, Highland Springs, Hiouchi, Hoopa, Hoopa (15'), Hopland, Hurdygurdy Butte, Hydesville, Inglenook, Jamison Ridge, Kelseyville, Lakeport, Larabee Valley, Laytonville, Leggett, Longvale, Lord-Ellis Summit, Lower Lake, Lucerne, Mallo Pass Creek, Mathison Peak, Mendocino, Middletown, Miranda, Mount St Helena, Myers Flat, Navarro, Noble Butte, Noyo Hill, Orick, Orleans, Orleans Mountain, Ornaun Valley, Owl Creek, Philo, Piercy, Point Arena, Redcrest, Requa, Rodgers Peak, Salyer, Saunders Reef, Scotia, Shelly Creek Ridge, Sister Rocks, Smith River, Somes Bar, Tan Oak Park, Tish Tang Point, Trinidad, Ukiah, Upper Lake, Weitchpec, Weott, Westport, Whispering Pines, Wilbur Springs, Willis Ridge, Willits, Willow Creek, Yorkville

Address:

PLSS:

Database record metadata

Date	User	
Entered: 5/22/2012	blacke	
Last modified: 11/20/2023	neala	
IC actions: Date	User	Action taken
6/21/2016	mikulic	This report was mapped using shapefiles provided by Caltrans. These features do not completely match the included report maps.
10/21/2016	rinerg	removed Sonoma, Napa and Colusa counties
6/9/2017	bentonb	report verified: awaiting verification of 60 resources.
8/31/2017	raelync	report verified: awaiting verification of 2 resources.
1/30/2018	raelync	All resources verified.
1/2/2019	moored	Removed 'See Also' to S-10273, S-49390, S-49657. Do not believe these reports relate to S-38865.

Record status: Verified

Report Detail: S-039470

Identifiers

Report No.: S-039470

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
	Voided	S-39230

Cross-refs: See also S-039230

Citation information

Author(s): Chris Kimsey, Jennifer Thomas, Adrian R. Whitaker, and Philip Kaijankoski

Year: 2011 (May)

Title: Archaeological Survey Report and Buried Site Sensitivity Study for the Garberville to Laytonville Transmission Line Project, Humboldt and Mendocino Counties, California

Affiliation: Far Western Anthropological Research Group, Inc.

No. pages:

No. maps:

Attributes: Archaeological, Field study, Other research

Inventory size: c 40 li mi

Disclosure: Not for publication

Collections: No

Sub-desig.: a

Author(s): Adrian Whitaker

Year: 2011 (Aug)

Title: CPUC Complaint Project, Garberville-Laytonville 60KV-Cultural Resource Investigations (letter report)

Affiliation: Far Western Anthropological Research Group Inc.

Report type(s): Archaeological, Excavation, Field study

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: Yes

PDF Pages: 213-228

General notes

Collections at SSU accessioned under 2011-11

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-12-002450	CA-HUM-001229	FW-CK-03
P-12-002451	CA-HUM-001230	FW-CK-01
P-12-002452	CA-HUM-001231	FW-CK-02
P-23-000434	CA-MEN-000433	Bell Springs Petroglyph Rock
P-23-003618	CA-MEN-003098	PB-2
P-23-005055	CA-MEN-003552	FW-TS-01
P-23-005056	CA-MEN-003553	FW-TS-02
P-23-005057		ISO-CK-01
P-23-005058		ISO-TS-01

No. resources: 9

Has informals: No

Location information

County(ies): Humboldt, Mendocino

USGS quad(s): Bell Springs, Cahto Peak, Garberville, Harris, Jewett Rock, Laytonville, Tan Oak Park

Address:

PLSS:

Report Detail: S-039470

Database record metadata

<i>Date</i>		<i>User</i>	
<i>Entered:</i> 10/5/2012		baileyl	
<i>Last modified:</i> 2/17/2023		VickeryN	
<i>IC actions: Date</i>		<i>User</i>	<i>Action taken</i>
10/14/2014		levyd	Updated report details: Collections, Disclosure, County, USGS quads & resources
12/14/2016		hagell	added note
8/27/2020		guldenbreinj	added Garberville Quad to location
5/25/2022		riner	add quad locations: 'Harris', 'Jewett Rock'
2/17/2023		VickeryN	Added additional citation 'a'-it was once S-39230, which has been voided.
<i>Record status:</i> Verified			

Report Detail: S-045464

Identifiers

Report No.: S-045464

Other IDs:

Cross-refs:

Citation information

Author(s): Janine M. Origer

Year: 2014 (Jun)

Title: A Cultural Resources Survey of the Property at 44720 Hwy 101, Laytonville, Mendocino County, California

Affiliation: Tom Origer & Associates

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 1 ac

Disclosure: Not for publication

Collections: No

Sub-desig.: a

Author(s): Amy Dutschke and Julianne Polanco

Year: 2016

Title: Section 106 consultation for the development of one acre parcel of land, south of Laytonville, Mendocino County

Affiliation: US Department of the Interior, Bureau of Indian Affairs; California Office of Historic Preservation

Report type(s): OHP Correspondence

Inventory size:

No. pages:

Disclosure: Unrestricted

Collections: No

PDF Pages: 18-21

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address: Address

City

Assessor's parcel no.

Zip code

44720 Highway 101

Laytonville

PLSS:

Database record metadata

Date

User

Entered: 12/11/2014

hagell

Last modified: 6/28/2017

hagell

IC actions: Date

User

Action taken

6/28/2017

hagell

added additional citation a

Record status: Verified

Report Detail: S-045632

Identifiers

Report No.: S-045632

Other IDs: Type

Name

Other

CA-MEU-007202

Cross-refs:

Citation information

Author(s): J. Charles Whatford

Year: 2014 (Jul)

Title: Cultural Resource Narrative for the Lodge Lightning Complex, CA-MEU-007202, Mendocino County, California (letter report)

Affiliation: California Department of Forestry and Fire Protection

No. pages:

No. maps:

Attributes: Archaeological, Field study, Other research

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	Trinomial	Name
P-23-003943	CA-MEN-003188/H	Butler and Hollow Tree Creeks S
P-23-003945		Chert Flake Isolate #2
P-23-004316		Fox Farm Homestead
P-23-004318		Miller #3 Site #1
P-23-004319		Miller #3 Site #2
P-23-004347	CA-MEN-003336/H	Spring Site
P-23-004420		HT-P1I- Site#1
P-23-004421		HT-P1I-Site #2
P-23-004422		Bond Ridge Site
P-23-004493		Michaels Creek House Site
P-23-005013	CA-MEN-003634H	Low Gap Landing Site
P-23-005457		The Jack of Hearts Mill Site
P-23-005482		HT-P1I- Isolated Artifact 1
P-23-005653		Lovejoy Homestead at Horsehoe
P-23-005654		Lodge Complex Site-01; BLM #9
P-23-005655	CA-MEN-003693H	Lodge Complex Site-03 (Pet Ce
P-23-005656		Lodge Complex Site-04
P-23-005657		Lodge Complex Site-05 (Alquist
P-23-005658		Lodge Complex Site-06 (Alquist
P-23-005659		Lodge Complex Site-07 (Fanny
P-23-005660		Lodge Complex Site-08 (Elder H
P-23-005661		Lodge Complex Site-09 (Elder C
P-23-005662		Lodge Complex Site-10 (USGS
P-23-005663		Lodge Complex Site-11 (Davis H
P-23-005664		Lodge Complex Site-12
P-23-005665		Lodge Complex Site-13
P-23-005666		Lodge Complex Site-14
P-23-005667		Lodge Complex Site-15
P-23-005668		Lodge Complex Site-16 (Guimelli
P-23-005669		Lodge Complex Site-17

No. resources: 30

Has informals: No

Location information

County(ies): Mendocino

Report Detail: S-045632

USGS quad(s): Cahto Peak, Leggett, Lincoln Ridge, Tan Oak Park

Address:

PLSS:

Database record metadata

Date		User	
Entered: 2/13/2015		caldwellh	
Last modified: 5/18/2020		hagell	
IC actions: Date		User	Action taken
1/13/2016		rinerg	quads: remove 'Elk'; add 'Cahto Peak', 'Leggett', 'Lincoln Ridge', 'Tan Oak Park'
1/14/2016		rinerg	per email with C. Whatford, his 2014 update to P-23-005013 has been incorporated back into this report (PDF & hardcopy)
Record status: Verified			

Report Detail: S-048194

Identifiers

Report No.: S-048194

Other IDs: Type

Name

Submitter

13FY23-0002

Cross-refs:

Citation information

Author(s): Robert McCann

Year: 2013 (Jul)

Title: Cultural Resources Survey Report for NRCS Project 13FY23-0002: Proposed Fuel Break, Forest Stand Improvement, and Erosion Control n Cahto Tribe Lands, Mendocino County, California

Affiliation: NRCS

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

Date

User

Entered: 10/29/2016

cabrala

Last modified: 3/21/2017

grahams

IC actions:

Record status: Verified

Report Detail: S-048270

Identifiers

Report No.: S-048270

Other IDs:

Cross-refs:

Citation information

Author(s): Gregory G. White

Year: 2016 (Sep)

Title: Inspection of Unanticipated Archaeological Discovery, Cahto Creek Riparian Restoration Project (letter report)

Affiliation: SubTerra Consulting

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: Yes

General notes

Associated resources

<i>Primary No.</i>	<i>Trinomial</i>	<i>Name</i>
P-23-005923	CA-MEN-003760	Cahto Creek Restoration Site

No. resources: 1

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 11/26/2016	cabrala	
<i>Last modified:</i> 5/25/2017	rinerg	

<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
11/26/2016	cabrala	Unprocessed records
5/22/2017	grahams	records processed

Record status: Verified

Report Detail: S-049203

Identifiers

Report No.: S-049203

Other IDs:

Cross-refs:

Citation information

Author(s): Thad M. Van Bueren

Year: 2017 (Jun)

Title: Archaeological Survey of Assessor Parcel 014-160-12 in Laytonville, California

Affiliation:

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Laytonville

Address: Address

City

Laytonville

Assessor's parcel no.

014-160-12

Zip code

PLSS:

Database record metadata

Date

User

Entered: 7/27/2017

vickeryn

Last modified: 9/12/2019

hagell

IC actions: Date

User

Action taken

7/27/2017

vickeryn

No affiliation submitted

Record status: Verified

Report Detail: S-050057

Identifiers

Report No.: S-050057

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
	NRCS	15FY23-0012

Cross-refs:

Citation information

Author(s): Robert McCann

Year: 2015 (Dec)

Title: Cultural Resources Survey Report for NRCS Project 15FY23-0012: Cahto Tribe of Laytonville Rancheria Forest Stand Improvement Project, Mendocino County, California

Affiliation: Natural Resource Conservation Service

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Elledge Peak

Address:

PLSS:

Database record metadata

	<i>Date</i>	<i>User</i>
<i>Entered:</i>	2/28/2018	vickeryn
<i>Last modified:</i>	10/2/2018	surgeonj
<i>IC actions:</i>		
<i>Record status:</i>	Verified	

Report Detail: S-050059

Identifiers

Report No.: S-050059

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
	NRCS	15FY23-0017

Cross-refs:

Citation information

Author(s): Robert McCann

Year: 2016 (Jan)

Title: Cultural Resources Survey Report for NRCS Project #15FY23-0017: Engber Forest Stand Improvement Project, Mendocino County, California

Affiliation: Natural Resource Conservation Service

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Remnants of 1970s logging activity. 2 isolated prehistoric artifacts

Associated resources

No. resources: 0

Has informals: Yes

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

<i>Date</i>	<i>User</i>
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<i>Entered:</i> 2/28/2018	vickeryn
---------------------------	----------

<i>Last modified:</i> 10/2/2018	surgeonj
---------------------------------	----------

IC actions:

Record status: Verified

Report Detail: S-055235

Identifiers

Report No.: S-055235

Other IDs:	Type	Name
	NRCS	Agreement 749104201UY
	NRCS	20FY23-0012
	OTIS Report Number	NRCS_2021_0202_008

Cross-refs:

Citation information

Author(s): Robert McCann

Year: 2021 (Jan)

Title: Cultural Resources Section 106 Review Form, Agreement 749104201UY, Mendocino County, California

Affiliation: Natural Resources Conservation Service

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

Sub-design.: a

Author(s): Emily Castano and Julianne Polanco

Year: 2021 (Feb)

Title: NRCS_2021_0202_008, Section 106 consultation for NRCS Environmental Quality Incentive Program (EQIP) Conservation Assistance Project No. 749104201UY, Mendocino County, California

Affiliation: Office of Historic Preservation, Natural Resources Conservation Service

Report type(s): OHP Correspondence

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 11-13

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

Database record metadata

	Date	User	
Entered:	12/8/2021	vickeryn	
Last modified:	7/26/2023	YanagiG	
IC actions:	Date	User	Action taken
	12/8/2021	vickeryn	Added additional citation 'a'. PDF not scanned.
	1/5/2022	VickeryN	Scanned.
	7/10/2023	ruyball	GIS: lydia_holdingarea_17
	7/26/2023	YanagiG	Verified.
Record status:	Verified		

Report Detail: S-055530

Identifiers

Report No.: S-055530

Other IDs:	Type	Name
	Submitter	ALTA 2020-76

Cross-refs:

Citation information

Author(s): Alex DeGeorgey

Year: 2021 (Jan)

Title: Archaeological Survey Report, 48650 Highway 101 North, Laytonville, Mendocino County, California, APN 013-180-01 & 013-190-23

Affiliation: Alta Archaeological Consulting

No. pages:

No. maps:

Attributes: Archaeological, Architectural/historical, Field study

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Informal resources: chert flakes, bucksaw, portable sawmill and steel tank, PDF page 13. NWIC 8/16/2023 yanagig.

Associated resources

Primary No.	Trinomial	Name
P-23-000524	CA-MEN-000569	[none]
P-23-000529	CA-MEN-000578	[none]
P-23-006442	CA-MEN-003872H	Site 20-76-02
P-23-006443	CA-MEN-003873	Site 20-76-03
P-23-006448	CA-MEN-003874H	Site 20-76-01

No. resources: 5

Has informals: Yes

Location information

County(ies): Mendocino

USGS quad(s): Cahto Peak, Laytonville

Address:	Address	City	Assessor's parcel no.	Zip code
	48650 Highway 101 North	Laytonville	013-180-01	
			013-190-23	

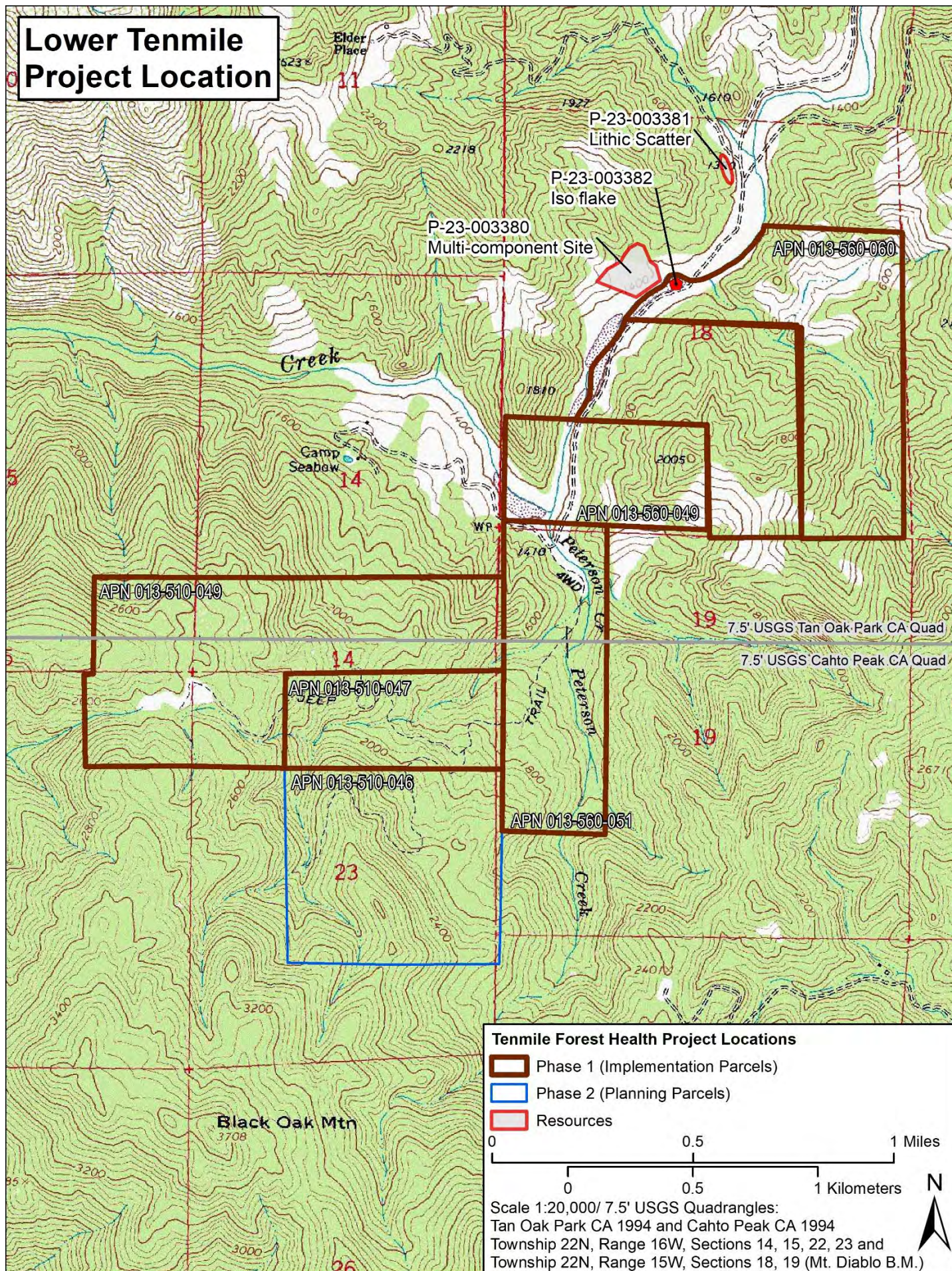
PLSS:

Database record metadata

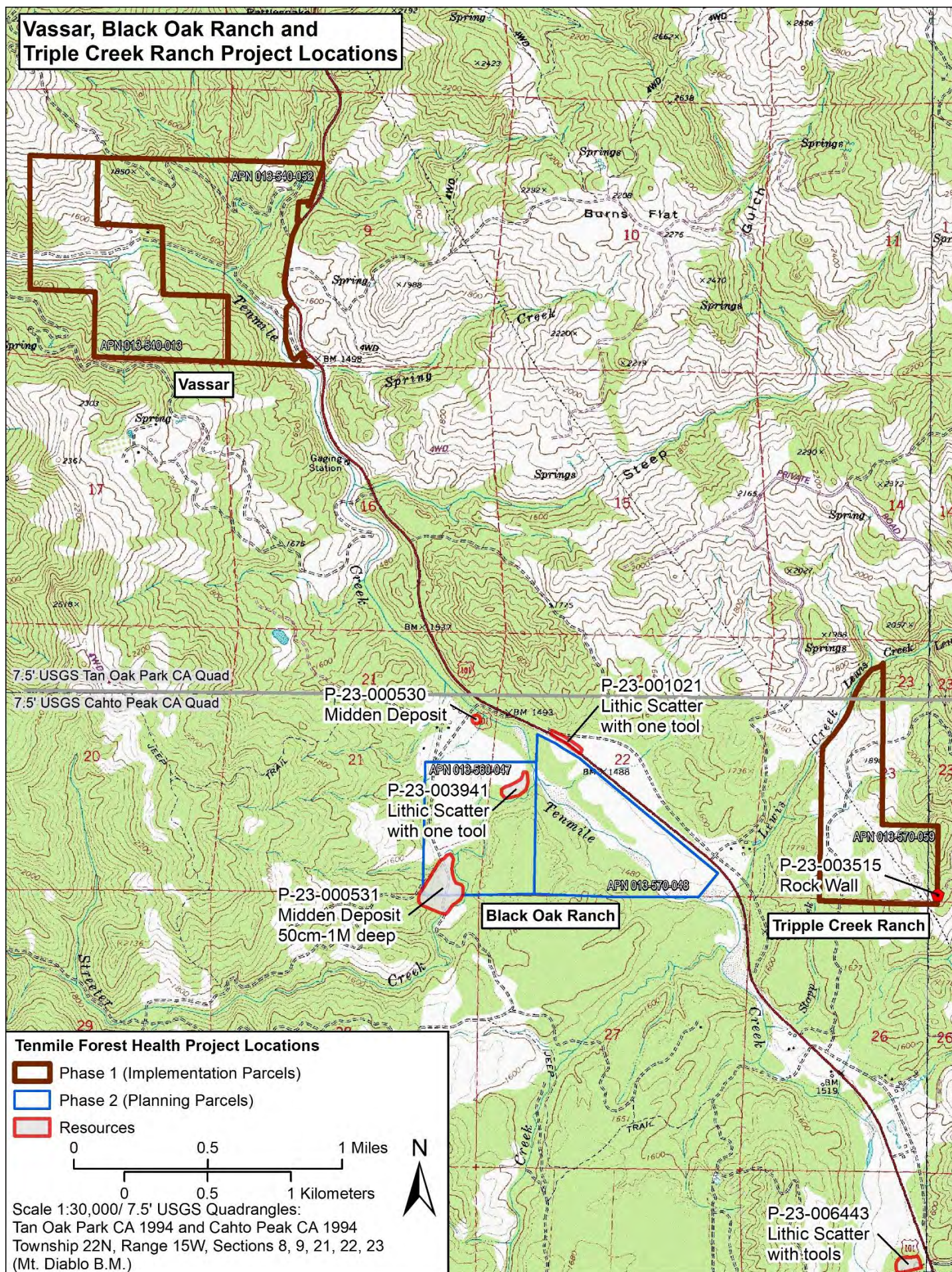
Date	User	
Entered: 2/17/2022	VickeryN	
Last modified: 8/16/2023	YanagiG	
IC actions:	Date	User
	8/10/2023	karapanosn
	8/16/2023	YanagiG
		Action taken
		GIS: nikki_holdingarea_15
		Verified.
Record status:	Verified	

RESOURCES

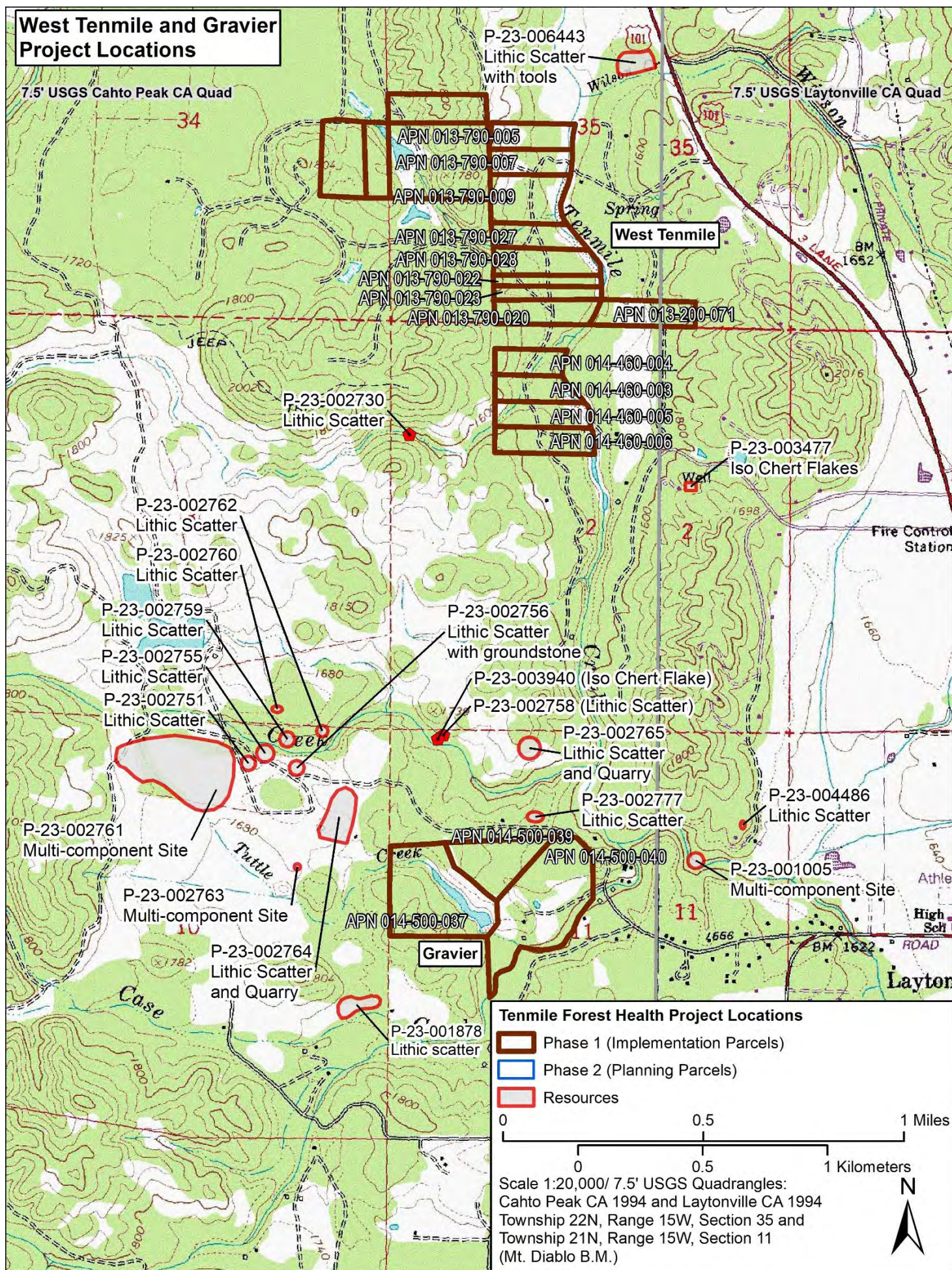
Lower Tenmile Project Location



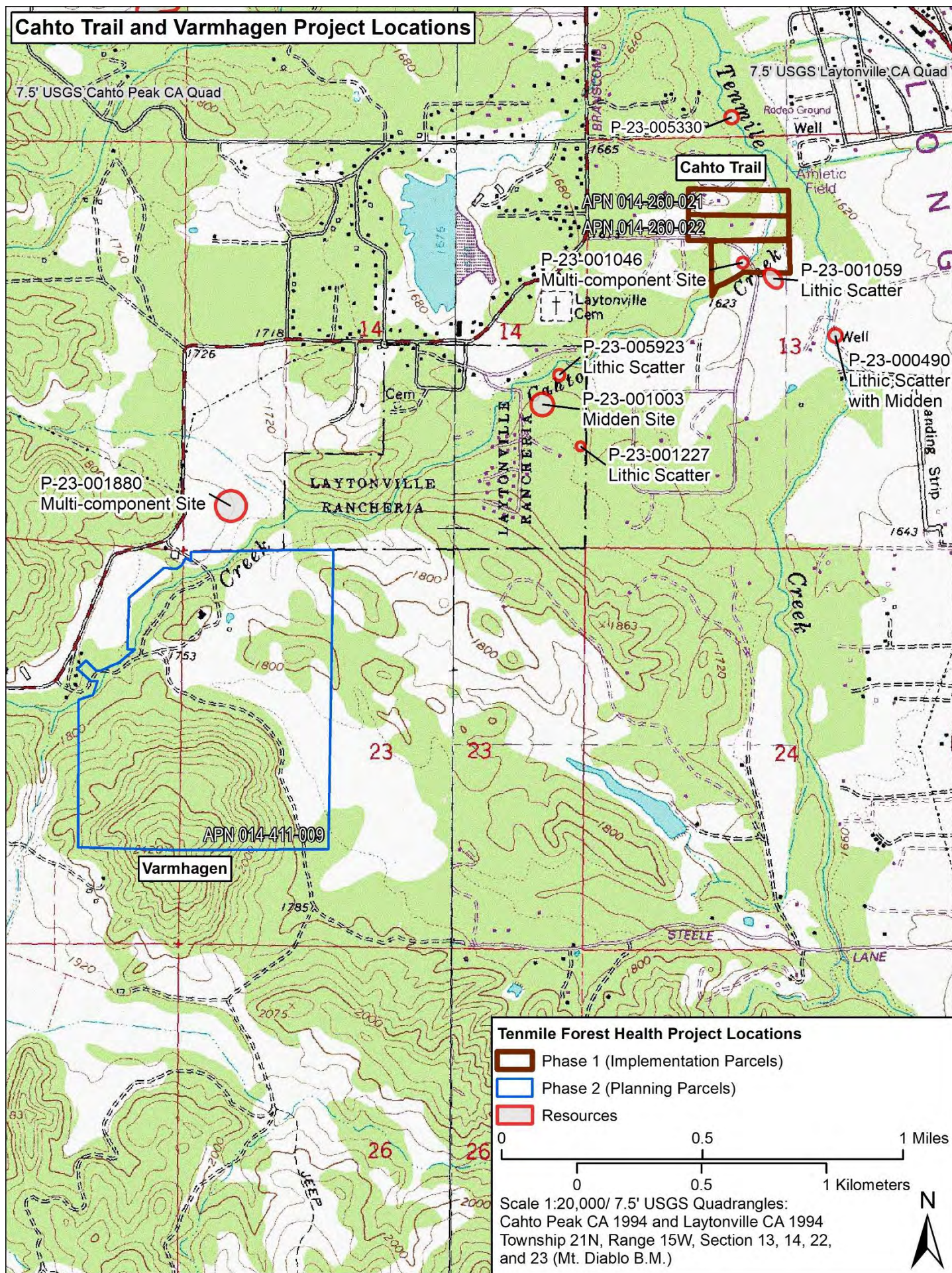
Vassar, Black Oak Ranch and Triple Creek Ranch Project Locations



West Tenmile and Gravier Project Locations



Cahto Trail and Varmhagen Project Locations



PA/SA	Project Location(s)	PrimCo	PrimNo	TrinNo	Label	OtherID
SA	Cahto Trail	23	490	498	P-23-000490	[none]
SA	Black Oak Ranch	23	530	579	P-23-000530	[none]
PA	Black Oak Ranch	23	531	580	P-23-000531	[none]
PA	Laytonville Rancheria	23	1003	1073	P-23-001003	Cahto Bluff
SA	Gravier	23	1005	1076	P-23-001005	Site 2
PA	Black Oak Ranch	23	1021	1092	P-23-001021	ARS-76-19
SA	Cahto Trail and Laytonville Rancheria	23	1046	1125	P-23-001046	Goat's Paradise
SA	Cahto Trail and Laytonville Rancheria	23	1059	1153	P-23-001059	THE COOL BREEZE SITE
PA	Laytonville Rancheria	23	1227	1332	P-23-001227	L2
SA	Gravier	23	1878	2118	P-23-001878	Foltz-Huff Site
SA	Laytonville Rancheria and Varnhagen	23	1880	2124	P-23-001880	Cahto Creek Site
SA	Varnhagen	23	1974	3347	P-23-001974	Branscomb Rd. 1
SA	West Tenmile	23	2730	2970	P-23-002730	FS 33, Subsumes 23-003214
SA	Gravier	23	2751		P-23-002751	FS61
SA	Gravier	23	2755		P-23-002755	FS67
SA	Gravier	23	2756	2983	P-23-002756	FS69, 23-003227
SA	Gravier	23	2758		P-23-002758	FS76
SA	Gravier	23	2759		P-23-002759	FS79
SA	Gravier	23	2760		P-23-002760	FS80
SA	Gravier	23	2761	3861	P-23-002761	FS75
SA	Gravier	23	2762		P-23-002762	FS81
SA	Gravier	23	2763	2985/H	P-23-002763	FS83/H
SA	Gravier	23	2764		P-23-002764	FS 85
SA	Gravier	23	2765		P-23-002765	FS 87
SA	Gravier	23	2777	2992	P-23-002777	FS 88
SA	Lower Ten Mile	23	3380		P-23-003380	Tenmile THP Site-01/H
SA	Lower Ten Mile	23	3381		P-23-003381	Tenmile THP Site-02
PA	Lower Ten Mile	23	3382		P-23-003382	Tenmile THP Isolate-01
SA	West Tenmile	23	3477		P-23-003477	Sanders Isolate
SA	Tripple Creek Ranch	23	3515		P-23-003515	Rock Wall
SA	Gravier	23	3940		P-23-003940	Alder Springs Isolate #1
PA	Black Oak Ranch	23	3941	3186	P-23-003941	Labyrinth Site
SA	Gravier	23	4486	3377	P-23-004486	Whitley Site
SA	Cahto Trail	23	5330		P-23-005330	Ten Mile Creek
PA	Laytonville Rancheria (PA), Cahto Trail (SA)	23	5923	3760	P-23-005923	Cahto Creek Restoration Site
SA	West Tenmile	23	6443	3873	P-23-006443	Site 20-76-03

Resource Detail: P-23-000490

Identifying information

Primary No.: P-23-000490

Trinomial: CA-MEN-000498

Name: [none]

Other IDs: *Type* *Name*

Resource Name [none]

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter); AP15 (Habitation debris)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

<i>Date</i>	<i>Recorder(s)</i>	<i>Affiliation</i>	<i>Notes</i>
8/21/1951	R.J.S.	[none]	

Associated reports

Location information

County: Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

UTMs: Zone 10 458760mE 4391480mN NAD27

Management status

Database record metadata

<i>Date</i>	<i>User</i>	<i>Action taken</i>
<i>Entered:</i> 4/1/2005	icrds	
<i>Last modified:</i> 6/16/2017	rinerg	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	
4/1/2005	jay	Appended records from discontinued ICRDS.
<i>Record status:</i> Verified		

Resource Detail: P-23-000530

Identifying information

Primary No.: P-23-000530

Trinomial: CA-MEN-000579

Name: [none]

Other IDs: Type Name

Resource Name [none]

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter) - obsidian & chert; AP15 (Habitation debris)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
6/14/1963	Dotta; Moore	UC	

Associated reports

Report No.	Year	Title	Affiliation
S-029778	1999	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Mitchell NTMP, 1-99NTMP-008 MEN	GTE & Associates

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 454600mE 4399720mN NAD27 (6/1963)

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 8/24/2021	neala	
IC actions: Date	User	Action taken
4/1/2005	jay	Appended records from discontinued ICRDS.
8/3/2021	rinerg	resName=[none]; add AP02; collections=No; finish 1963 Dotta & Moore recording event
8/24/2021	neala	no affiliation listed

Record status: Verified

Resource Detail: P-23-000531

Identifying information

Primary No.: P-23-000531

Trinomial: CA-MEN-000580

Name: [none]

Other IDs: Type Name

Resource Name [none]

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey, Other

Attribute codes: AP02 (Lithic scatter); AP15 (Habitation debris)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility: collected by land owner

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	6/14/1963	Dotta, Moore		
b	10/3/2003	Nick Angeloff, Cameron Williams	CICD-CRF	

Associated reports

Report No.	Year	Title	Affiliation
S-028787	2004	A Cultural Resources Investigation of the Streeter/Ten Mile Creeks Restoration Project, located in Mendocino, California, DF&G #224-R3	Cultural Resources Facility, Center for Indian Community Development, Humboldt State University

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS: T22N R15W Sec. 21 HBM

UTMs: Zone 10 454250mE 4398640mN NAD83 (nwic, 10/2003)

Zone 10 454240mE 4398970mN NAD83 (nwic, 10/2003)

Zone 10 454170mE 4399127mN NAD83 (10/2003)

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 8/24/2021	neala	
IC actions: Date	User	Action taken
12/14/2016	hagell	edited recording events
4/1/2005	jay	Appended records from discontinued ICRDS.
8/24/2021	neala	no affiliation 1963 recording;
3/3/2008	neala	added update: event 'b' [Angeloff/Williams 10/2003]
Record status: Verified		

Resource Detail: P-23-001003

Identifying information

Primary No.: P-23-001003

Trinomial: CA-MEN-001073

Name: Cahto Bluff

Other IDs: Type

Name

Resource Name

Cahto Bluff

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey, Other

Attribute codes: AP02 (Lithic scatter); AP15 (Habitation debris)

Disclosure: Not for publication

Collections:

Accession no(s): 76-04

Facility: David A. Fredrickson Archaeological Collections Facility at SSU

General notes

Recording events

<i>Date</i>	<i>Recorder(s)</i>	<i>Affiliation</i>	<i>Notes</i>
1/1/1976	DAVID A. FREDRICKSON		

Associated reports

<i>Report No.</i>	<i>Year</i>	<i>Title</i>	<i>Affiliation</i>
S-000249	1976	An Archaeological Survey of a Proposed Development Area at Laytonville Rancheria, Mendocino County, California.	
S-000945	1978	An Archaeological Survey and Cultural Resource Evaluation of Six Northern California Rancherias (Susanville, Cortina, Colusa, Rumsey, Laytonville, and Sherwood Valley Rancherias)	Archeological Study Center, California State University, Sacramento

Location information

County: Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

UTMs: Zone 10 457450mE 4391150mN NAD27

Management status

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/1/2005	icrds	
<i>Last modified:</i>		
<i>IC actions:</i> Date	<i>User</i>	<i>Action taken</i>
4/1/2005	jay	Appended records from discontinued ICRDS.
12/11/2017	riner	auto-convert resource name to Proper Case (was: CAHTO BLUFF)
<i>Record status:</i>		

Resource Detail: P-23-001005

Identifying information

Primary No.: P-23-001005

Trinomial: CA-MEN-001076/H

Name: Site 2

Other IDs: Type

Name

Resource Name

Site 2

Other

Wilson Homestead

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric, Protohistoric, Historic

Information base: Other

Attribute codes: AH16 (Other) - Homestead; AP04 (Bedrock milling feature); AP09 (Burials); AP16 (Other) - projectile point

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
6/1/1975	R. King	[none]	

Associated reports

Report No.	Year	Title	Affiliation
S-000151	1975	An Archaeological Reconnaissance of the Proposed Laytonville Wastewater Disposal Project.	California State College, Sonoma
S-038573	2011	An Archaeological Survey Report for the Whitley Timber Harvesting Plan, Mendocino County, California, THP 1-11-071 MEN	Harwood Products

Location information

County: Mendocino

USGS quad(s): Laytonville

Address:

PLSS: T21N R15W SW¼ of SE¼ of Sec. 11 MDBM

UTMs: Zone 10 557280mE 4393340mN NAD27

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 10/16/2019	intern02	
IC actions: Date	User	Action taken
9/25/2018	moored	added attributes, collections, and corrected recording events. Added /H
4/1/2005	jay	Appended records from discontinued ICRDS.
10/16/2019	intern02	Updated collection information; No artifacts were collected (page 11 PDF)

Record status: Verified

Resource Detail: P-23-001021

Identifying information

Primary No.: P-23-001021

Trinomial: CA-MEN-001092

Name: ARS-76-19

Other IDs:	Type	Name
	Resource Name	ARS-76-19

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey, Other

Attribute codes: AP02 (Lithic scatter); AP15 (Habitation debris)

Disclosure: Not for publication

Collections: Yes

Accession no(s): 76-50

Facility: David A. Fredrickson Archaeological Collections Facility ASC at SSU

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	3/21/1976	Flynn, Roop	ARS	
b	10/23/1986	Barry Douglas	Caltrans, District 1	
d	4/1/2001	L. Compas, J. Burton, T. Bakic	PAR Environmental Services,	

Associated reports

Report No.	Year	Title	Affiliation
S-009059	1987	Historic Property Survey Report for a Proposed Resurfacing and Widening Project on Highway 101 from Huntsman Way to 5.0 Miles North of Laytonville in Mendocino County, 01-MEN-101-70.7/74.8 01-197730	Caltrans
S-012937	1988	Report on Construction Impact to CA-Men-1092, 1-Men-101-74.8/77.8 01-202423	California Department of Transportation, District 1
S-029778	1999	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Mitchell NTMP, 1-99NTMP-008 MEN	GTE & Associates
S-054298	2020	Cultural Resources Constraints Report: Laytonville 1101 12kV Enhanced Vegetation Management Hwy 101 Caltrans 2019	Blue Rock Services, Inc.
S-056975	2023	Archaeological Survey Report, Eureka-Manchester Fiber Optic Proct, Humboldt and Mendocino Counties, California (Draft)	Dudek

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 456500mE 4397760mN NAD27 (4/2001)
Zone 10 454880mE 4399740mN NAD27 (nwc, 4/2001)
Zone 10 455050mE 4399620mN NAD27 (nwc, 4/2001)
Zone 10 454697mE 4399937mN NAD83 (nwc, 8/2021)
Zone 10 454960mE 4300680mN NAD27 (10/1986)

Resource Detail: P-23-001021

Management status

Database record metadata

Date		User	
Entered:		4/1/2005	icrds
Last modified:		8/25/2021	neala
IC actions:		Date	User
		4/1/2005	jay
		3/6/2017	hagell
		8/25/2021	neala
Record status:		Verified	

Action taken

Appended records from discontinued ICRDS.

edited recording events

event 'c' in location change dated 2/20/1992; added UTM

Resource Detail: P-23-001046

Identifying information

Primary No.: P-23-001046

Trinomial: CA-MEN-001125/H

Name: Goat's Paradise

Other IDs: Type

Name

Resource Name

Goat's Paradise

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric, Historic

Information base: Survey

Attribute codes: AH04 (Privies/dumps/trash scatters); AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s): 77-03

Facility: David A. Fredrickson Archaeological Collections Facility at SSU

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
6/6/1977	Offermann	[none]	

Associated reports

Report No.	Year	Title	Affiliation
S-000537	1977	An Archaeological Survey of 285 Acres Located Southwest of Laytonville, California.	The Anthropology Laboratory, Sonoma State College
S-017343	1995	A Cultural Resources Study of a Portion of the Rathke Property at 165 Mulligan Road, Laytonville, Mendocino County, California	Tom Origer & Associates

Location information

County: Mendocino

USGS quad(s): Laytonville

Address:

PLSS: T21N R15W NW¼ of SE¼ of Sec. 13 MDBM

UTMs: Zone 10 458100mE 4391700mN NAD27

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 6/16/2017	rinerg	
IC actions: Date	User	Action taken
4/1/2005	jay	Appended records from discontinued ICRDS.
5/31/2017	hagell	edited resource name, recording event

Record status: Verified

Resource Detail: P-23-001059

Identifying information

Primary No.: P-23-001059

Trinomial: CA-MEN-001153

Name: The Cool Breeze Site

Other IDs: *Type* *Name*

Resource Name The Cool Breeze Site

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s): 77-03

Facility: David A. Fredrickson Archaeological Collections Facility at SSU

General notes

Recording events

<i>Date</i>	<i>Recorder(s)</i>	<i>Affiliation</i>	<i>Notes</i>
6/6/1977	J. Milburn	[none]	

Associated reports

<i>Report No.</i>	<i>Year</i>	<i>Title</i>	<i>Affiliation</i>
S-000537	1977	An Archaeological Survey of 285 Acres Located Southwest of Laytonville, California.	The Anthropology Laboratory, Sonoma State College

Location information

County: Mendocino

USGS quad(s): Laytonville

Address:

PLSS: T21N R15W NE¼ of NE¼ of Sec. 13 MDBM

UTMs: Zone 10 458300mE 4391300mN NAD27

Management status

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/1/2005	icrds	
<i>Last modified:</i> 2/24/2017	moored	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
4/1/2005	jay	Appended records from discontinued ICRDS.
<i>Record status:</i> Verified		

Resource Detail: P-23-001227

Identifying information

Primary No.: P-23-001227

Trinomial: CA-MEN-001332

Name: L2

Other IDs: Type Name

Resource Name L2

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: Yes

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/29/1977	C. Kielusiak; G. Greenway	C.S.U.S	

Associated reports

Report No.	Year	Title	Affiliation
S-000945	1978	An Archaeological Survey and Cultural Resource Evaluation of Six Northern California Rancherias (Susanville, Cortina, Colusa, Rumsey, Laytonville, and Sherwood Valley Rancherias)	Archeological Study Center, California State University, Sacramento

Location information

County: Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

UTMs: Zone 10 457620mE 4391040mN NAD27

Management status

Database record metadata

Date	User	
Entered: 4/1/2005	icrds	
Last modified: 3/28/2017	rinerg	
IC actions: Date	User	Action taken
4/1/2005	jay	Appended records from discontinued ICRDS.
Record status: Verified		

Resource Detail: P-23-001878

Identifying information

Primary No.: P-23-001878

Trinomial: CA-MEN-002118

Name: Foltz-Huff Site

Other IDs: Type

Name

Resource Name

Foltz-Huff Site

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey, Testing

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: Yes

Accession no(s):

Facility: landowner

General notes

Recording events

<i>Date</i>	<i>Recorder(s)</i>	<i>Affiliation</i>	<i>Notes</i>
4/5/1987	Mark Gary; Deborah McLearn; Tim Huff; JoAnn	CDF; Mendocino County Archaeological Commission	

Associated reports

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS: T21N R15W NE¼ of SE¼ of Sec. 10 MDBM

UTMs: Zone 10 455960mE 4392820mN NAD27

Management status

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/1/2005	icrds	
<i>Last modified:</i> 4/20/2023	rinerg	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
12/11/2017	rinerg	auto-convert resource name to Proper Case (was: FOLTZ-HUFF SITE)
4/1/2005	jay	Appended records from discontinued ICRDS.
4/20/2023	rinerg	update date, names, and affiliation of Gary/McLearn 1987 recording ('a'); check InfoBase=Testing
4/4/2023	NiecE	database 'complete', township and range
<i>Record status:</i> Verified		

Resource Detail: P-23-001880

Identifying information

Primary No.: P-23-001880

Trinomial: CA-MEN-002124/H

Name: Cahto Creek Site

Other IDs: Type

Name

Resource Name

Cahto Creek Site

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric, Historic

Information base: Survey, Excavation

Attribute codes: AH16 (Other) - stage coach stop; AP02 (Lithic scatter); AP15 (Habitation debris)

Disclosure: Not for publication

Collections: Yes

Accession no(s): Site Number

Facility: SJSU

General notes

Recording events

<i>Date</i>	<i>Recorder(s)</i>	<i>Affiliation</i>	<i>Notes</i>
6/1/1987	Mark Gary / Dr. Thomas Layton, Deborah McLearn, Dwight Simond	San Jose State University and Mendocino County Arch. Comm.	

Associated reports

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 456060mE 4390280mN NAD27

Management status

Database record metadata

<i>Date</i>	<i>User</i>	<i>Action taken</i>
<i>Entered:</i> 4/1/2005	icrds	
<i>Last modified:</i> 4/30/2019	rinerg	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	
12/11/2017	rinerg	auto-convert resource name to Proper Case (was: CAHTO CREEK SITE)
4/30/2019	rinerg	correct the quad location: delete 'Sherwood Peak', add 'Cahto Peak'
4/1/2005	jay	Appended records from discontinued ICRDS.
3/12/2019	wandlingj	Database Populated.
<i>Record status:</i> Verified		

Resource Detail: P-23-001974

Identifying information

Primary No.: P-23-001974

Trinomial: CA-MEN-002247

Name: Branscomb Road #1

Other IDs: Type Name

Resource Name Branscomb Road #1

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey, Surface collection, Testing, Excavation

Attribute codes: AP02 (Lithic scatter); AP16 (Other)

Disclosure: Not for publication

Collections: Yes

Accession no(s): 89-2-1150; 89-29

Facility: David A. Fredrickson Archaeological Collections Facility at SSU

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	6/2/1989	S.A. Waechter	[none]	
b	1/1/1990	S.A. Waechter	[none]	update

Associated reports

Report No.	Year	Title	Affiliation
S-009688	1990	Historic Property Survey Report for Proposed Branscomb Road (County Road 429) Realignment Project near Laytonville, Mendocino County, California	Earthcraft Planning Services
S-010819		VOIDED S# - additional citation 'b' of S-9688	
S-011595		VOIDED S# - additional citation 'c' of S-9688	

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 454300mE 4389300mN NAD27

Zone 10 454510mE 4389530mN NAD27

Zone 10 454820mE 4389540mN NAD27

Zone 10 454900mE 4389190mN NAD27

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 6/22/2017	grahams	
IC actions: Date	User	Action taken
12/11/2017	riner	auto-convert resource name to Proper Case (was: BRANSCOMB ROAD #1)
4/1/2005	jay	Appended records from discontinued ICRDS.
Record status: Verified		

Resource Detail: P-23-002730

Identifying information

Primary No.: P-23-002730

Trinomial: CA-MEN-002970

Name: FS 33

Other IDs:	Type	Name
	Resource Name	FS 33
	Other	M-23

Cross-refs: Subsumes 23-003214

See also 23-003226

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	4/20/1991	M. Byars, R.W. Duddles	Archaeological Services Inc.	
b	9/1/2000	Max Neri	North Coast Resource Management	

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates
S-026500	2001	Confidential Archaeological Addendum, Alder Springs Ranch NTMP, 1-01-NTMP-24 (California Department of Forestry)	North Coast Resource Management

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 456100mE 4395040mN NAD27 (1991)

Zone 10 456090mE 4395000mN NAD83 (2000)

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 11/1/2016	castrom	
IC actions: Date	User	Action taken
4/1/2005	jay	Appended records from discontinued ICRDS.
11/1/2016	castrom	Association to P-23-003214 based on NWIC Trinomial Log

Resource Detail: P-23-002730

11/1/2016	castrom	Association to P-23-003226 based on Table 1 in S-19588
1/7/1998	AOApp1	Primary Number Autofill

Record status: Database Complete

Resource Detail: P-23-002751

Identifying information

Primary No.: P-23-002751

Trinomial:

Name: FS61

Other IDs:	Type	Name
	Resource Name	FS61
	Other	FS 61
	Other	FS-61

Cross-refs: See also 23-003245

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
a 4/27/1991	D. Livingston, E. Walker	Archaeological Services, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS: T22N R15W NW¼ of NE¼ of Sec. 10 MDBM

UTMs: Zone 10 455520mE 4393700mN NAD27 (1991)

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 11/2/2016	castrom	
IC actions: Date	User	Action taken
11/2/2016	castrom	Association to P-23-003245 based on Table 1 in S-19588
4/1/2005	jay	Appended records from discontinued ICRDS.
1/7/1998	AOApp1	Primary Number Autofill

Record status: Database Complete

Resource Detail: P-23-002755

Identifying information

Primary No.: P-23-002755

Trinomial:

Name: FS67

Other IDs:	Type	Name
	Resource Name	FS67
	Other	FS 67

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	4/27/1991	D. Livingstone, E. Walker	Archaeological Services, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS: T22N R15W NW¼ of NE¼ of Sec. 10 MDBM

UTMs: Zone 10 455560mE 4393760mN NAD27 (1991)

Management status

Database record metadata

	Date	User	
Entered:	4/1/2005	icrds	
Last modified:	11/2/2016	castrom	
IC actions:	Date	User	Action taken
	11/2/2016	castrom	Association to P-23-003249 based on Table 1 in S-19588
	4/1/2005	jay	Appended records from discontinued ICRDS.
	1/7/1998	AOApp1	Primary Number Autofill
Record status:	Database Complete		

Resource Detail: P-23-002756

Identifying information

Primary No.: P-23-002756
Trinomial: CA-MEN-002983
Name: FS69
Other IDs:

Type	Name
Resource Name	FS69
Other	FS 69

Cross-refs: Subsumes 23-003227
See also 23-003250

Attributes

Resource type: Site
Age: Prehistoric
Information base: Survey
Attribute codes: AP02 (Lithic scatter); AP16 (Other) - groundstone
Disclosure: Not for publication
Collections: No
Accession no(s): 93-27
Facility: David A. Fredrickson Archaeological Collections Facility at SSU

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
a 4/27/1991	D. Livingstone, E. Walker	Archaeological Services, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates

Location information

County: Mendocino
USGS quad(s): Cahto Peak
Address:
PLSS:
UTMs: Zone 10 455720mE 4393700mN NAD27

Management status

Database record metadata

Date	User	Action taken
<i>Entered:</i> 4/1/2005	icrds	
<i>Last modified:</i> 11/2/2016	castrom	
<i>IC actions:</i> Date	User	Action taken
11/2/2016	castrom	Association to P-23-003227 based on the NWIC Trinomial Log
11/2/2016	castrom	Association to P-23-003250 based on Table 1 in S-19588
4/1/2005	jay	Appended records from discontinued ICRDS.
1/7/1998	AOApp1	Primary Number Autofill

Record status: Database Complete

Resource Detail: P-23-002758

Identifying information

Primary No.: P-23-002758

Trinomial:

Name: FS76

Other IDs:	Type	Name
	Resource Name	FS76
	Other	M-52
	Other	FS 76

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	4/27/1991	M. Byars, R.W. Duddles	Archaeological Services, Inc.	
b	11/1/2000	Max Neri	North Coast Resource Management	

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates
S-026500	2001	Confidential Archaeological Addendum, Alder Springs Ranch NTMP, 1-01-NTMP-24 (California Department of Forestry)	North Coast Resource Management

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 456280mE 4393840mN NAD83

Zone 10 456260mE 4393840mN NAD27

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 11/2/2016	castrom	
IC actions: Date	User	Action taken
11/2/2016	castrom	Association to P-23-003253 based on Table 1 in S-19588
4/1/2005	jay	Appended records from discontinued ICRDS.

Resource Detail: P-23-002758

1/7/1998	AOApp1	Primary Number Autofill
<i>Record status:</i> Database Complete		

Resource Detail: P-23-002759

Identifying information

Primary No.: P-23-002759

Trinomial:

Name: FS79

Other IDs:	Type	Name
	Resource Name	FS79
	Other	FS 79

Cross-refs: See also 23-003254

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
a 4/14/1991	R.W. Duddles; D. Livingstone	Archaeological Services, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 455620mE 4393820mN NAD27

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 4/18/2019	rinerg	
IC actions: Date	User	Action taken
11/2/2016	castrom	Association to P-23-003254 based on Table 1 in S-19588
4/1/2005	jay	Appended records from discontinued ICRDS.
1/7/1998	AOApp1	Primary Number Autofill

Record status: Verified

Resource Detail: P-23-002760

Identifying information

Primary No.: P-23-002760

Trinomial:

Name: FS80

Other IDs:	Type	Name
	Resource Name	FS80
	Other	M-54
	Other	FS 80

Cross-refs: See also 23-003255

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	4/19/1991	R.W. Duddles, M. Byars	Archaeological Services, Inc.	
b	11/1/2000	Max Neri	North Coast Resource Management	

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates
S-026500	2001	Confidential Archaeological Addendum, Alder Springs Ranch NTMP, 1-01-NTMP-24 (California Department of Forestry)	North Coast Resource Management
S-028769	2004	A Cultural Resources Investigation of the Alder Springs Ranch Fencing Project, located in Mendocino, California, DF&G #026-R3	Cultural Resources Facility, Center for Indian Community Development, Humboldt State University

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 455620mE 4393940mN NAD27

Management status

Database record metadata

Date	User	
Entered: 4/1/2005	icrds	
Last modified: 11/2/2016	castrom	
IC actions: Date	User	Action taken
11/2/2016	castrom	Associated to P-23-003255 based on Table 4 in S-10588

Resource Detail: P-23-002760

11/2/2016	Castrom	
4/1/2005	jay	Appended records from discontinued ICRDS.
1/7/1998	AOApp1	Primary Number Autofill
<i>Record status:</i> Database Complete		

Resource Detail: P-23-002761

Identifying information

Primary No.: P-23-002761

Trinomial: CA-MEN-003861/H

Name: FS75

Other IDs:	Type	Name
	Resource Name	FS75
	Other	FS73
	Other	FS77
	Other	FS65
	Other	FS82

Cross-refs: See also 23-003252

Attributes

Resource type: Site

Age: Prehistoric, Historic

Information base: Survey

Attribute codes: AH04 (Privies/dumps/trash scatters); AP02 (Lithic scatter); HP02 (Single family property) - cabin [pg.2 #19.]; HP04 (Ancillary building) - barn [pg.2 #19.]

Disclosure: Not for publication

Collections: Yes

Accession no(s): --

Facility: given to property owner

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
a 4/26/1991	M. Jablonowski, D. Livingstone, E. Walker	Archaeological Services, Inc.	page 3 of 4 missing as of 5/1998

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 455220mE 4393700mN NAD27 (4/1991)
Zone 10 454960mE 4393800mN NAD27 (1991, nwic)
Zone 10 455440mE 4393550mN NAD27 (1991, nwic)
Zone 10 455320mE 4393500mN NAD27 (1991, nwic)

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 10/6/2022	muchb	
IC actions: Date	User	Action taken
11/2/2016	castrom	Association to P-23-003252 based on Table 1 in S-19588
10/6/2022	neala	added hp attributes, collections facility, recording event notes & UTMs

Resource Detail: P-23-002761

4/1/2005	jay	Appended records from discontinued ICRDS.
1/7/1998	AOApp1	Primary Number Autofill

Record status: Verified

Resource Detail: P-23-002762

Identifying information

Primary No.: P-23-002762

Trinomial:

Name: FS81

Other IDs:	Type	Name
	Resource Name	FS81
	Other	FS 81

Cross-refs: See also 23-003256

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	4/19/1991	R.W. Duddles, M. Byars	Archaeological Services, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 455800mE 4399380mN NAD27

Management status

Database record metadata

	Date	User	
Entered:	4/1/2005	icrds	
Last modified:	11/2/2016	castrom	
IC actions:	Date	User	Action taken
	11/2/2016	castrom	Association to P-23-003256 based on Table 1 in S-19588
	4/1/2005	jay	Appended records from discontinued ICRDS.
	1/7/1998	AOApp1	Primary Number Autofill
Record status:	Database Complete		

Resource Detail: P-23-002763

Identifying information

Primary No.: P-23-002763

Trinomial: CA-MEN-002985/H

Name: FS83/H

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
	Resource Name	FS83/H
	Other	FS83H
	Other	FS 83H

Cross-refs: Subsumes 23-003229

See also 23-003257

Attributes

Resource type: Site

Age: Prehistoric, Historic

Information base: Survey

Attribute codes: AH04 (Privies/dumps/trash scatters); AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s): 93-27

Facility: David A. Fredrickson Archaeological Collections Facility at SSU

General notes

[See S-19588 for additional sketch map. M. Castro 11/01/2016]

Recording events

	<i>Date</i>	<i>Recorder(s)</i>	<i>Affiliation</i>	<i>Notes</i>
a	4/28/1991	D. Livingstone, E. Walker	Archaeological Services, Inc.	

Associated reports

<i>Report No.</i>	<i>Year</i>	<i>Title</i>	<i>Affiliation</i>
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 455680mE 4393320mN NAD27

Management status

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 4/1/2005	icrds	
<i>Last modified:</i> 11/2/2016	castrom	
<i>IC actions:</i>	<i>Date</i>	<i>User</i>
	11/2/2016	castrom
	11/2/2016	castrom
	10/31/2016	castrom
	4/1/2005	jay
	11/1/2016	castrom
	1/7/1998	AOApp1

<i>Action taken</i>
Association to P-23-003229 based on the NWIC Trinomial Log
Association to P-23-003257 based on Table 1 in S-19588
changed AH16 attribute to AH04
Appended records from discontinued ICRDS.
added general note
Primary Number Autofill

Resource Detail: P-23-002763

Record status: Database Complete

Resource Detail: P-23-002764

Identifying information

Primary No.: P-23-002764

Trinomial:

Name: FS 85

Other IDs: Type Name

Resource Name FS 85

Cross-refs: See also 23-003258

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter); AP12 (Quarry)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	4/28/1991	R.W. Duddles, M. Byars, M. Jablonowski, K. Zahniser	Archaeological Services, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 455840mE 4393520mN NAD27 (1991)

Management status

Database record metadata

	Date	User	Action taken
Entered:	4/1/2005	icrds	
Last modified:	11/2/2016	castrom	
IC actions:	Date	User	Action taken
	11/2/2016	castrom	Association to P-23-003258 based on Table 1 in S-19588
	4/1/2005	jay	Appended records from discontinued ICRDS.
	1/7/1998	AOApp1	Primary Number Autofill
Record status:	Database Complete		

Resource Detail: P-23-002765

Identifying information

Primary No.: P-23-002765

Trinomial:

Name: FS 87

Other IDs:	Type	Name
	Resource Name	FS 87
	Other	M-58

Cross-refs: See also 23-003259

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter); AP12 (Quarry) - potential quarry

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	4/27/1991	R.W. Duddles, M. Byars	Archaeological Services, Inc.	
c	11/1/2000	Max A. Neri	North Coast Resource Management	
b	9/4/1997	Maria Ribeiro	NWIC	memo regarding "draft" status

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates
S-026500	2001	Confidential Archaeological Addendum, Alder Springs Ranch NTMP, 1-01-NTMP-24 (California Department of Forestry)	North Coast Resource Management

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS: T22N R15W NE¼ of NW¼ of Sec. 11 MDBM

UTMs: Zone 10 456600mE 4393780mN NAD83 (11/2000)

Zone 10 456540mE 4393780mN NAD27 (4/1991)

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 4/5/2023	neala	
IC actions: Date	User	Action taken
11/2/2016	castrom	Association to P-23-003259 based on Table 1 in S-19588
4/1/2005	jay	Appended records from discontinued ICRDS.

Resource Detail: P-23-002765

1/7/1998	AOApp1	Primary Number Autofill
4/5/2023	neala	added event 'b' info
4/4/2023	NiecE	Township and range

Record status: Verified

Resource Detail: P-23-002777

Identifying information

Primary No.: P-23-002777

Trinomial: CA-MEN-002992

Name: FS 88; M-95

Other IDs:	Type	Name
	Resource Name	FS 88
	Resource Name	M-95
	Other	F88

Cross-refs: Subsumes 23-003260

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter); AP16 (Other) - potential handstone

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	4/28/1991	M. Jablonowski, K. Zahniser	Archaeological Services, Inc.	
d	11/1/2000	Max Neri	North Coast Resource Management	
b	11/1/1993	Vicki Beard	ToA	Sketch Map & Location Map from S-19588
c	9/4/1997	Maria Ribeiro	NWIC	memo regarding "draft" status

Associated reports

Report No.	Year	Title	Affiliation
S-019472	1991	Cultural Resources Reconnaissance of #S 6-87/#U 47-87 near Laytonville, Mendocino County, California	Archaeological Services, Inc.
S-019588	1993	Archaeological Investigations at Prehistoric Sites Located on Alder Springs Ranch near Laytonville, Mendocino County, California	Tom Origer & Associates
S-026500	2001	Confidential Archaeological Addendum, Alder Springs Ranch NTMP, 1-01-NTMP-24 (California Department of Forestry)	North Coast Resource Management

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS: T22N R15W NE¼ of NW¼ of Sec. 11 MDBM

UTMs: Zone 10 456680mE 4393560mN NAD27 (4/1991)

Zone 10 456680mE 4393520mN NAD83 (11/2000)

Management status

Database record metadata

Date	User	
Entered: 4/1/2005	icrds	
Last modified: 4/5/2023	neala	
IC actions: Date	User	Action taken

Resource Detail: P-23-002777

11/2/2016	castrom	
4/1/2005	jay	Appended records from discontinued ICRDS.
1/7/1998	AOApp1	Primary Number Autofill
4/5/2023	neala	added event 'b' info
4/4/2023	NiecE	Township and range
<i>Record status:</i> Verified		

Resource Detail: P-23-003380

Identifying information

Primary No.: P-23-003380

Trinomial:

Name: Tenmile THP Site-01/H

Other IDs: Type Name

Resource Name Tenmile THP Site-01/H

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric, Historic

Information base: Survey

Attribute codes: AH02 (Foundations/structure pads); AH04 (Privies/dumps/trash scatters); AH16 (Other); AP02 (Lithic scatter); AP04 (Bedrock milling feature) - possible; AP15 (Habitat debris)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
4/21/1998	Max Neri	NCRM	

Associated reports

Report No.	Year	Title	Affiliation
S-020407		VOIDED S#-see additional citation 'a' of S-20676	
S-020676	1998	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Tenmile THP, 1-98-162 MEN	North Coast Resource Management

Location information

County: Mendocino

USGS quad(s): Tan Oak Park

Address:

PLSS:

UTMs: Zone 10 450330mE 4401440mN NAD27

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 6/7/2021	muchb	
IC actions: Date	User	Action taken
6/4/2021	riner	add AP04 (with note)
12/29/1998	AOLPJ	Primary number 23-003380 assigned.
3/25/2021	riner	recorder's name and affiliation; collections=No
4/1/2005	jay	Appended records from discontinued ICRDS.
12/11/2017	riner	auto-convert resource name to Proper Case (was: TENMILE THP SITE-01/H)

Record status: Verified

Resource Detail: P-23-003381

Identifying information

Primary No.: P-23-003381

Trinomial:

Name: Tenmile THP Site-02

Other IDs: Type

Name

Resource Name

Tenmile THP Site-02

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
4/21/1998	Max A. Neri	NCRM	

Associated reports

Report No.	Year	Title	Affiliation
S-020407		VOIDED S#-see additional citation 'a' of S-20676	
S-020676	1998	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Tenmile THP, 1-98-162 MEN	North Coast Resource Management

Location information

County: Mendocino

USGS quad(s): Tan Oak Park

Address:

PLSS:

UTMs: Zone 10 450650mE 4401860mN NAD27

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 6/7/2021	muchb	
IC actions: Date	User	Action taken
12/29/1998	AOLPJ	Primary number 23-003381 assigned.
3/25/2021	rinerg	recorder's name & affiliation; collections=No
4/1/2005	jay	Appended records from discontinued ICRDS.
12/11/2017	rinerg	auto-convert resource name to Proper Case (was: TENMILE THP SITE-02)
Record status: Verified		

Resource Detail: P-23-003382

Identifying information

Primary No.: P-23-003382

Trinomial:

Name: Tenmile THP Isolate-01

Other IDs: Type Name

Resource Name Tenmile THP Isolate-01

Cross-refs:

Attributes

Resource type: Other

Age: Prehistoric

Information base: Survey

Attribute codes: AP16 (Other) - isolate flake

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
4/21/1998	Max A. Neri	NCRM	

Associated reports

Report No.	Year	Title	Affiliation
S-020407		VOIDED S#-see additional citation 'a' of S-20676	
S-020676	1998	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Tenmile THP, 1-98-162 MEN	North Coast Resource Management

Location information

County: Mendocino

USGS quad(s): Tan Oak Park

Address:

PLSS:

UTMs: Zone 10 450480mE 4401490mN NAD27

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 6/7/2021	muchb	
IC actions: Date	User	Action taken
12/29/1998	AOLPJ	Primary number 23-003382 assigned.
3/25/2021	rinerg	collections=No; type=Other (not 'Site'); recorder's name & affiliation
4/1/2005	jay	Appended records from discontinued ICRDS.
12/11/2017	rinerg	auto-convert resource name to Proper Case (was: TENMILE THP ISOLATE-01)

Record status: Verified

Resource Detail: P-23-003477

Identifying information

Primary No.: P-23-003477

Trinomial:

Name: Sanders Isolate

Other IDs: Type

Name

Resource Name

Sanders Isolate

Cross-refs:

Attributes

Resource type: Other

Age: Prehistoric

Information base: Survey

Attribute codes: AP16 (Other) - isolate

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
1/1/2000	V.Beard	Tom Origer & Associates	

Associated reports

Report No.	Year	Title	Affiliation
S-022532	2000	A Cultural Resources Survey of a Little 28-Acre Parcel Northwest of Laytonville, Mendocino County, California	Tom Origer and Associates

Location information

County: Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

UTMs: Zone 10 457320mE 4394860mN NAD83 (1/2000)

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 9/8/2021	riner	
IC actions: Date	User	Action taken
8/3/2021	riner	quad=Laytonville; 2000 recording affiliation=TOA; type=Other; age=Prehistoric; info=Survey; attr: AP16; remove duplicated pages from PDF; disclose=No; collections=No; S-22532
8/9/2000	AOLPJ	Primary number 23-003477 assigned.
4/1/2005	jay	Appended records from discontinued ICRDS.
8/3/2021	neala	added author & utms

Record status: Verified

Resource Detail: P-23-003515

Identifying information

Primary No.: P-23-003515

Trinomial:

Name: Rock Wall

Other IDs: Type

Name

Resource Name

Rock Wall

Cross-refs:

Attributes

Resource type: Site

Age: Historic

Information base: Survey

Attribute codes: HP98 (Stone Construction) - Rock Wall

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
9/9/1998	Greg Checkal	GTE & Associates Forestry Consultants	

Associated reports

Report No.	Year	Title	Affiliation
S-029778	1999	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California, Mitchell NTMP, 1-99NTMP-008 MEN	GTE & Associates

Location information

County: Mendocino

USGS quad(s): Laytonville

Address:

PLSS: T22N R15W SW¼ of SE¼ of Sec. 23 MDBM

UTMs: Zone 10 457265mE 4398740mN NAD27

Management status

Database record metadata

Date	User	Action taken
Entered: 4/6/2005	jay	
Last modified: 10/6/2023	NiecE	
IC actions: Date	User	Action taken
4/6/2005	jay	Entered minimal information from hard copy list provided by Leigh.
10/6/2023	NiecE	Disclosure, record status, resource type, resource attribute.

Record status: Database Complete

Resource Detail: P-23-003940

Identifying information

Primary No.: P-23-003940

Trinomial:

Name: Alder Springs Isolate #1

Other IDs: Type Name

Resource Name Alder Springs Isolate #1

Cross-refs:

Attributes

Resource type: Other

Age: Prehistoric

Information base: Survey

Attribute codes: AP16 (Other) - chert flake

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
2/1/2004	Angeloff; Roscoe	CICD-CRF	

Associated reports

Report No.	Year	Title	Affiliation
S-028769	2004	A Cultural Resources Investigation of the Alder Springs Ranch Fencing Project, located in Mendocino, California, DF&G #026-R3	Cultural Resources Facility, Center for Indian Community Development, Humboldt State University

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs:

Management status

Database record metadata

Date	User	Action taken
Entered: 4/6/2005	jay	
Last modified: 5/19/2023	rinerg	
IC actions: Date	User	Action taken
4/6/2005	jay	Entered minimal information from hard copy list provided by Leigh.
8/3/2004	baumannh	notification letter sent to Nick Angeloff @HSU/CRF
5/19/2023	rinerg	add date to Angeloff & Roscoe record (2/1/2004), based on S-28769

Record status: Database Complete

Resource Detail: P-23-003941

Identifying information

Primary No.: P-23-003941

Trinomial: CA-MEN-003186

Name: Labyrinth Site

Other IDs: Type

Name

Resource Name

Labyrinth Site

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey, Other

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
10/2/2003	Nick Angeloff, Cameron Williams	HSU CICD-CRF	

Associated reports

Report No.	Year	Title	Affiliation
S-028787	2004	A Cultural Resources Investigation of the Streeter/Ten Mile Creeks Restoration Project, located in Mendocino, California, DF&G #224-R3	Cultural Resources Facility, Center for Indian Community Development, Humboldt State University

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address:

PLSS:

UTMs: Zone 10 454549mE 4399557mN NAD83 (10/2003)

Zone 10 454700mE 4399480mN NAD83 (nwc)

Management status

Database record metadata

Date	User	Action taken
Entered: 4/6/2005	jay	
Last modified: 9/8/2021	rinerg	
IC actions: Date	User	Action taken
4/6/2005	jay	Entered minimal information from hard copy list provided by Leigh.
8/3/2021	neala	added UTM
Record status: Verified		

Resource Detail: P-23-004486

Identifying information

Primary No.: P-23-004486

Trinomial: CA-MEN-003377

Name: Whitley Site

Other IDs:	Type	Name
	Resource Name	Whitley Site

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey, Other

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
2/13/2007	James E. Little	Harwood Products	[affiliation from report]

Associated reports

Report No.	Year	Title	Affiliation
S-034144	2007	An Archaeological Survey Report for the Whitley/Frost Modified Timber Harvesting Plan, Mendocino County, California	Harwood Products
S-038573	2011	An Archaeological Survey Report for the Whitley Timber Harvesting Plan, Mendocino County, California, THP 1-11-071 MEN	Harwood Products

Location information

County: Mendocino

USGS quad(s): Laytonville

Address:

PLSS: T21N R15W NE¼ of NE¼ of Sec. 11 MDBM

UTMs: Zone 10 457480mE 4393480mN NAD27 (2/2007)

Management status

Database record metadata

Date	User	Action taken
Entered: 7/19/2007	blacke	
Last modified: 8/30/2021	rinerg	
IC actions: Date	User	Action taken
8/14/2019	surgeonj	Corrected quad from Yorkville to Laytonville.
8/3/2021	neala	added affiliation
8/5/2021	neala	mapped in GIS

Record status: Verified

Resource Detail: P-23-005330

Identifying information

Primary No.: P-23-005330

Trinomial:

Name: Ten Mile Creek

Other IDs: Type

Name

Resource Name

Ten Mile Creek

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Analysis, Other

Attribute codes: AP01 (Unknown); AP11 (Hearths/pits); AP15 (Habitation debris)

Disclosure: Not for publication

Collections: Yes

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
5/30/2011	[none]	Far Western Anthropological Research Group	

Associated reports

Location information

County: Mendocino

USGS quad(s): Laytonville

Address: Address

City

Assessor's parcel no.

Zip code

890 feet northwest of baseball diamond
at west end of Harwood Road

PLSS: T21N R15W SE¼ of SW¼ of Sec. 12 MDBM

UTMs: Zone 10 458132mE 4392504mN NAD83

Management status

Database record metadata

Date	User	Action taken
Entered: 1/24/2012	Intern	
Last modified: 6/16/2017	rinerg	
IC actions: Date	User	Action taken
1/24/2012	Intern	Data entry
Record status: Verified		

Resource Detail: P-23-005923

Identifying information

Primary No.: P-23-005923

Trinomial: CA-MEN-003760

Name: Cahto Creek Restoration Site

Other IDs: *Type* *Name*

Resource Name Cahto Creek Restoration Site

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: Yes

Accession no(s):

Facility:

General notes

Recording events

	<i>Date</i>	<i>Recorder(s)</i>	<i>Affiliation</i>	<i>Notes</i>
a	9/14/2016	G. White	Sub Terra Consulting	

Associated reports

<i>Report No.</i>	<i>Year</i>	<i>Title</i>	<i>Affiliation</i>
S-048270	2016	Inspection of Unanticipated Archaeological Discovery, Cahto Creek Riparian Restoration Project (letter report)	SubTerra Consulting

Location information

County: Mendocino

USGS quad(s): Laytonville

Address:

PLSS:

UTMs: Zone 10 457427mE 4391468mN NAD83 (2016)

Management status

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 5/22/2017	grahams	
<i>Last modified:</i> 5/25/2017	rinerg	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
5/22/2017	grahams	notification letter sent
<i>Record status:</i> Verified		

Resource Detail: P-23-006443

Identifying information

Primary No.: P-23-006443

Trinomial: CA-MEN-003873

Name: Site 20-76-03

Other IDs: Type

Name

Resource Name

Site 20-76-03

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric

Information base: Survey, Other

Attribute codes: AP02 (Lithic scatter)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
11/20/2020	Alex DeGeorgey, Brianna Byrd	Alta Archaeological Consulting	

Associated reports

Report No.	Year	Title	Affiliation
S-055530	2021	Archaeological Survey Report, 48650 Highway 101 North, Laytonville, Mendocino County, California, APN 013-180-01 & 013-190-23	Alta Archaeological Consulting

Location information

County: Mendocino

USGS quad(s): Cahto Peak

Address: Address

City

Assessor's parcel no.

Zip code

48650 Highway 101 North

Laytonville

013-180-01-000

95454

PLSS: T22N R15W Sec. 35 MDBM

UTMs: Zone 10 456956mE 4396723mN NAD83 (11/20/2020)

Management status

Database record metadata

Date	User	Action taken
Entered: 8/10/2023	karapanosn	
Last modified: 8/16/2023	YanagiG	
IC actions: Date	User	Action taken
8/10/2023	karapanosn	GIS: nikki_holdingarea_15
8/16/2023	YanagiG	Added trinomial. Verified.

Record status: Verified

APPENDIX B

Records of Correspondence with Tribal Representatives

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission

1550 Harbor Blvd, Suite
100 West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Tenmile Forest Health Project

County: Mendocino

USGS Quadrangle Names: Cahto Peak CA (1994), Tan Oak Park CA (1994) and Laytonville CA (1994)

Township: 22N **Range:** 16W **Section(s):** Sections 14, 15, 22 and 23;
Township: 22N **Range:** 15W **Section(s):** Sections 8, 9, 18, 19, 21, 22, 23 and 35;
Township: 21N **Range:** 15W **Section(s):** Sections 2, 11, 13, 14, 22 and 23
(Mount Diablo Meridian)

Company/Firm/Agency: Roscoe and Associates

Street Address: 3781 Brookwood Drive

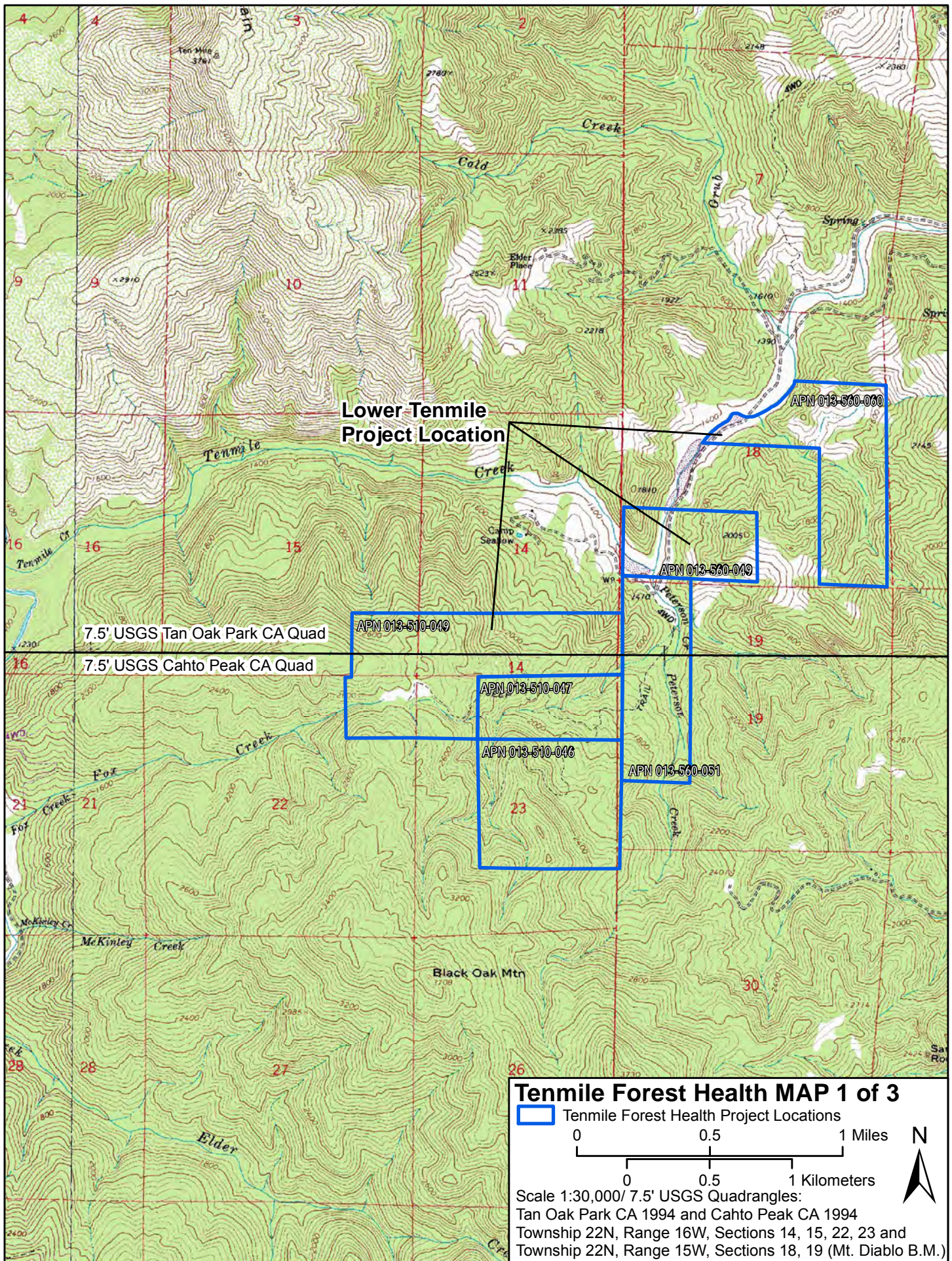
City: Bayside, CA **Zip:** 95524

Phone: (707) 845-5239

Fax: N/A

Email: jroscoecrm54@gmail.com

Project Description: Roscoe and Associates (RA) has been retained to conduct a cultural resource investigation for a Forest Health project in Laytonville, Mendocino County, California. RA's cultural resource investigation will assist the Eel River Recovery Project in their obligation to comply with the environmental requirements specified in the California Environmental Quality Act (CEQA) and its guidelines with regard to historical and tribal cultural resources (California Public Resources Code (PRC) Section 21084.1, CA AB52 Chapter 532 (2014)). We are contacting you as part of our good faith effort to identify historical and tribal cultural resources that could be impacted by the implementation of this project.



Lower Tenmile
Project Location

7.5' USGS Tan Oak Park CA Quad

7.5' USGS Cahto Peak CA Quad

APN 013-510-049

APN 013-510-047


APN 013-510-046

APN 013-560-031

APN 013-560-049

APN 013-560-060

Tenmile Forest Health MAP 1 of 3

 Tenmile Forest Health Project Locations

0 0.5 1 Miles

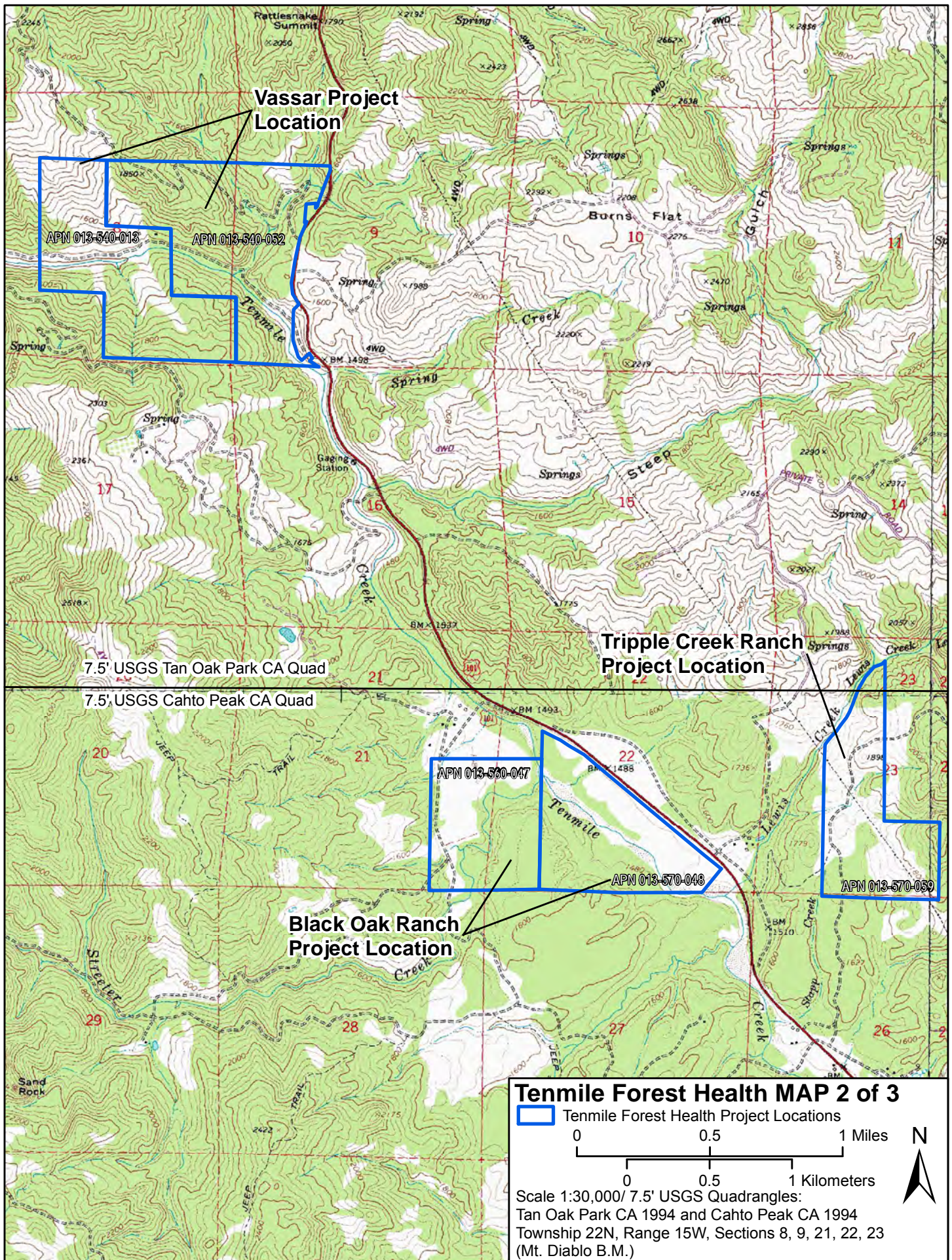
0 0.5 1 Kilometers

Scale 1:30,000/ 7.5' USGS Quadrangles:

Tan Oak Park CA 1994 and Cahto Peak CA 1994

Township 22N, Range 16W, Sections 14, 15, 22, 23 and

Township 22N, Range 15W, Sections 18, 19 (Mt. Diablo B.M.)



Vassar Project Location

APN 013-540-013

APN 013-540-032

7.5' USGS Tan Oak Park CA Quad

7.5' USGS Cahto Peak CA Quad

Tripple Creek Ranch Project Location


APN 013-530-047

APN 013-570-048

APN 013-570-059

Black Oak Ranch Project Location

Tenmile Forest Health MAP 2 of 3

 Tenmile Forest Health Project Locations

0 0.5 1 Miles

0 0.5 1 Kilometers

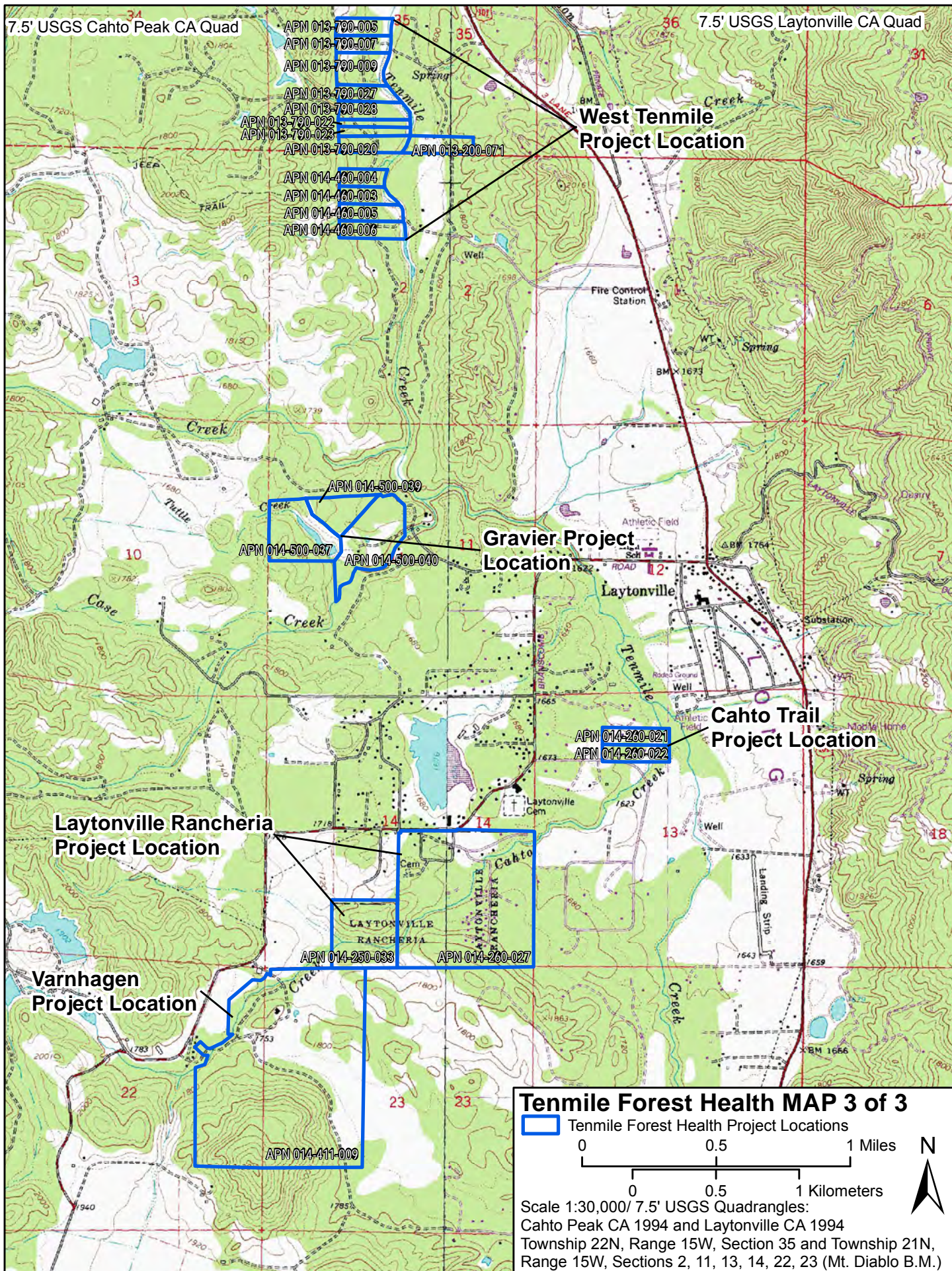
Scale 1:30,000/ 7.5' USGS Quadrangles:

Tan Oak Park CA 1994 and Cahto Peak CA 1994

Township 22N, Range 15W, Sections 8, 9, 21, 22, 23

(Mt. Diablo B.M.)





**Native American Heritage Commission
Native American Contact List
Mendocino County
1/24/2024**

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Mendocino	Cahto Tribe	F	Tasheena Sloan, Vice Chairperson	P.O. Box 1239 Laytonville, CA, 95454	(707) 984-6197		vicechair@cahtotribe-nsn.gov	Cahto Pomo	Mendocino	3/20/2023
	Cahto Tribe	F	Kendra Campbell, Secretary-Treasurer	P.O. Box 1239 Laytonville, CA, 95454	(707) 984-6197	(707) 984-6201	secretary_treasurer@cahtotribe-nsn.gov	Cahto Pomo	Mendocino	3/20/2023
	Cahto Tribe	F	Mary Norris, Chairperson	P.O. Box 1239 Laytonville, CA, 95454	(707) 984-6197	(707) 984-6201	chair@cahtotribe-nsn.gov	Cahto Pomo	Mendocino	3/20/2023
	Coyote Valley Band of Pomo Indians	F	Richard Campbell, Acting Chairperson	P.O. Box 391/ 7901 Hwy 10, North Redwood Valley, CA, 95470	(707) 485-8723	(707) 485-1247	vc@coyotevalley-nsn.gov	Pomo	Mendocino	6/26/2023
	Guidiville Rancheria of California	F	Michael Derry, Historian	PO Box 339 Talmage, CA, 95481	(707) 391-1665		historian@guidiville.net	Pomo	Alameda, Contra Costa, Lake Marin, Mendocino, Napa, Sacramento, San Joaquin, Solano, Sonoma	6/21/2023
	Guidiville Rancheria of California	F	Bunny Tain, Tribal Administrator	PO Box 339 Talmage, CA, 95481	(707) 462-3682		admin@guidiville.net	Pomo	Alameda, Contra Costa, Lake Marin, Mendocino, Napa, Sacramento, San Joaquin, Solano, Sonoma	6/21/2023
	Hopland Band of Pomo Indians	F	Sonny Elliott, Chairperson	3000 Shanel Road Hopland, CA, 95449	(707) 472-2100	(707) 744-1506	sje Elliott@hoplandtribe.com	Pomo	Mendocino	
	Hopland Band of Pomo Indians	F	Ramon Billy, Tribal Historical Preservation Officer	3000 Shanel Road Hopland, CA, 95449	(707) 472-2100		thpo@hoplandtribe.com	Pomo	Mendocino	4/30/2020
	Manchester Band of Pomo Indians of the Manchester Rancheria	F	Jaime Cobanubla, Chairperson	P.O. Box 623 Point Arena, CA, 95468	(707) 882-2788	(707) 882-3417		Pomo	Mendocino	
	Noyo River Indian Community	N	.	P. O. Box 91 Fort Bragg, CA, 95437				Pomo Yuki	Mendocino	6/7/2018
	Pinoleville Pomo Nation	F	Leona Williams, Chairperson	500 B Pinoleville Drive Ukiah, CA, 95482	(707) 463-1454	(707) 463-6601		Pomo	Lake, Mendocino, Napa, Sonoma	
	Pinoleville Pomo Nation	F	Erica Carson, Tribal Historic Preservation Officer	500 B Pinoleville Drive Ukiah, CA, 95482	(707) 463-1454	(707) 463-6601		Pomo	Lake, Mendocino, Napa, Sonoma	
	Potter Valley Tribe	F	Salvador Rosales, Chairperson	2251 South State Street Ukiah, CA, 95482	(707) 462-1213	(707) 462-1240	pottervalleytribe@pottervalleytribe.com	Pomo	Mendocino	
	Redwood Valley or Little River Band of Pomo Indians	F	Debra Ramirez, Chairperson	3250 Road I Redwood Valley, CA, 95470	(707) 485-0361	(707) 485-5726	rvsecretary@comcast.net	Pomo	Mendocino	
	Robinson Rancheria of Pomo Indians	F	Beniakem Cromwell, Chairperson	P.O. Box 4015 Nice, CA, 95464	(707) 275-0527	(707) 275-0235	bcromwell@rmbc-nsn.gov	Pomo	Colusa, Glenn, Lake, Mendocino, Sonoma	
	Round Valley Reservation/ Covelo Indian Community	F	James Russ, President	77826 Covelo Road Covelo, CA, 95428	(707) 983-6126	(707) 983-6128	tribalcouncil@rvit.org	ConCow Nomlaki Pit River Pomo Wailaki Wintun Yuki	Humboldt, Mendocino, Trinity	
	Sherwood Valley Rancheria of Pomo	F	Valerie Stanley, THPO	190 Sherwood Hill Drive Willits, CA, 95490	(707) 459-9690	(707) 459-6936	svthpo@sherwoodband.com	Pomo	Mendocino	3/22/2023
	Sherwood Valley Rancheria of Pomo	F	Melanie Rafanan, Chairman	190 Sherwood Hill Drive Willits, CA, 95490	(707) 459-9690	(707) 459-6936	morafanan@sherwoodband.com	Pomo	Mendocino	3/22/2023
	Yokayo Tribe	N	Yokayo Tribe, Chairperson	P.O. Box 362 Talmadge, CA, 95481				Pomo	Mendocino	



NATIVE AMERICAN HERITAGE COMMISSION

January 24, 2024

James Roscoe
Roscoe and AssociatesVia Email to: jroscoecrm54@gmail.com

Re: Tenmile Forest Health Project Project, Mendocino County

Dear Mr. Roscoe:

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

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cameron.vela@nahc.ca.gov.

Sincerely,

*Cameron Vela*Cameron Vela
Cultural Resources Analyst

Attachment

CHAIRPERSON
Reginald Pagaling
ChumashVICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki,
NomlakiSECRETARY
Sara Dutschke
MiwokPARLIAMENTARIAN
Wayne Nelson
LuiseñoCOMMISSIONER
Isaac Bojorquez
Ohlone-CostanoanCOMMISSIONER
Stanley Rodriguez
KumeyaayCOMMISSIONER
Laurena Bolden
SerranoCOMMISSIONER
Reid Milanovich
CahuillaCOMMISSIONER
VacantEXECUTIVE SECRETARY
**Raymond C.
Hitchcock**
Miwok, NisenanNAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

ROSCOE & ASSOCIATES

3781 Brookwood Drive, Bayside CA, 95524
(707) 845-5239 (office); jkroscow@suddenlink.net

February 05, 2024

Cahto Tribe

Tasheena Sloan, Vice Chairperson
P.O. Box 1239, Laytonville, CA, 95454
vicechair@cahtotribe-nsn.gov

Kendra Campbell, Secretary-Treasurer
P.O. Box 1239, Laytonville, CA, 95454
secretary_treasurer@cahtotribe-nsn.gov

Mary Norris, Chairperson
P.O. Box 1239, Laytonville, CA, 95454
chair@cahtotribe-nsn.gov

Coyote Valley Band of Pomo Indians

Richard Campbell, Acting Chairperson
P.O. Box 39/ 7901 Hwy 10, North
Redwood Valley, CA, 95470
vc@coyotevalley-nsn.gov

Guidiville Rancheria of California

Michael Derry, Historian
PO Box 339, Talmage, CA, 95481
historian@guidiville.net

Bunny Tarin, Tribal Administrator
PO Box 339, Talmage, CA, 95481
admin@guidiville.net

Hopland Band of Pomo Indians

Sonny Elliott, Chairperson
3000 Shanel Road, Hopland, CA, 95449
sjelliott@hoplandtribe.com

Ramon Billy, Tribal Historical Preservation
Officer
3000 Shanel Road, Hopland, CA, 95449
thpo@hoplandtribe.com

Manchester Band of Pomo Indians of the Manchester Rancheria

Jaime Cobarrubia, Chairperson
P.O. Box 623, Point Arena, CA, 95468

Yokayo Tribe

Yokayo Tribe, Chairperson
P.O. Box 362, Talmadge, CA, 95481

Noyo River Indian Community

P. O. Box 91, Fort Bragg, CA, 95437

Pinoleville Pomo Nation

Leona Willams, Chairperson
500 B Pinoleville Drive, Ukiah, CA, 95482

Erica Carson, Tribal Historic Preservation
Officer
500 B Pinoleville Drive, Ukiah, CA, 95482

Potter Valley Tribe

Salvador Rosales, Chairperson
2251 South State Street, Ukiah, CA, 95482
pottervalleytribe@pottervalleytribe.com

Redwood Valley or Little River Band of Pomo Indians

Debra Ramirez, Chairperson
3250 Road I, Redwood Valley, CA, 95470
rvrsecretary@comcast.net

Robinson Rancheria of Pomo Indians

Beniakem Cromwell, Chairperson
P.O. Box 4015, Nice, CA, 95464
bcromwell@rrcbc-nsn.gov

Round Valley Reservation/ Covelo Indian Community

James Russ, President
77826 Covelo Road, Covelo, CA, 95428
tribalcouncil@rvit.org

Sherwood Valley Rancheria of Pomo

Valerie Stanley, Tribal Historic Preservation
Officer
190 Sherwood Hill Drive, Willits, CA, 95490
svrthpo@sherwoodband.com

Melanie Rafanan, Chairman
190 Sherwood Hill Drive, Willits, CA, 95490
mcraftanan@sherwoodband.com

ROSCOE & ASSOCIATES

3781 Brookwood Drive, Bayside CA, 95524
(707) 845-5239 (office); jkroscoe@suddenlink.net

February 05, 2024

RE: Tenmile Forest Health Project, Laytonville, Mendocino County CA

Dear Tribal Representative,

Roscoe and Associates (RA) has been retained to conduct a cultural resources investigation for a Forest Health project in Laytonville, Mendocino County, California. The project includes 32 parcels as shown on the Cahto Peak CA (1994), Tan Oak Park CA (1994) and Laytonville CA (1994) 7.5' USGS quadrangles in the accompanying maps. The parcels are contained in the following sections:

Township 22N, Range 16W, Sections 14, 15, 22 and 23;
Township 22N, Range 15W, Sections 8, 9, 18, 19, 21, 22, 23 and 35; and
Township 21N, Range 15W, Sections 2, 11, 13, 14, 22 and 23 (Mount Diablo Meridian).

RA's cultural resource investigation will assist the Eel River Recovery Project in their obligation to comply with the environmental requirements specified in the California Environmental Quality Act (CEQA) and its guidelines with regard to historical and tribal cultural resources (California Public Resources Code (PRC) Section 21084.1, CA AB52 Chapter 532 (2014)). RA's investigation will: (1) identify and document all artifacts, structures, buildings and sites that are more than 50 years old and located within the project area; (2) assess the historical significance of identified resources to determine if they would be considered historical or tribal cultural resources eligible for the California or National Registers; (3) make recommendations regarding the project's potential to adversely change identified resources, and (4) develop recommendations to negate, minimize or mitigate substantial adverse change to identified resources.

RA's identification effort includes a review of regional archaeological and ethno-geographic literature, historical maps and air photos, a project vicinity record search at the Northwest Information Center in Rohnert Park California, correspondence with the Native American Heritage Commission (NAHC) and local Native American Tribal Representatives, and a pedestrian field survey. Representatives of the Cahto Tribe's Laytonville Rancheria are participating in the investigation and a tribal member is working with RA during the field surveys.

We are contacting you as part of our good faith effort to identify historical and tribal cultural resources that could be impacted by the implementation of this project. Identification of tribal resources will allow for avoidance recommendations to negate, minimize, or mitigate potential adverse change. We welcome your participation and would be happy to discuss the proposed project with you. Please contact us if you have questions or comments.

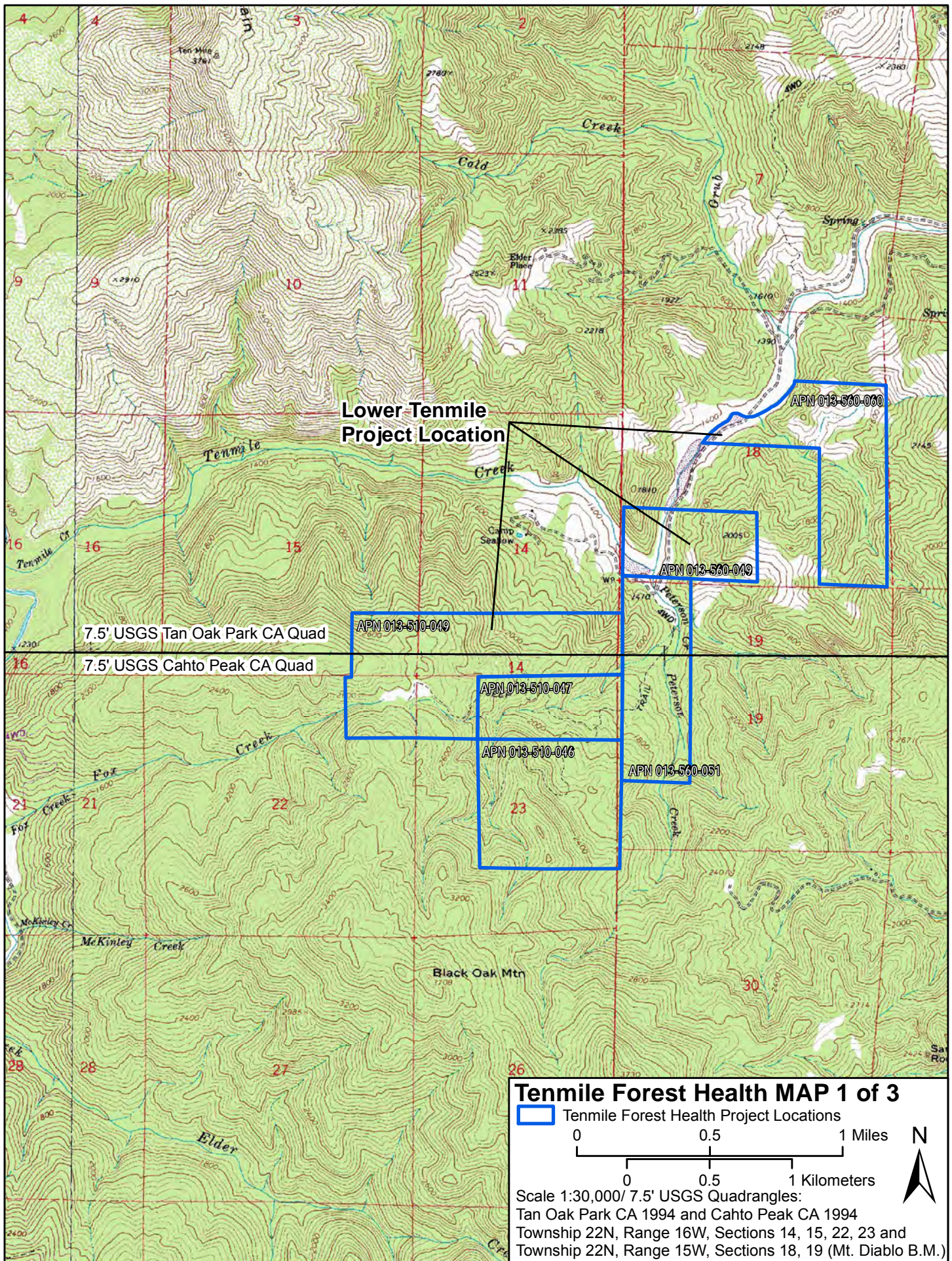
Sincerely,
James Roscoe, M.A.

ROSCOE & ASSOCIATES

3781 Brookwood Drive, Bayside CA, 95524

(707) 845-5239 (office); jkroscoe@suddenlink.net

Map Attachments



Lower Tenmile
Project Location

7.5' USGS Tan Oak Park CA Quad

7.5' USGS Cahto Peak CA Quad

APN 013-510-049

APN 013-510-047


APN 013-510-046

APN 013-560-031

APN 013-560-049

APN 013-560-060

Tenmile Forest Health MAP 1 of 3

 Tenmile Forest Health Project Locations

0 0.5 1 Miles

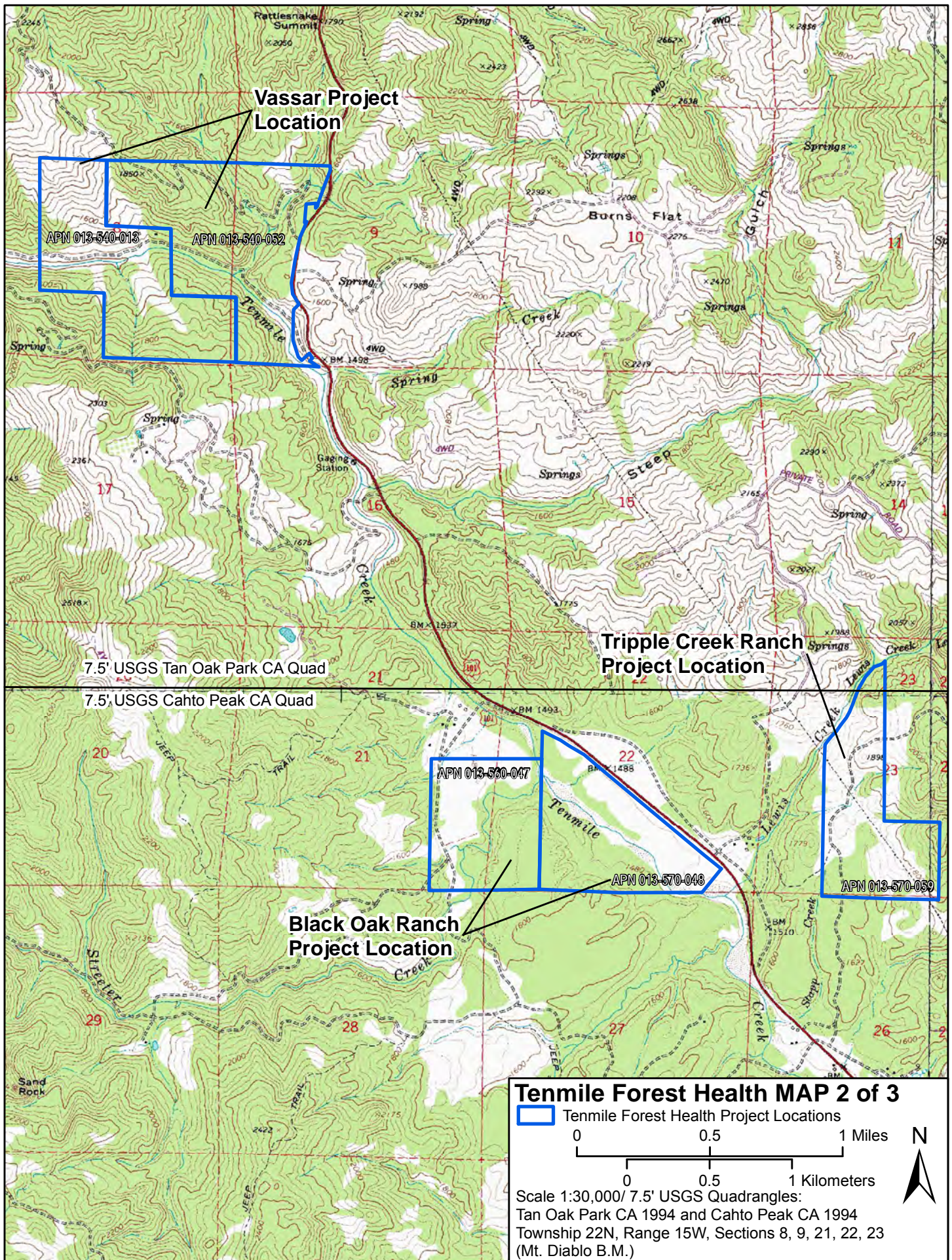
0 0.5 1 Kilometers

Scale 1:30,000/ 7.5' USGS Quadrangles:

Tan Oak Park CA 1994 and Cahto Peak CA 1994

Township 22N, Range 16W, Sections 14, 15, 22, 23 and

Township 22N, Range 15W, Sections 18, 19 (Mt. Diablo B.M.)



Vassar Project Location

APN 013-540-013

APN 013-540-032

7.5' USGS Tan Oak Park CA Quad

7.5' USGS Cahto Peak CA Quad

Tripple Creek Ranch Project Location


APN 013-530-047

APN 013-570-048

APN 013-570-059

Black Oak Ranch Project Location

Tenmile Forest Health MAP 2 of 3

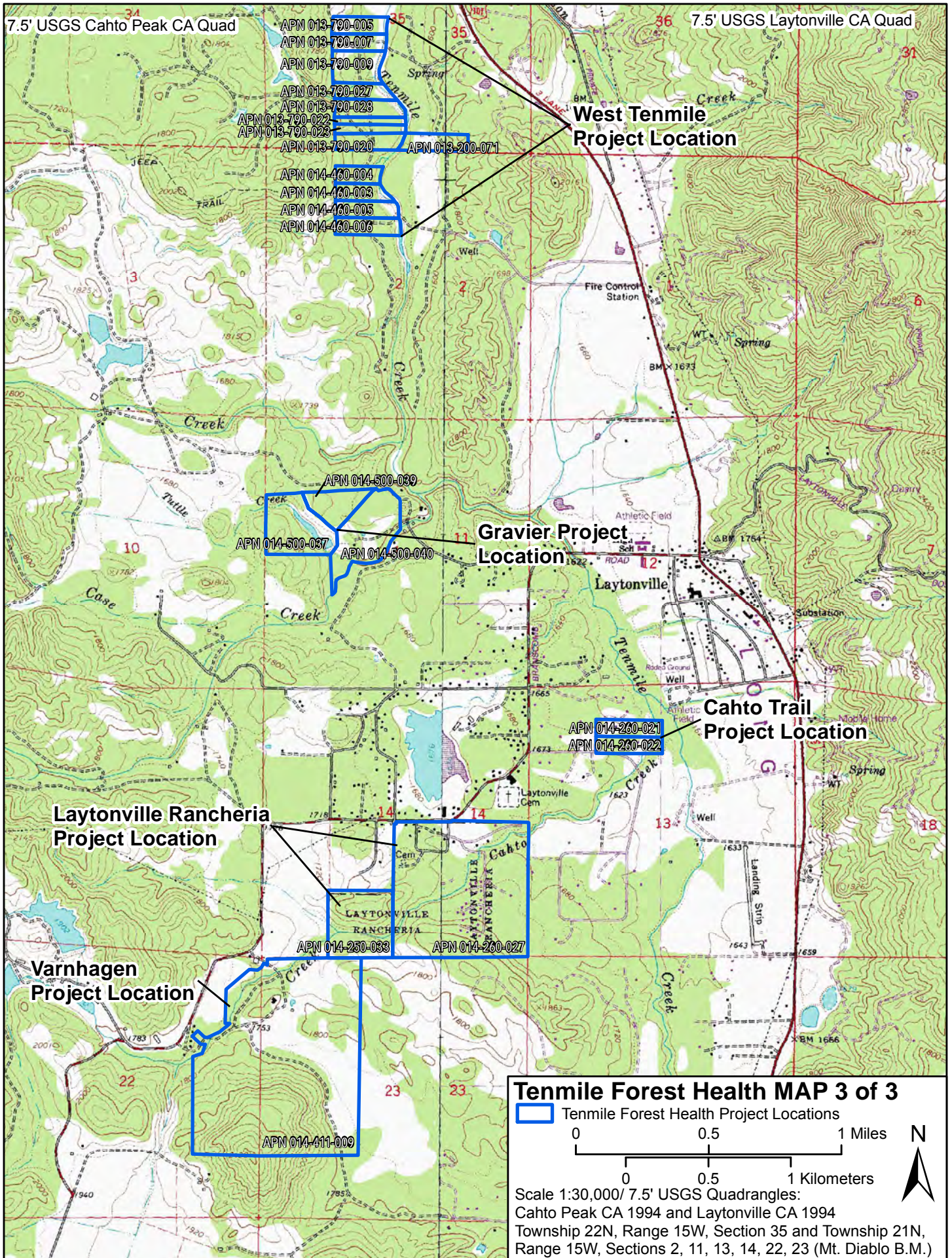
 Tenmile Forest Health Project Locations

0 0.5 1 Miles

0 0.5 1 Kilometers

Scale 1:30,000/ 7.5' USGS Quadrangles:
Tan Oak Park CA 1994 and Cahto Peak CA 1994
Township 22N, Range 15W, Sections 8, 9, 21, 22, 23
(Mt. Diablo B.M.)







Melinda Salisbury <salisbury.cultural.consultant@gmail.com>

FW: Tenmile Forest Health Project Project

1 message

James & Kimberley Roscoe <jroscoecrm54@gmail.com>
To: Melinda Salisbury <salisbury.cultural.consultant@gmail.com>

Thu, Jan 25, 2024 at 12:27 PM

Here you go.

Sent from [Mail](#) for Windows

From: [Vela, Cameron@NAHC](#)
Sent: Wednesday, January 24, 2024 6:22 PM
To: [James & Kimberley Roscoe](#)
Subject: Tenmile Forest Health Project Project

Good Afternoon,

Attached is the response to the project referenced above. If you have any additional questions, please feel free to contact our office email at nahc@nahc.ca.gov.

Thank You

Cameron Vela

Native American Heritage Commission

[1550 Harbor Blvd., Suite 100](#)

[West Sacramento, CA 95691](#)

Cameron.vela@nahc.ca.gov

Direct Line: (916) 573-0168

Office: (916) 373-3710

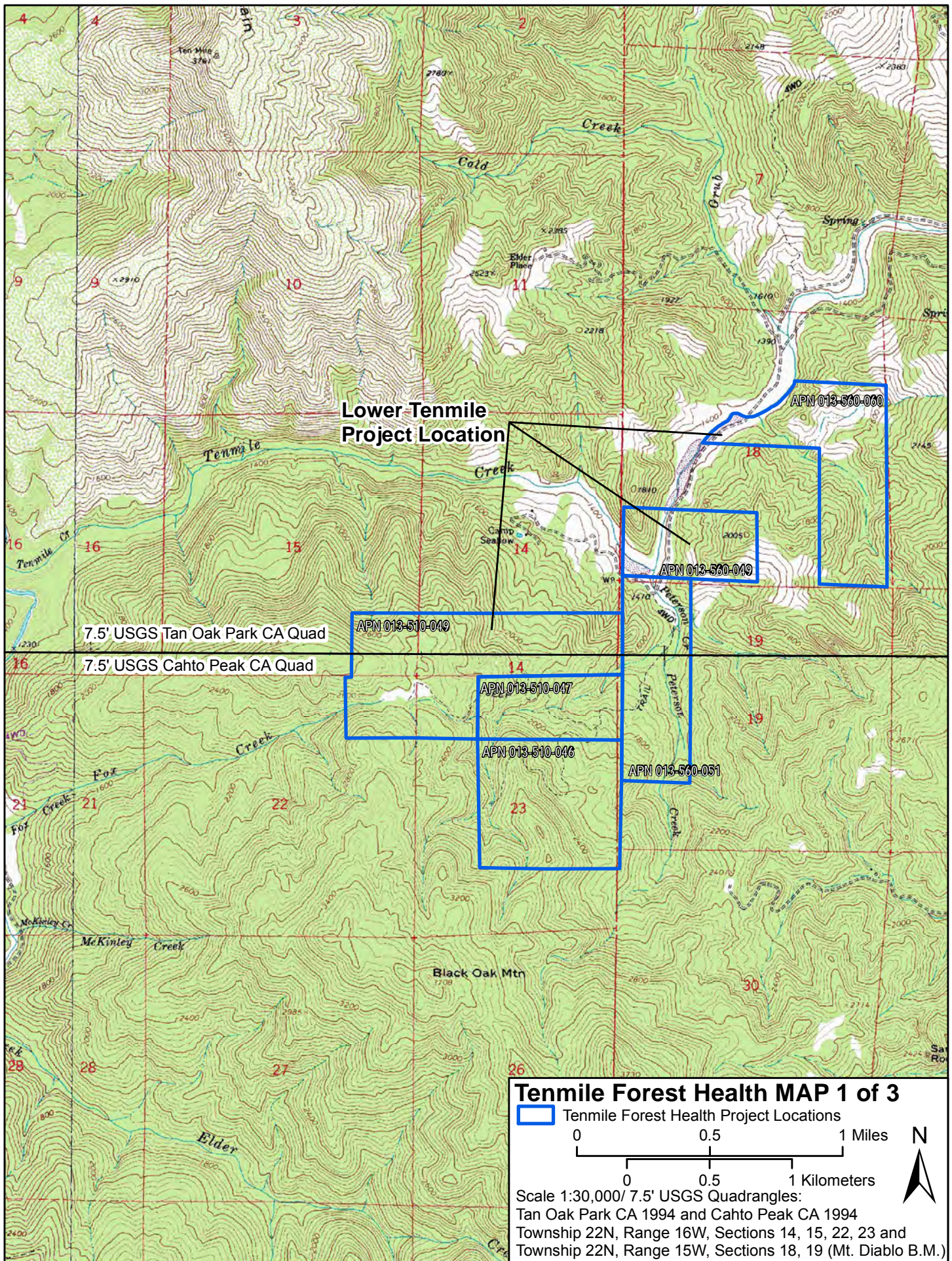
2 attachments**SLF No Tenmile Forest Health Project Project 1.24.2024.pdf**

179K



Tenmile Forest Health Project Project List 1.24.2024.xlsx

14K



Lower Tenmile
Project Location

7.5' USGS Tan Oak Park CA Quad

7.5' USGS Cahto Peak CA Quad

APN 013-510-049

APN 013-510-047


APN 013-510-046

APN 013-560-031

APN 013-560-049

APN 013-560-060

Tenmile Forest Health MAP 1 of 3

 Tenmile Forest Health Project Locations

0 0.5 1 Miles

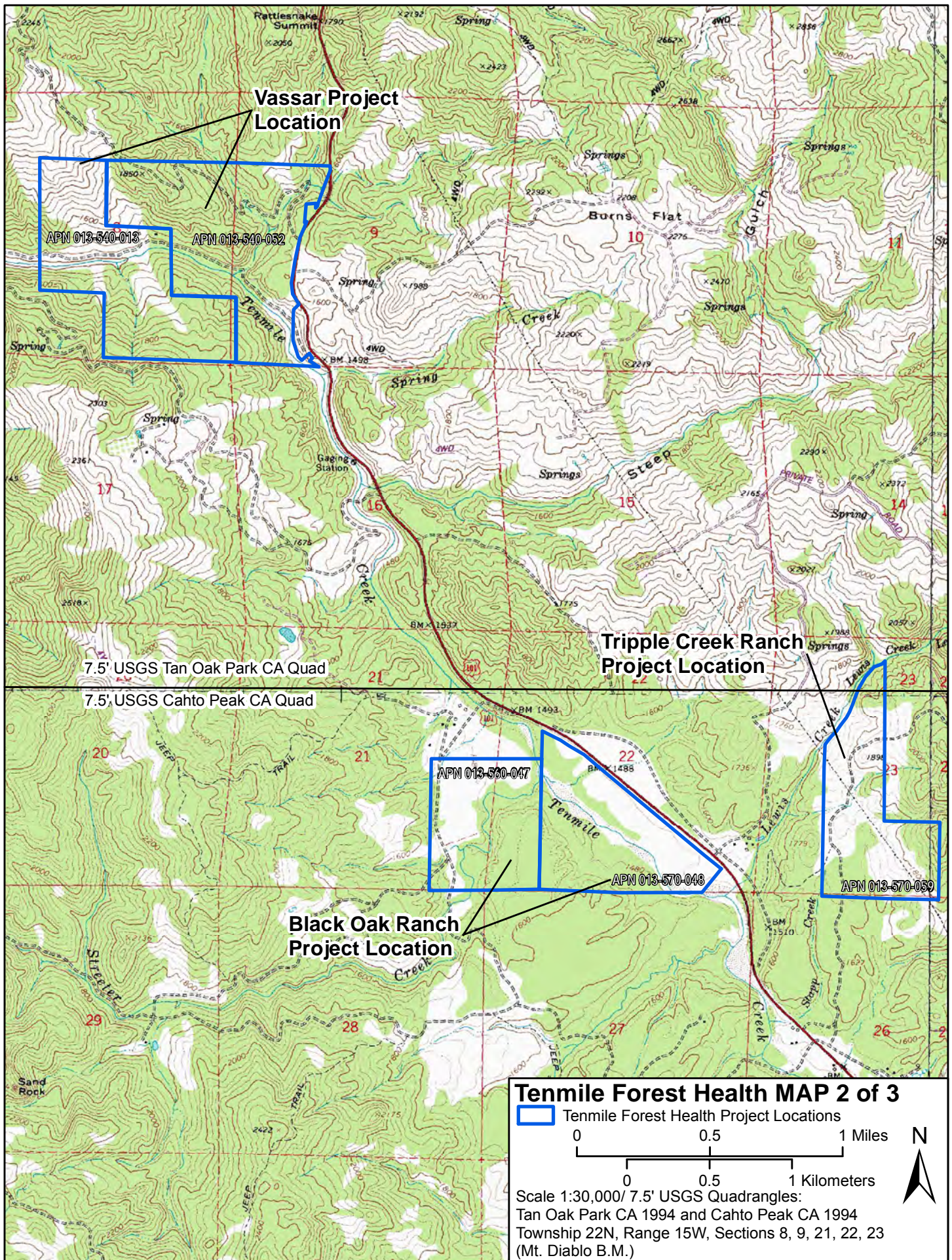
0 0.5 1 Kilometers

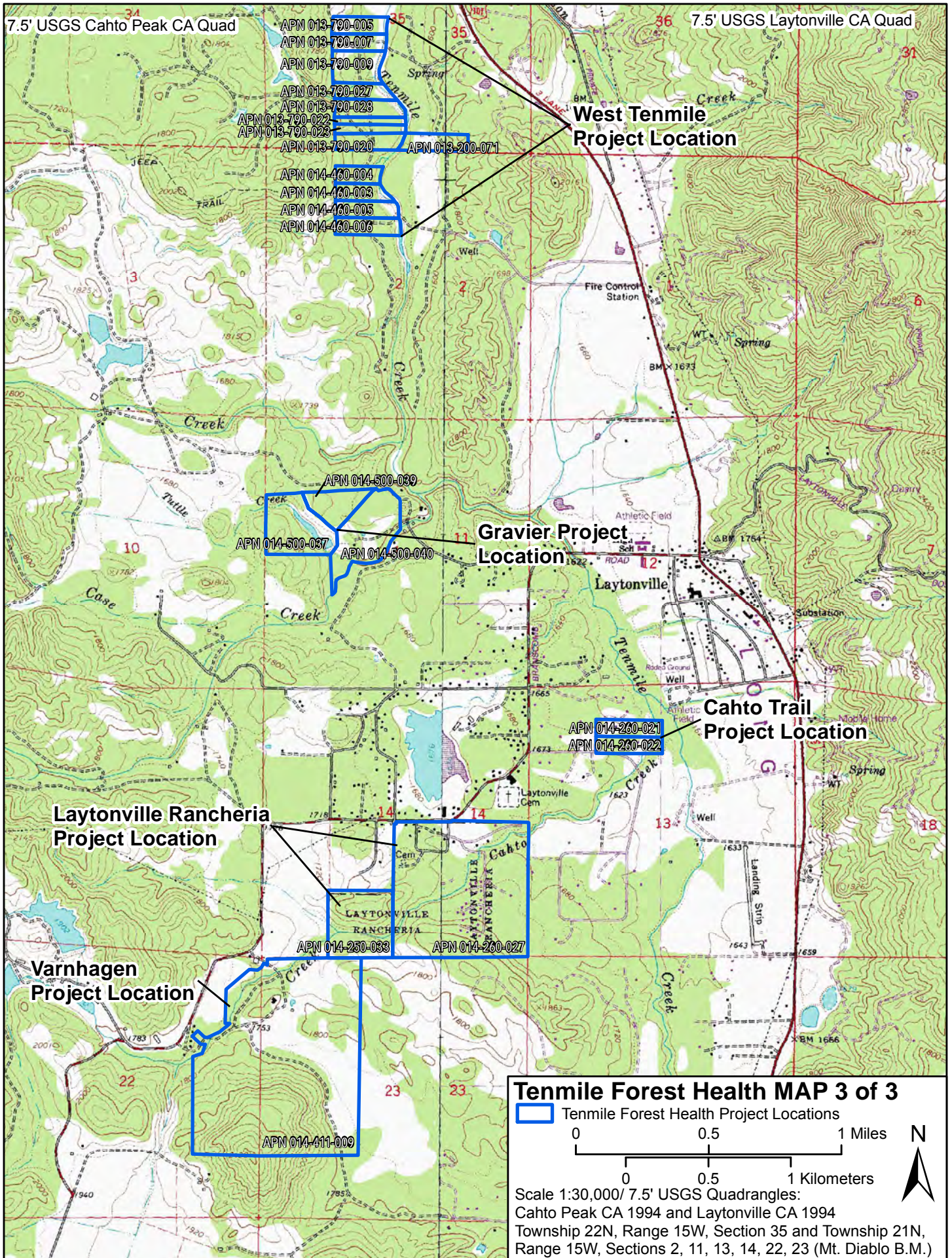
Scale 1:30,000/ 7.5' USGS Quadrangles:

Tan Oak Park CA 1994 and Cahto Peak CA 1994

Township 22N, Range 16W, Sections 14, 15, 22, 23 and

Township 22N, Range 15W, Sections 18, 19 (Mt. Diablo B.M.)





APPENDIX C

California Department of Parks and Recreation 523 series Site Record Forms

State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code _____ Reviewer _____ Date _____

Page 1 of 3 *Resource Name or #: Fox Creek Road Segment

P1. Other Identifier: Ahlquist's Trail

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County Mendocino and

*b. USGS 7.5' Quad Cahto Peak CA Date 1994 T 22N; R 16W; NE 1/4 of NE 1/4 of Sec 22; Mount Diablo B.M.

c. Address APN 013-510-049 City Laytonville Zip _____

d. UTM (NAD 83): Zone 10N, 448,145 mE/ 4,399,872 mN (East); 448,018 mE/ 4,399,861 mN (West)

e. Other Locational Data: From the intersection of US Highway 101 Post Mile 76 and an unnamed private road, travel west on the private road, along the north side of Tenmile Creek for approximately 2.4 miles (3.9km) to reach an in-stream crossing of the creek. Cross to the south side of the creek and travel approximately 0.71 miles (1.1km) west to Peterson Creek where a jeep trail intersects the road from the south. Turn left (south) on to the jeep trail and travel in a south and westerly direction approximately 1.8 miles to reach a small pond. The documented road segment is located west of the pond (approx. 259'), along the southern bank of the creek, 485 feet (148 meters) from the western edge of the pond.

*P3a. Description: A 420 foot east-west road segment was identified along the south side of Fox Creek. The segment is cut approximately 2 feet into the north facing slope above the creek and is 6 to 7 feet wide. The creek is approximately 100 feet down-slope from the road. A review of the GLO Map of Township 22N, Range 16W (Mt. Diablo B.M.) from 1902 indicates that this segment may have connected roads to the east and west. To the west of the identified road segment, an east to west road travels along the south side of Fox Creek, originating from Wilderness Lodge and the South Fork Eel River. The Fox Creek Road shown on the 1902 GLO map intersects with a north/ south road that ties in with Branscomb road to the south. To the east of the identified road segment, is an east-west road that connects to a larger road that travels along Tenmile Creek, intersecting with US 101 (former wagon road), approximately 4 miles to the east. In 1902, this eastern road passed just south of Ahlquist's House (1902 GLO). Background research found no information about Ahlquist. According to the current landowner, the trail was a pack trail that was later converted to a wagon road used to haul tan bark south to Branscomb and west to West Port.

*P3b. Resource Attributes: AH7: Road



*P4. Resources Present: ☐ Building ☒ Structure ☐ Object ☐ Site
☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: A view of the Fox Creek Road Segment, Facing west on February 25, 2024

*P6. Date Constructed/Age and Source:
☒ Historic c. 1902 GLO

*P7. Owner and Address:
Browns Stevenson
PO Box 1347, Willits CA 95490

*P8. Recorded by:
James Roscoe and Melinda Salisbury
Roscoe and Associates
3781 Brookwood Drive, Bayside, CA 95524

*P9. Date Recorded:
August 24, 2024

*P10. Survey Type: reconnaissance survey for a forest health project

*P11. Report Citation:
Jennifer Burns Whiteman, M.A. and Melinda Salisbury B.A.
2024 A Cultural Resource Investigation Report for Tenmile Creek Watershed Forest Health Project (CALFIRE #8GG22660). Laytonville, Mendocino County, California.

*Attachments: ☐ NONE ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☒ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List): _____

L1. Historic and/or Common Name: Ahlquist's Trail

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:** _____

b. Location of point or segment: (Provide UTM coordinates, decimal degrees, legal description, and any other useful locational data.)

L3. Description: The road segment is a cut, mid slope road above a creek channel. No artifacts were found to be associated with the road.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)

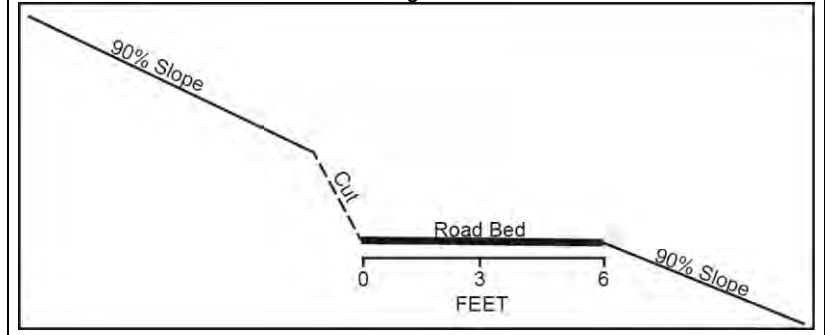
- a. **Top Width** 8 feet
- b. **Bottom Width** 6 feet
- c. **Height or Depth** 1-2 feet
- d. **Length of Segment** 420 feet

L5. Associated Resources: None Identified

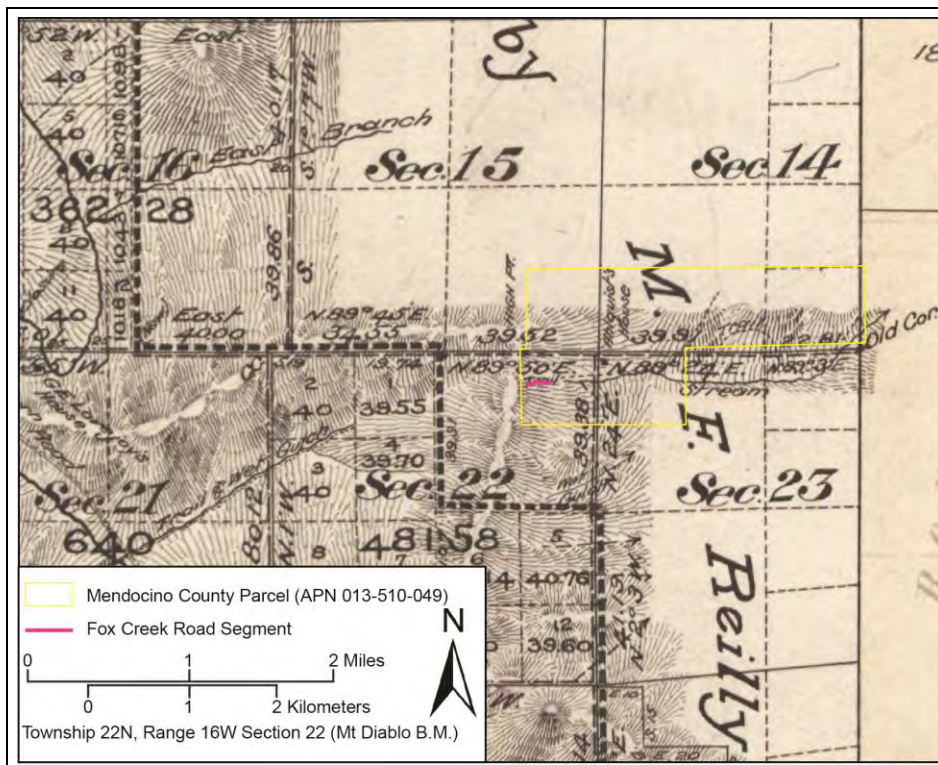
L6. Setting: This site is located on a north facing slope (approx.. 90%) in a woodland setting above (south of) a creek.

L7. Integrity Considerations: The road segment maintains many aspects of integrity, as it is in the same location and setting and of the same design, materials and workmanship as when originally constructed.

L4e. Sketch of Cross-Section Facing: West



L8b. Description of Photo, Map, or Drawing 1902 GLO Map showing the location of the identified road segment as well as the locations of trail segments to the east and west.



L9. Remarks: None

L10. Form Prepared by:
Melinda Salisbury
Roscoe and Associates
3781 Brookwood Drive
Bayside, CA 95524

L11. Date: August 24, 2024

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

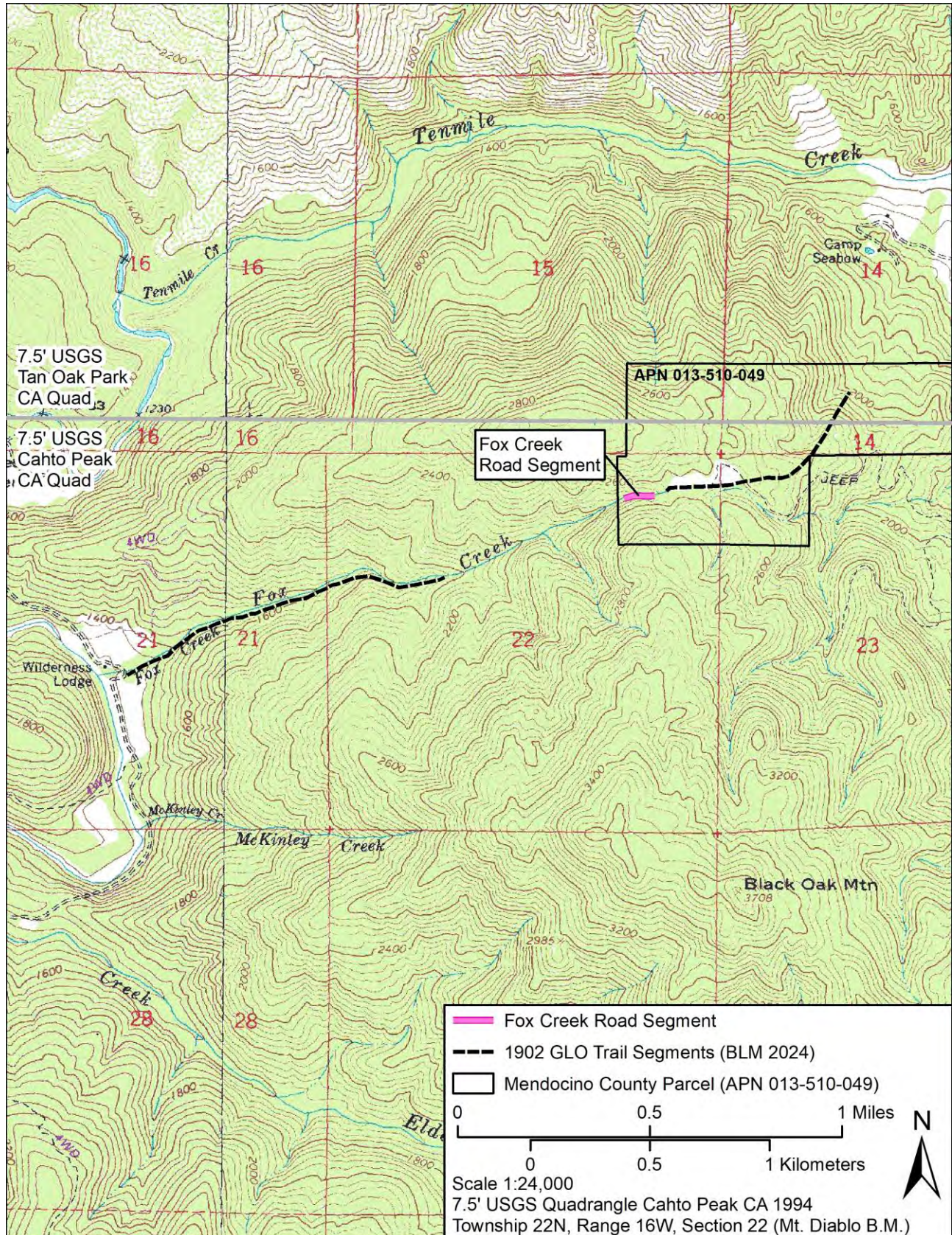
Page 3 of 3

*Map Name: Cahto Peak CA 1994

*Scale: 1:24,000

*Resource Name or # Fox Creek Road Segment

*Date of map: August 24, 2021



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code _____ Reviewer _____ Date _____

Page 1 of 5

*Resource Name or #: Gravier Habitation Site

P1. Other Identifier: _____

*P2. Location: ☒ Not for Publication ☐ Unrestricted

*a. County Mendocino and

*b. USGS 7.5' Quad Cahto Peak CA Date 1994 T 21N; R 15W; NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Sec 11; Mount Diablo B.M.

c. Address 1147 Bauer Road (APN 014-500-040) City Laytonville CA Zip 95454

d. UTM (NAD 83) Zone 10N, 456,568 mE/ 4,393,249 mN (Center Point); 456,496 mE/ 4,393,327 mN (Site Datum- SE corner of residence at 1147 Bauer Road)

e. Other Locational Data: From the intersection of Branscomb Road and Bauer Road in Laytonville California, travel west along Bauer Road for 0.61 miles (0.98km) to reach the private drive that accesses 1147, 1157 and 1200 Bauer Road and is situated just north of where Bauer Road crosses over Little Case Creek. Travel west for 0.17 miles (27.4km) along the private road to reach the site, this is approximately 400 feet (122 meters) east of the driveway for the residence at 1147 Bauer Road. The site is approximately 66 feet (20 meters) south of the private road and 120 feet (36.6 meters) east of the residence at 1147 Bauer Road. The site datum was established as the south east corner of the residence at 1147 Bauer Road. The approximate center of the site is located 77 meters at 135° from the datum and the north western edge of the midden is located 75 meters at 158° from the datum.

*P3a. Description: This habitation site was identified along the north side of Little Case Creek and includes a large lithic scatter with approximately fifty chert flakes including secondary and tertiary core reduction flakes and biface thinning flakes, bifacially worked flake tools, groundstone, a large mortar and a hand-stone/ chopper. A loci of midden with locally darkened soil and a higher concentration of artifacts is present along the southern boundary of the site, just above (north of) the creek. The site measures approximately 115 meters north to south by 100 meters east to west. The midden area measures approximately 25 meters north to south by 75 meters east to west.

*P3b. Resource Attributes: AP2: Lithic Scatter, AP15: Habitation Debris

*P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)



P5b. Description of Photo: View of the midden area along the southern boundary of the site, facing south toward Little Case Creek June 04, 2024.

*P6. Date Constructed/Age and Source:

☐ Historic ☒ Prehistoric ☐ Both

*P7. Owner and Address:

Gravier Enterprises
PO Box 163
Laytonville CA 95454

*P8. Recorded by:

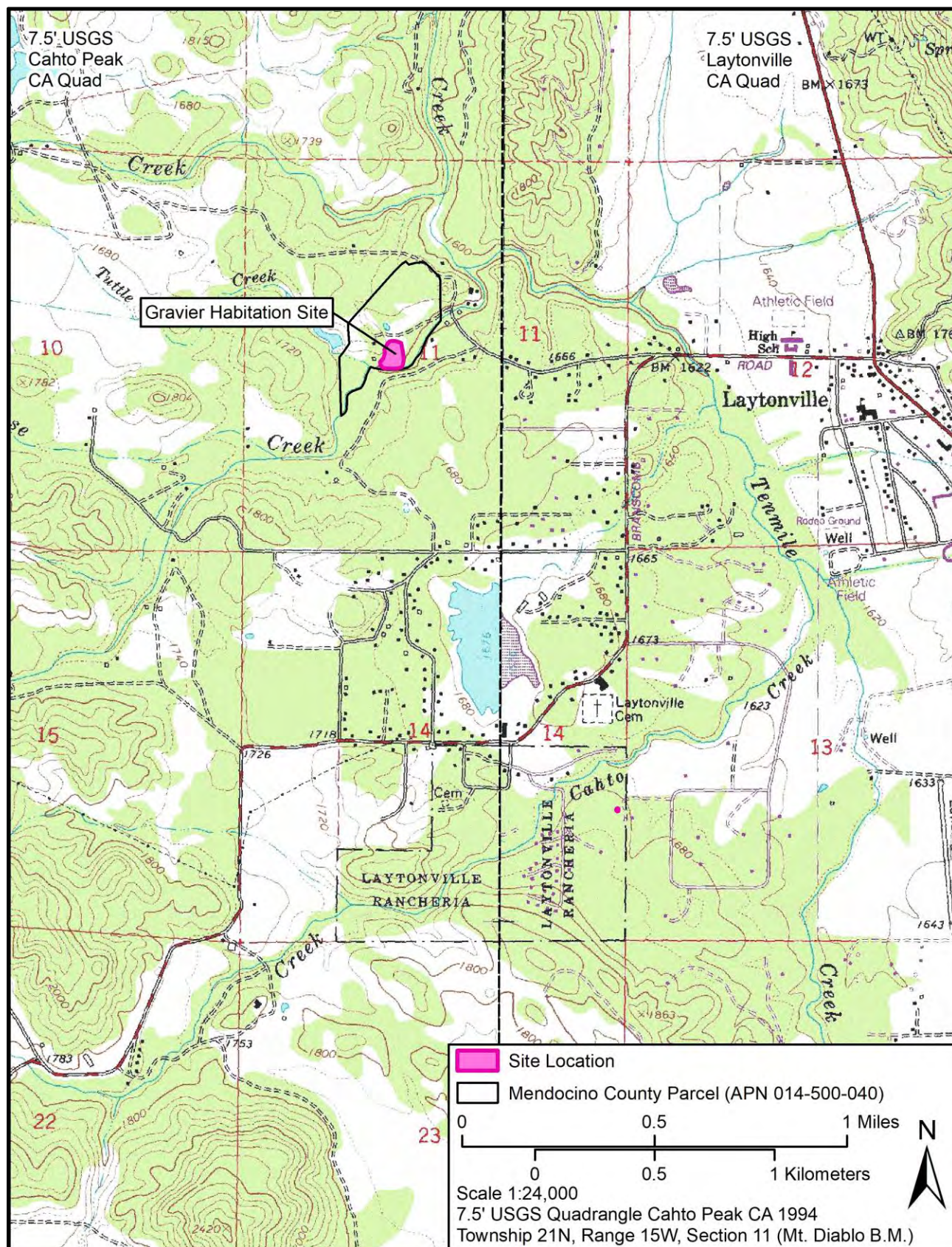
James Roscoe, Roscoe and Associates
3781 Brookwood Drive, Bayside, CA 95524

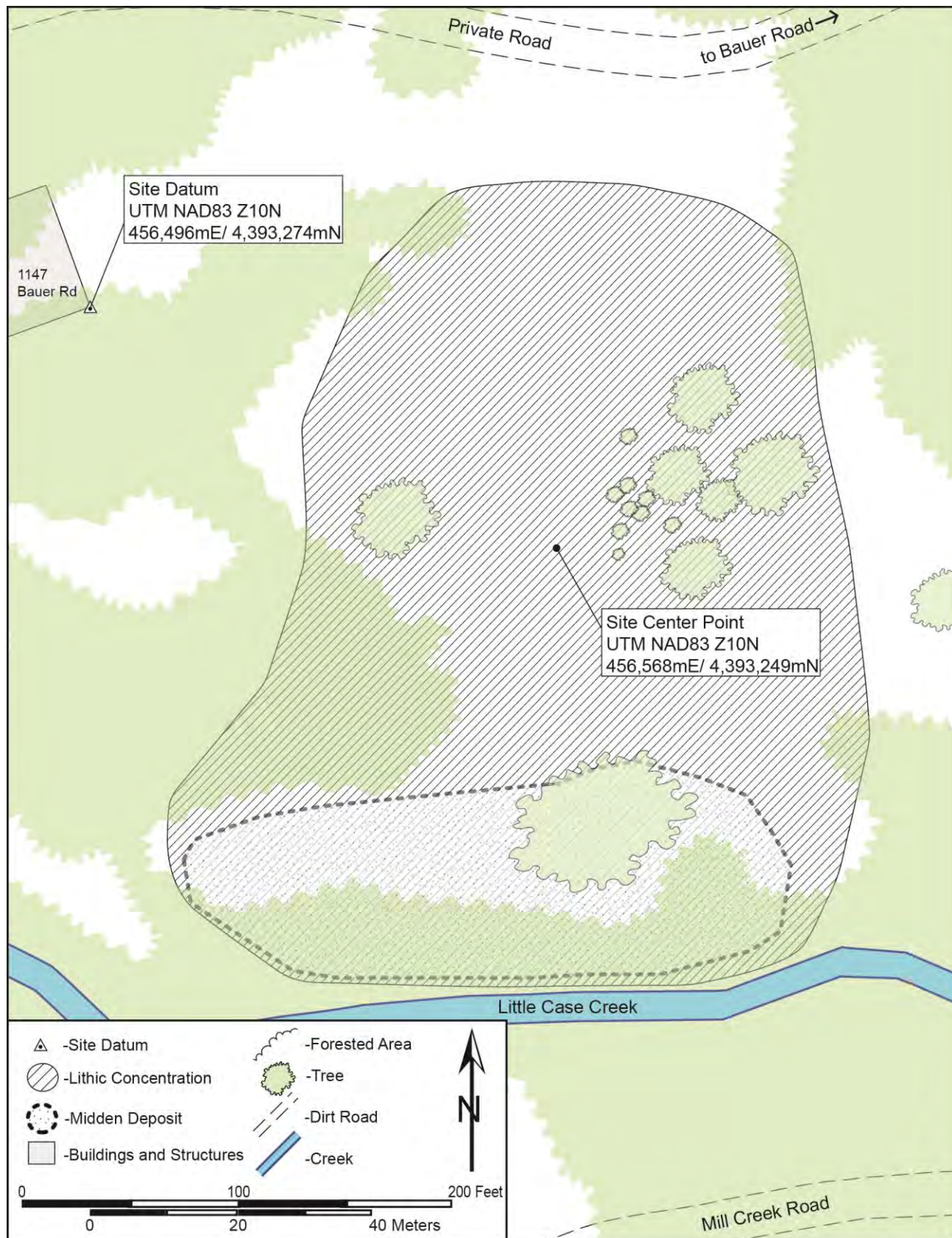
*P9. Date Recorded: August 24, 2024

*P10. Survey Type: reconnaissance survey for a forest health project

*P11. Report Citation: Jennifer Burns Whiteman, M.A. and Melinda Salisbury B.A.
2024 A Cultural Resource Investigation Report for Tenmile Creek Watershed Forest Health Project (CALFIRE #8GG22660). Laytonville, Mendocino County, California.

*Attachments: ☐ NONE ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List): _____





CONTINUATION SHEET

Property Name: Gravier Habitation Site

Page 4 of 5

*Recorded by: James Roscoe, Roscoe and Associates *Date August 24, 2024 ☒ Continuation ☐ Update

Photo Sample of the flakes identified within the site.



CONTINUATION SHEET

Property Name: Gravier Habitation Site

Page 5 of 5

*Recorded by: James Roscoe, Roscoe and Associates *Date August 24, 2024 ☒ Continuation ☐ Update

Photo showing a ground stone fragment identified within the site.



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code _____ Reviewer _____ Date _____

Page 1 of 4

*Resource Name or #: Lower Tenmile Quarry Site

P1. Other Identifier: _____

*P2. Location: ☒ Not for Publication ☐ Unrestricted

*a. County Mendocino and

*b. USGS 7.5' Quad Tan Oak Park CA Date 1994; T 22N; R 16W; NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Sec 18; Mount Diablo B.M.

c. Address APN 013-560-055 City Laytonville CA Zip 95454

d. UTM: (NAD 83) Zone 10N, 450,130 mE/ 4,401,299 mN (Site Datum at south east edge of rock outcrop)

e. Other Locational Data: From the intersection of US Highway 101 Post Mile 76 and an unnamed private road, travel west on the private road, along the north side of Tenmile Creek for approximately 2.4 miles to reach an in-stream crossing of the creek. Cross to the south side of the creek and travel approximately 0.5 miles west on an unnamed private dirt road to reach the site.

*P3a. **Description:** A lithic scatter measuring approximately 72 meters north to south and 80 meters east to west was identified on the terrace just south of Tenmile Creek and an unnamed private road. The site is comprised of a mix of wooded and open meadow areas and contains approximately 30 lithic artifacts including primary, secondary and tertiary chert flakes as well as bifacially worked chert cobbles (cores). One bifacially worked flake tool was identified. A large rock outcrop at the north west corner of the site appears to be the source for the chert material. The primary concentration of lithic artifacts is in the north east corner of the site.

*P3b. **Resource Attributes:** AP2: Lithic Scatter



*P4. **Resources Present:** ☐ Building
☐ Structure ☐ Object ☒ Site ☐ District ☐
Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: 2024
Google Earth view of the site location

*P6. **Date Constructed/Age and Source:** ☐ Historic ☒ Prehistoric ☐ Both

*P7. **Owner and Address:**
Mary Anne TTEE-Larsen
382 Jayne Ave.
Oakland CA, 94610

*P8. **Recorded by:**
James Roscoe
Roscoe and Associates
3781 Brookwood Drive
Bayside, CA 95524

*P9. **Date Recorded:**
August 18, 2024

*P10. **Survey Type:** reconnaissance
survey for a forest health project

*P11. **Report Citation:**

Jennifer Burns Whiteman, M.A. and Melinda Salisbury B.A.

2024 A Cultural Resource Investigation Report for Tenmile Creek Watershed Forest Health Project (CALFIRE #8GG22660).
Laytonville, Mendocino County, California.

*Attachments: ☐ NONE ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List): _____

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

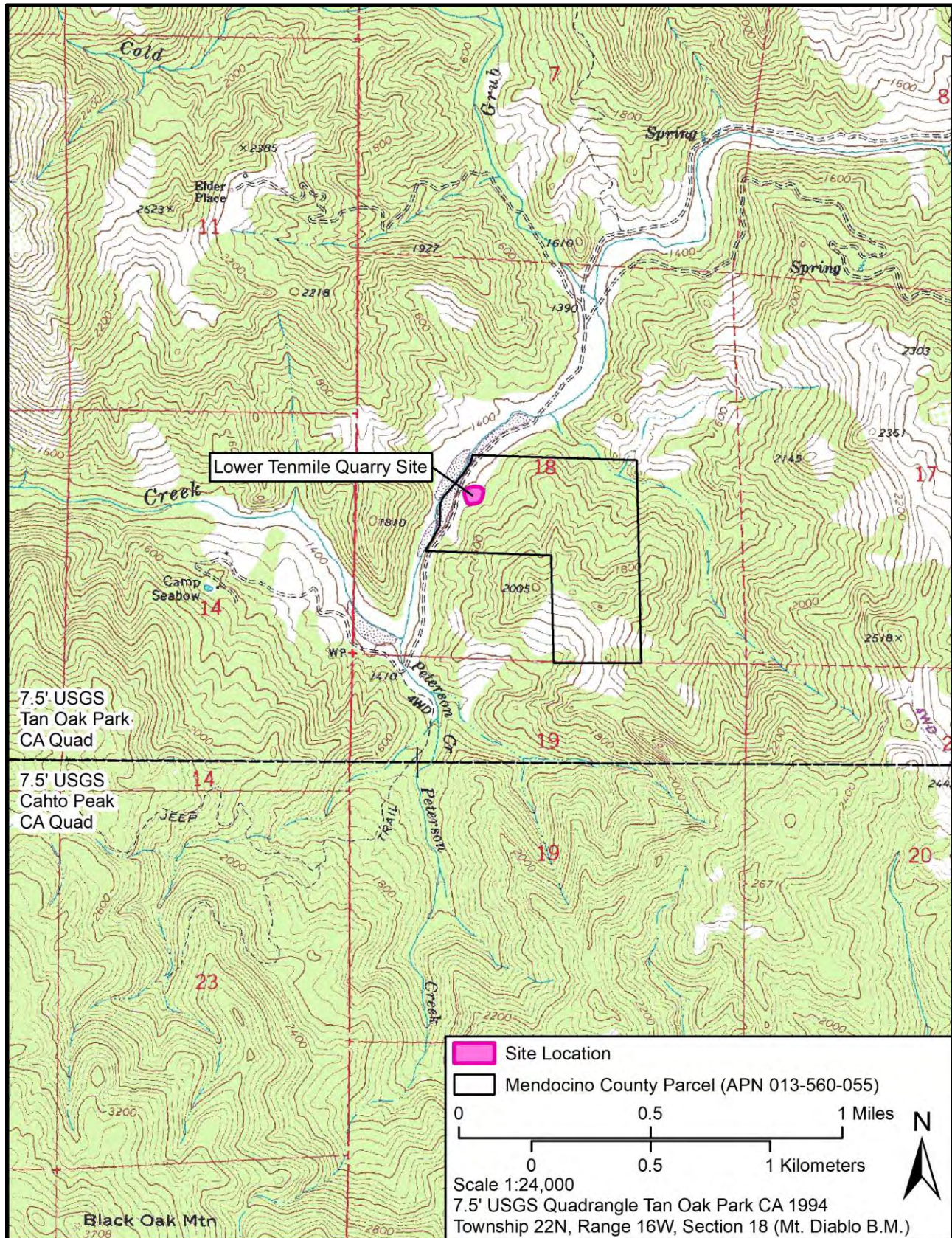
Page 2 of 4

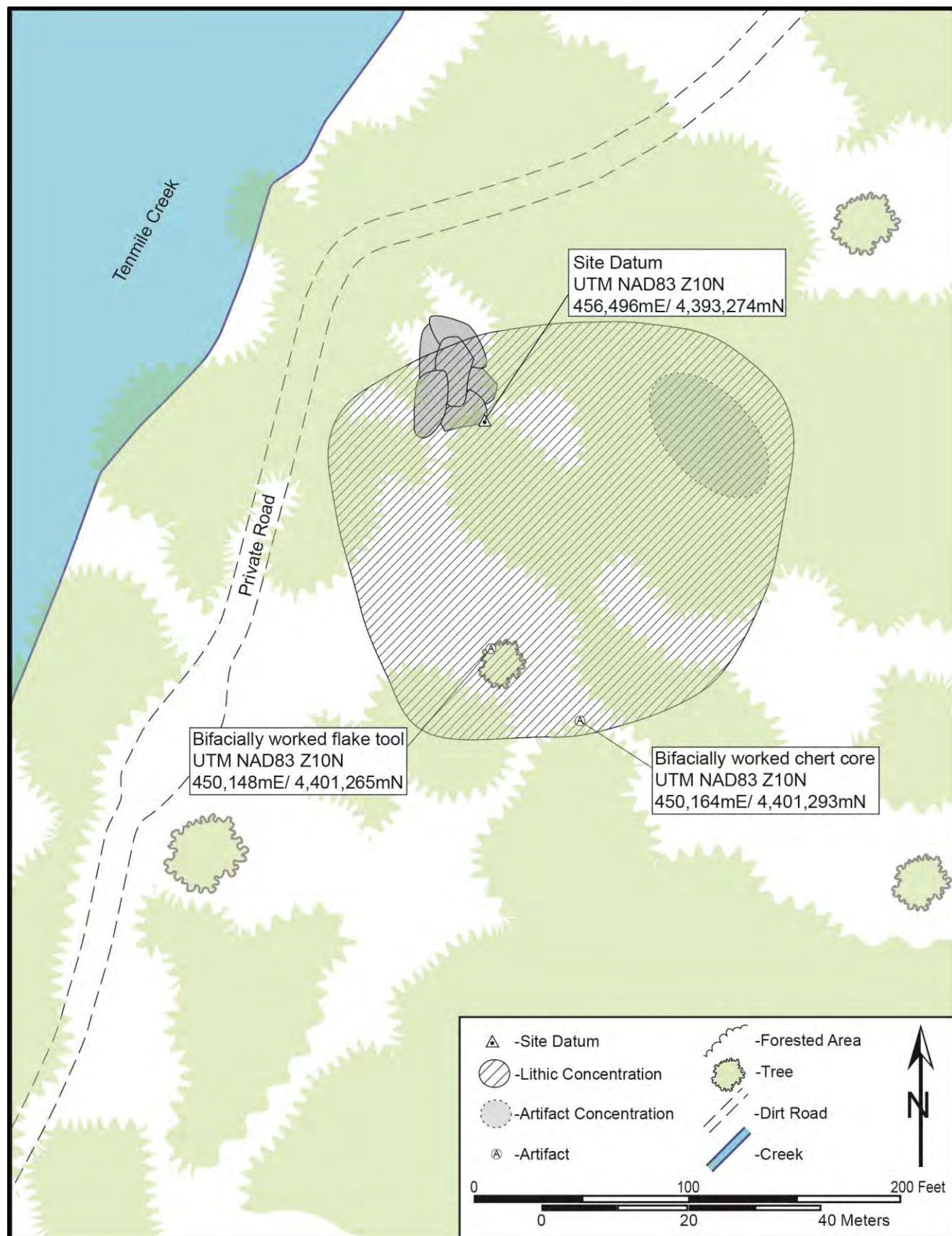
*Resource Name or # Lower Tenmile Quarry Site

*Map Name: Tan Oak Park CA 1994

*Scale: 1:24,000

*Date of map: August 24, 2024





CONTINUATION SHEET

Property Name: Lower Tenmile Quarry Site
Page 4 of 4

*Recorded by: James Roscoe, Roscoe and Associates *Date August 18 2024 ☒ Continuation ☐ Update

Plan view photos of the bifacially worked flake tool.



Plan view photos of the bifacially worked chert core.



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code _____ Reviewer _____ Date _____

Page 1 of 4

*Resource Name or #: Triple Creek Lithic Scatter

P1. Other Identifier: _____

*P2. Location: ☒ Not for Publication ☐ Unrestricted

*a. County Mendocino and

*b. USGS 7.5' Quad Cahto Peak CA Date 1994 T 22N; R 15W; SE 1/4 of SE 1/4 of Sec 23; Mount Diablo B.M.

c. Address APN 013-570-059 City Laytonville Zip 95454

d. UTM: (NAD 83) Zone 10N, 456,634 mE/ 4,399,043 mN (Site Center Point);
456,616 mE/ 4,399,0463 mN (Site Datum- Private Road Intersection)

e. Other Locational Data: From the intersection of US Highway 101 Post Mile 73 and an unnamed private road, travel east then north on the private road, along the east side of Stapp Creek for approximately 0.46 miles to reach a 'T' intersection. Turn left (north) and travel 0.33 miles north to where the road intersects with the driveway to a private property (48621 US 101). This intersection is the site datum. The site is located approximately 7 meters east of the road intersection.

*P3a. Description: This site contains a scatter of approximately 40 chert flakes found in a forested area east of a private road, on a ridge above Stapp Creek. Identified flakes were all in secondary and tertiary stages of reduction. One bifacially worked flake tool measuring 11.5cm by 3.5cm was also observed. This site measures approximately 75 meters north to south and 40 meters east to west.

*P3b. Resource Attributes: AP2: Lithic Scatter

*P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: A view of the site area facing south from the private road on June 18, 2024



*P6. Date Constructed/Age and Source: ☐ Historic ☒ Prehistoric ☐ Both

*P7. Owner and Address:

James R. Hochgraef
303 Wildwood Drive
South San Francisco CA 94080

*P8. Recorded by:

James Roscoe and Melinda Salisbury
Roscoe and Associates
3781 Brookwood Drive
Bayside, CA 95524

*P9. Date Recorded:

August 24, 2024

*P10. Survey Type: reconnaissance survey for a forest health project

*P11. Report Citation:

Jennifer Burns Whiteman, M.A. and
Melinda Salisbury B.A.

2024 A Cultural Resource Investigation Report for Tenmile Creek Watershed Forest Health Project (CALFIRE #8GG22660). Laytonville, Mendocino County, California.

*Attachments: ☐ NONE ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List): _____

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

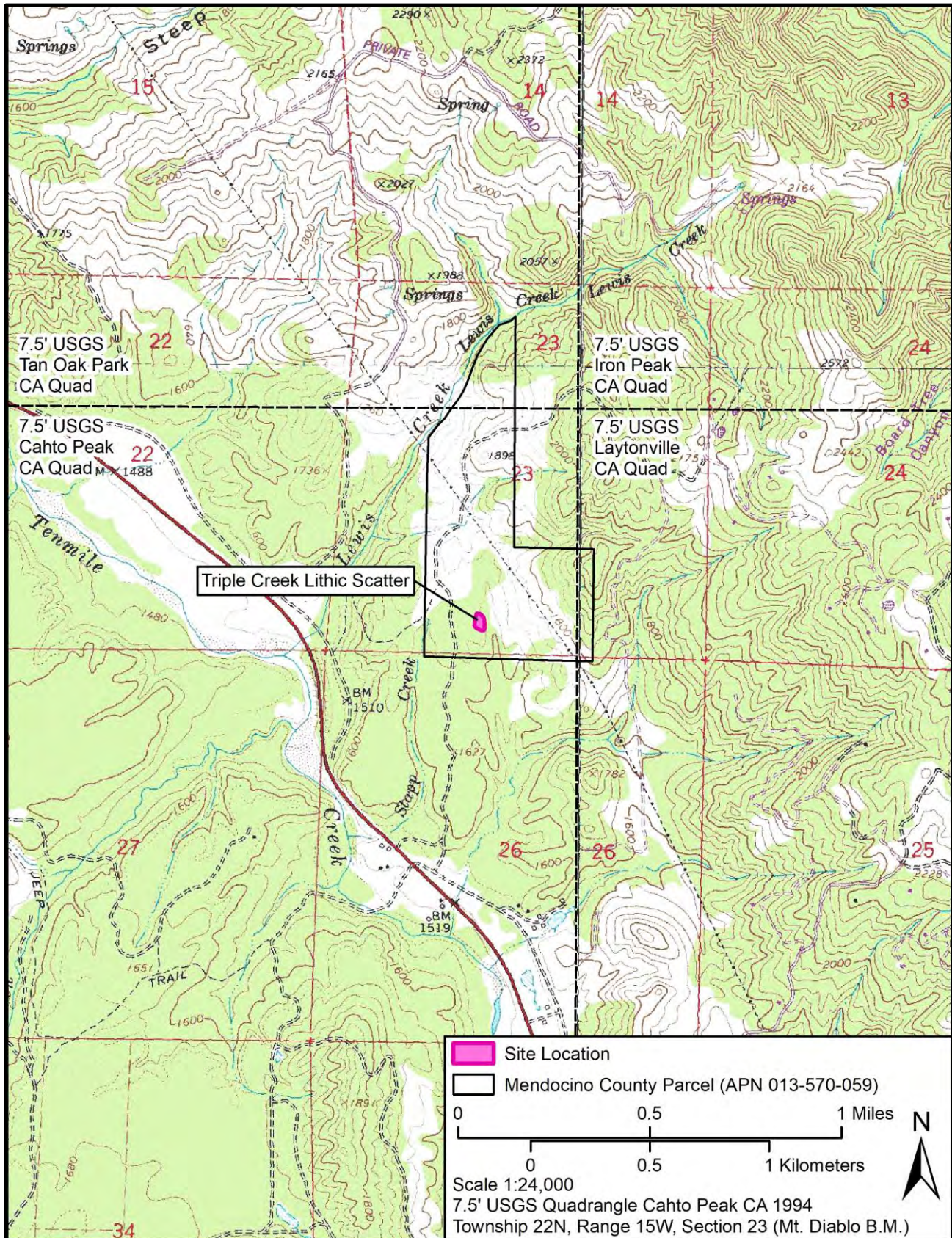
Page 2 of 4

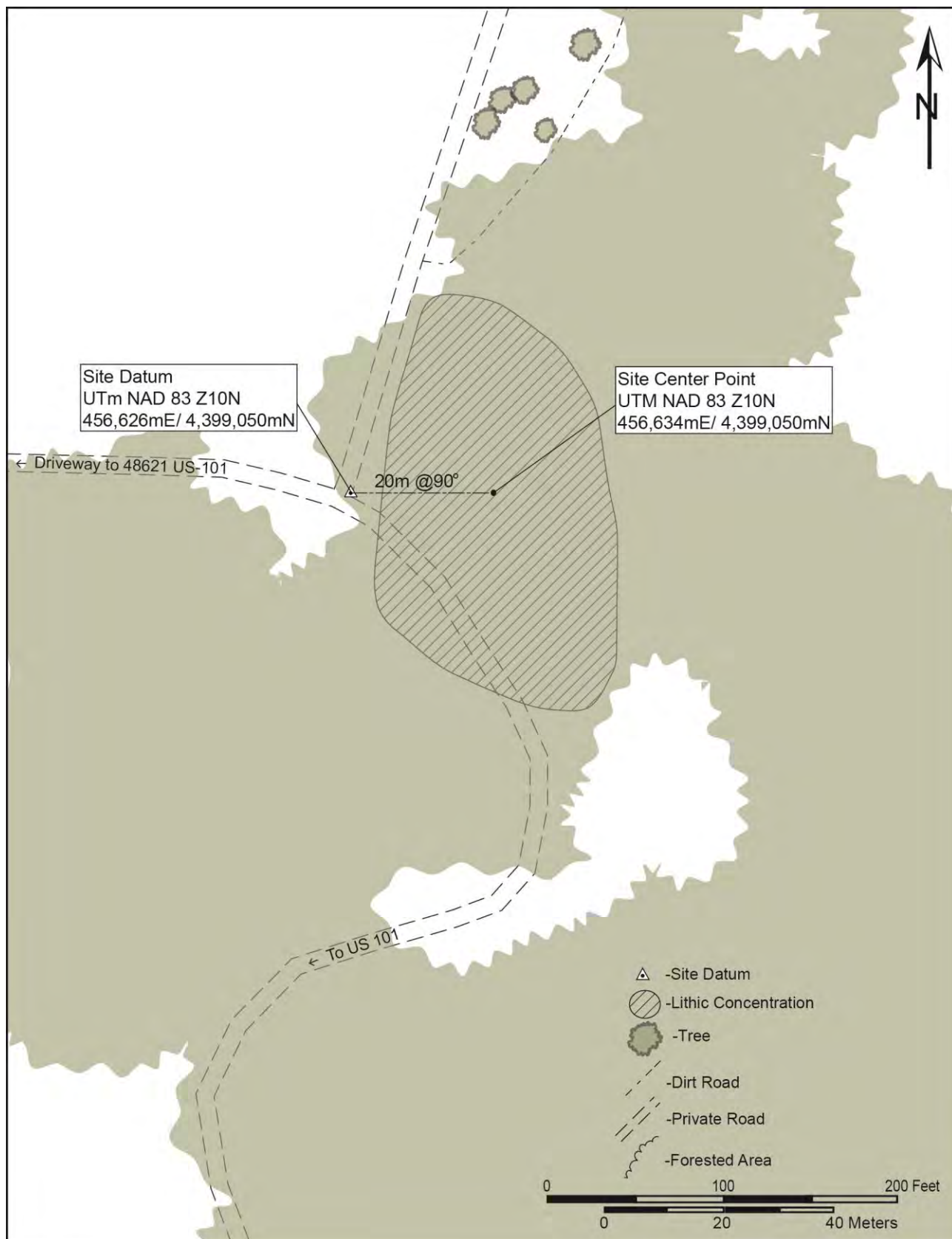
*Resource Name or # Triple Creek Lithic Scatter

*Map Name: Cahto Peak CA, 1994

*Scale: 1:24,000

*Date of map: 2024





CONTINUATION SHEET

Property Name: Triple Creek Lithic Scatter

Page 4 of 4

*Recorded by: James Roscoe and Melinda Salisbury *Date August 24, 2024 ☒ Continuation ☐ Update

Photo showing the bifacially worked flake tool measuring 11.5cm by 3.5cm found within the site



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code _____ Reviewer _____ Date _____

Page 1 of 4

*Resource Name or #: West Tenmile Lithic Scatter North

P1. Other Identifier: _____

*P2. Location: ☐ Not for Publication ☐ Unrestricted 130

*a. County Mendocino and

*b. USGS 7.5' Quad Cahto Peak CA Date 1994, T 22N; R 15W; SE 1/4 of SW 1/4 of Sec 35; Mount Diablo B.M.

c. Address APN 013-790-027 City Laytonville CA Zip 95454

d. UTM: (NAD 83) Zone 10N, 456,509 mE/ 4,396,022 mN (Site Center Point);

456,516 mE/ 4,396,012 mN (Site Datum- opening in the tree canopy on the road to the south of the site).

e. Other Locational Data: From the intersection of U.S. Highway 101 and Tenmile Creek Road, travel west on Tenmile Road for 0.4 miles (.64lm). Veer to the north and continue on Tenmile Creek Road for 1.3 miles (2.1km). Turn left (west) to stay on West Tenmile Road and travel 130 feet (40m). From this point the site is located along the north side of the road, approximately 16 feet (5m) from the edge of the road.

*P3a. **Description:** A small lithic scatter measuring approximately 12.5 meters north to south and 14 meters east to west was identified along the north side of Tenmile Creek Road on a terrace above the confluence of Tenmile Creek and an unnamed tributary. The confluence is approximately 130 meters north of the site. The site contains approximately eighteen chert flakes all in the tertiary stage of reduction, as well as two formed tool fragments. The two tool fragments are a red chert biface tip measuring 5cm long and 3cm at its widest point where it is broken and a grey/ green chert bifacially worked base that is ovular in shape and measures approximately 3cm in length and is 3.5 cm at its widest point.

*P3b. **Resource Attributes:** AP2. Lithic Scatter

*P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)



P5b. Description of Photo: A view of the site facing southwest on June 03, 2024.

*P6. **Date Constructed/Age and**

Source: ☐ Historic ☒ Prehistoric ☐ Both

*P7. **Owner and Address:**

Janice M Smith
PO Box 923
Laytonville CA, 95454

*P8. **Recorded by:**

James Roscoe
Roscoe and Associates
3781 Brookwood Drive
Bayside, CA 95524

*P9. **Date Recorded:**

August 18, 2024

*P10. **Survey Type:** reconnaissance survey for a forest health project

*P11. **Report Citation:**

Jennifer Burns Whiteman, M.A. and Melinda Salisbury B.A.

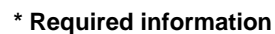
2024 A Cultural Resource Investigation Report for Tenmile Creek Watershed Forest Health Project (CALFIRE #8GG22660). Laytonville, Mendocino County, California.

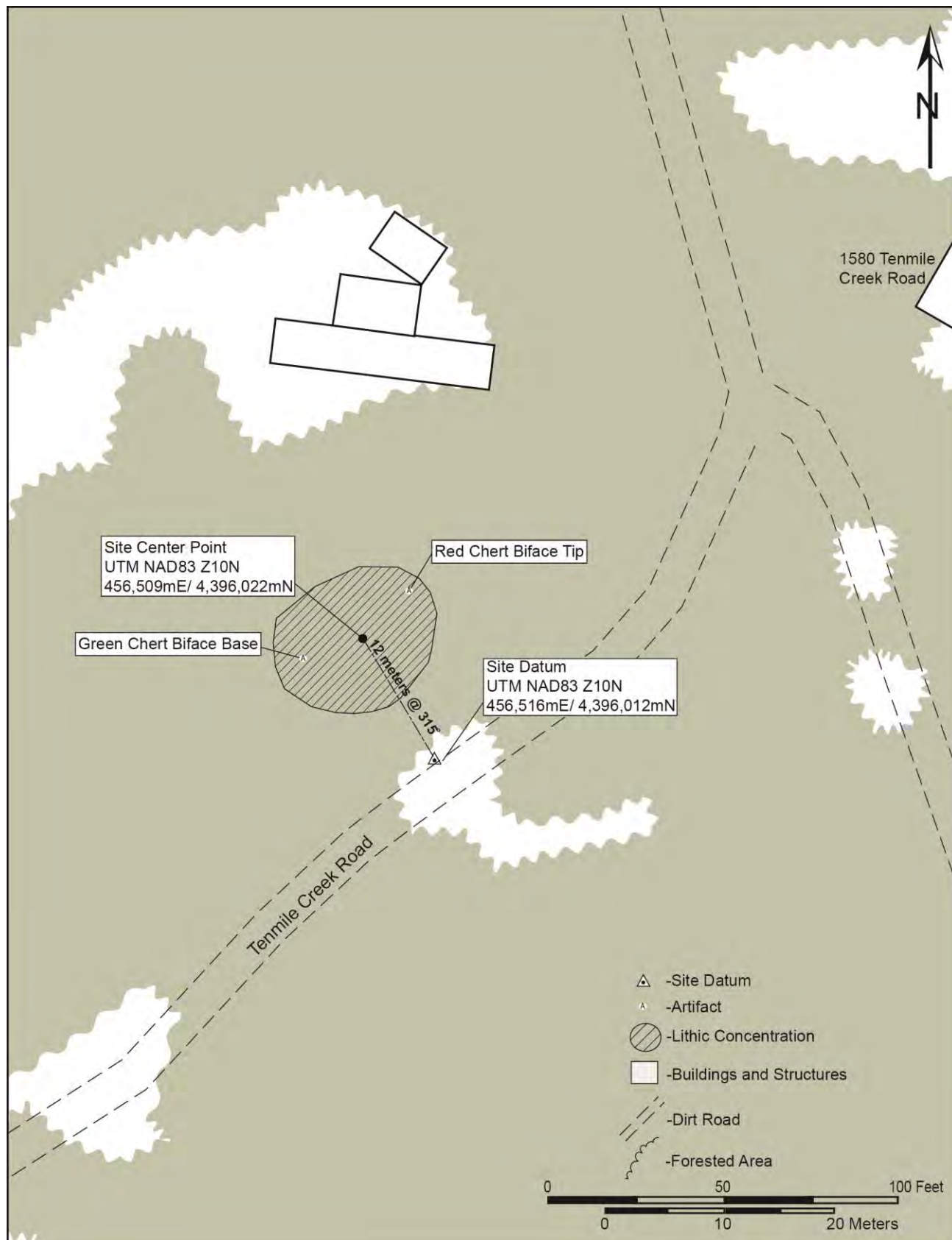
*Attachments: ☐ NONE ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List): _____

Primary #
HRI#
Trinomial

*Resource Name or # West Tenmile Lithic Scatter North

***Date of map:** August 18, 2024





CONTINUATION SHEET

Property Name: West Tenmile Lithic Scatter North

Page 4 of 4

*Recorded by: James Roscoe, Roscoe and Associates

*Date August 18, 2024

☒ Continuation ☐ Update

Plan view photo showing the red chert biface tip



Plan view photo showing the green chert biface base



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code _____ Reviewer _____ Date _____

Page 1 of 4

*Resource Name or #: Tenmile Creek Lithic Scatter South

P1. Other Identifier: _____

*P2. Location: ☒ Not for Publication ☐ Unrestricted

*a. County Mendocino and

*b. USGS 7.5' Quad Cahto Peak Date 1994 T 22N; R 15W; SE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Sec 35; Mount Diablo B.M.

c. Address 1574 Tenmile Creek Road (APN 013-790-028) City Laytonville Zip 95454

d. UTM: (NAD 83) Zone 10N, 456,513 mE/ 4,395,917 mN (Site Center Point);
456,508 mE/ 4,395,935 mN (Site Datum- SE corner of the residence that is to the north of the site).

e. Other Locational Data: From the intersection of U.S. Highway 101 and Tenmile Creek Road, travel west on Tenmile Road for 0.4 miles (0.64km). Veer to the north and continue on Tenmile Creek Road for 1.3 miles (2.1km). Turn left (west) to stay on West Tenmile Road and travel 340 feet (104m) to the driveway for 1574 Tenmile Creek Road. From this point travel 140 feet (43m) south to reach the residence. The site is located 8 feet (2.4m) south of the south east corner of the residence.

*P3a. **Description:** A lithic scatter measuring approximately 30 meters north to south and 24 meters east to west was identified in a wooded area along Tenmile Creek Road on a terrace above the confluence of Tenmile Creek and an unnamed tributary. The confluence is approximately 200 meters north east of the site. Approximately 20 chert flakes were observed in this location, all in secondary and tertiary stages of production. No formed tools were observed.

*P3b. Resource Attributes: AP2. Lithic Scatter

*P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)



P5b. Description of Photo: (view, date, accession #)
View of the site, facing north toward the south east corner of the residence (site datum).

*P6. Date Constructed/Age and Source: ☐ Historic
☒ Prehistoric ☐ Both

*P7. Owner and Address:

Decarlos Hanabal
PO Box 445
Laytonville CA 95454

*P8. Recorded by:

James Roscoe
Roscoe and Associates
3781 Brookwood Drive
Bayside, CA 95524

*P9. Date Recorded:

August 18, 2024

*P10. Survey Type: reconnaissance survey for a forest health project

*P11. Report Citation:

Jennifer Burns Whiteman, M.A. and Melinda Salisbury B.A.

2024 A Cultural Resource Investigation Report for Tenmile Creek Watershed Forest Health Project (CALFIRE #8GG22660).
Laytonville, Mendocino County, California.

*Attachments: ☐ NONE ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record
☐ Photograph Record ☐ Other (List):

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

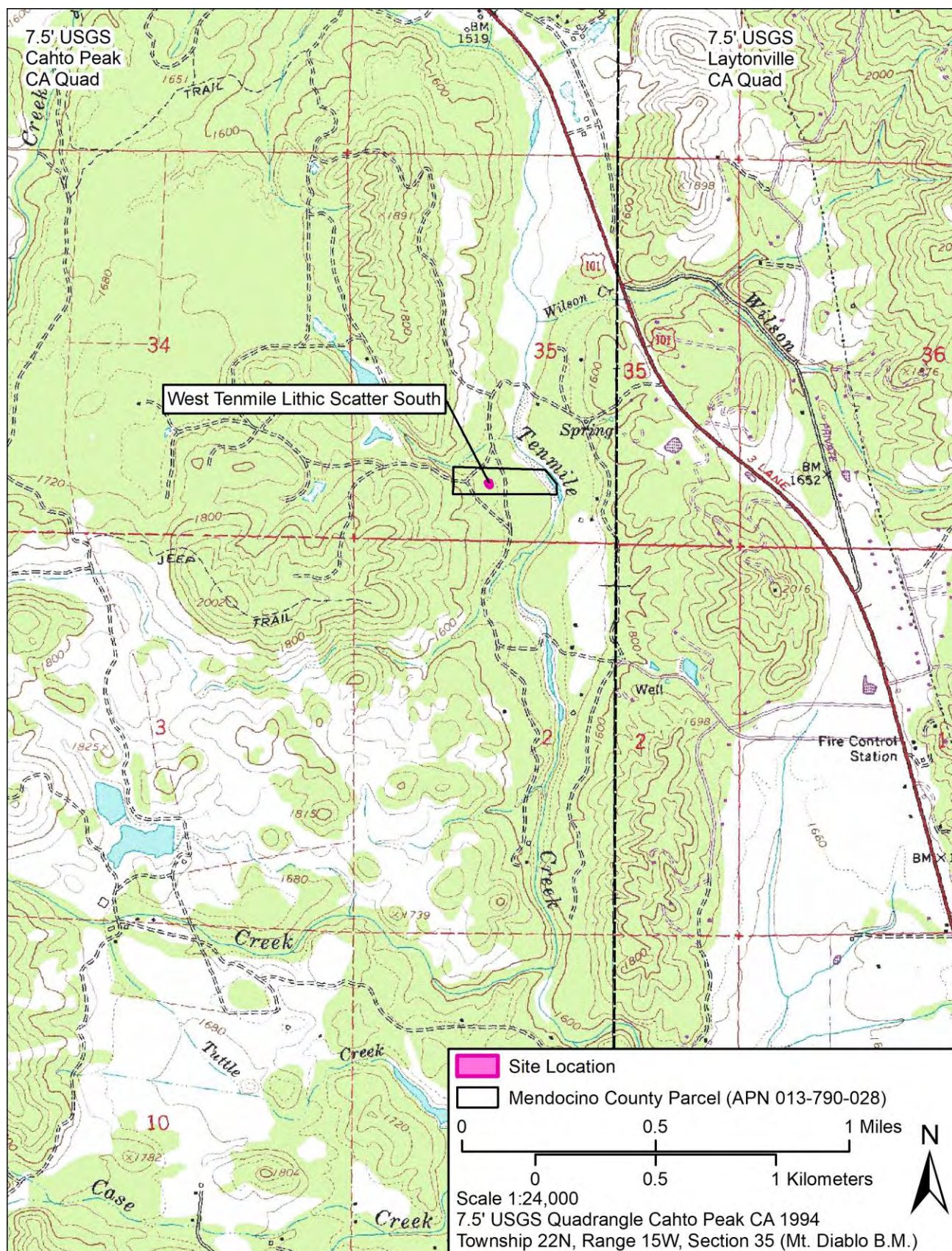
Page 2 of 4

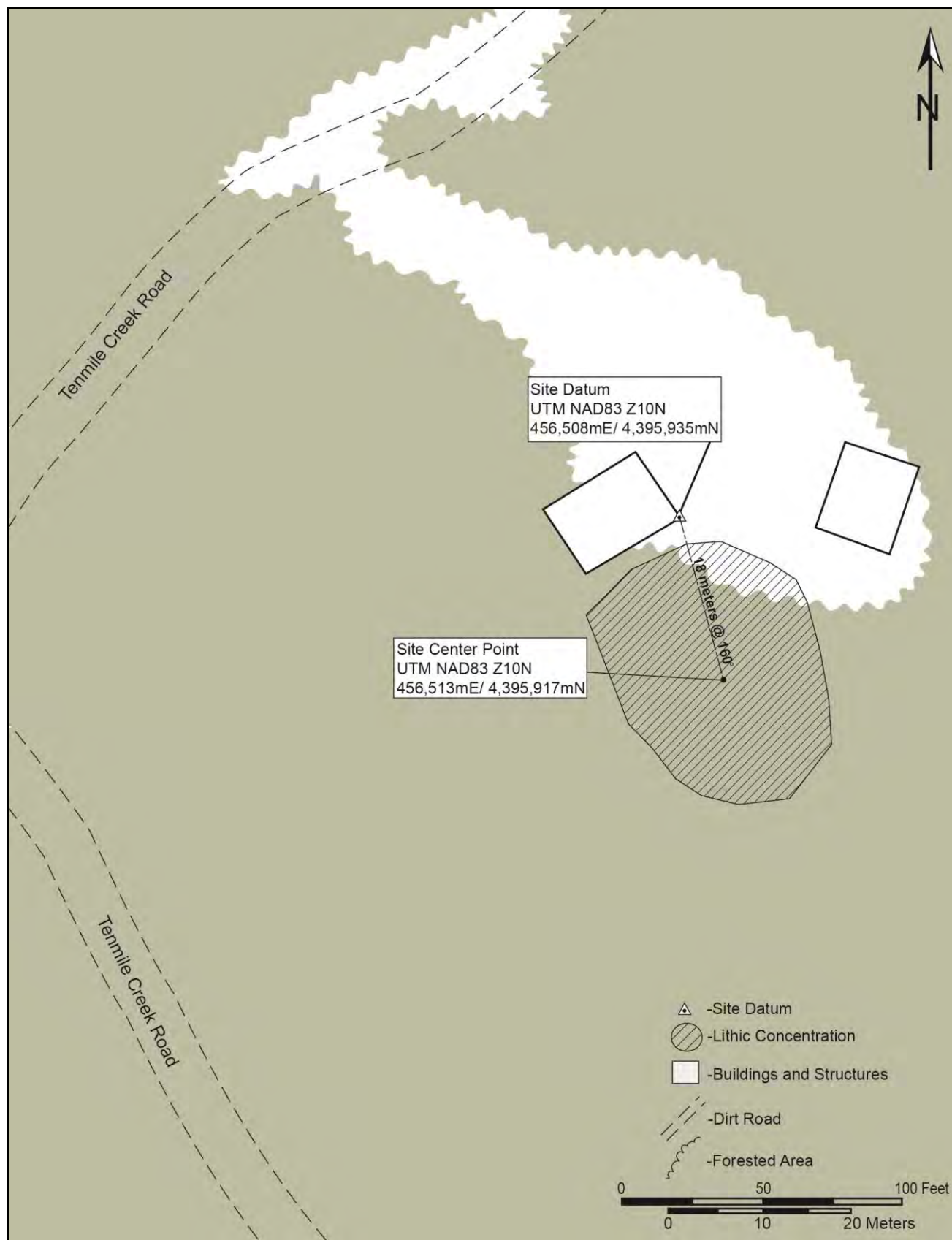
*Resource Name or # Tenmile Creek Lithic Scatter South

*Map Name: Cahto Peak CA 1994

*Scale: 1:24,000

*Date of map: August 18, 2024





CONTINUATION SHEET

Property Name: Tenmile Creek Lithic Scatter South

Page 4 of 4

*Recorded by: James Roscoe, Roscoe and Associates *Date August 18, 2024 ☒ Continuation ☐ Update

Photos showing plan views of flakes identified within the site.



Appendix D
Ecosystem Restoration Treatment - CalVTP ID: 2024-17

Tenmile Creek Forest Health Project (CALFIRE # 8GG22600)
CAL VTP PSA Addendum for Placement of Woody Biomass in Gullies or Class III
Watercourses



By: Patrick Higgins, Colin Gillespie and Steve Brown

June 30, 2024

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Background

The Eel River Recovery Project (ERRP) is the recipient of a CALFIRE Climate Change Initiative (CCI) grant awarded in August 2023, that will run through March 2028. The *Tenmile Creek Forest Health Project* (CALFIRE # 8GG22600) will treat 867 acres of private forest land and parts of the Cahto Tribe Rancheria using forest thinning, oak woodland restoration, and application of prescribed fire. Project permitting is required before any work can begin on the ground, and ERRP has retained a cadre of highly skilled natural resource professionals to acquire necessary California Environmental Quality Act (CEQA) and National Environmental Policy Act permits. This type of forest health project can be permitted under the California Vegetation Treatment Program (CAL VTP) through conformance with the Programmatic Environmental Impact Report (PEIR) established for that program for Ecosystem Restoration.

In addition to restoring forest health, this project also is pursuing ecological goals such as increased flow, increased biodiversity, and increased soil moisture and fertility. For example, woody biomass derived from forest health activities will be placed in headwater swales without beds and banks, which does not require a permit of any kind. This will reduce the amount of woody material that needs to be burned, help sequester carbon, increase microbial and mycorrhizal activity in the soil, retain hillslope moisture and foster conditions suitable for native plants and grasses. ERRP also wishes to use woody debris to treat ephemeral headwater streams that do have beds and banks, and this Addendum is to provide sufficient background information so that treatment of Class III gullies can be carried out with CEQA VTP coverage. The Mattole Restoration Council has carried out large scale restoration projects in Class I streams using the CAL VTP CEQA process, so there is precedent for coverage of work in stream channels not requiring California Department of Fish and Wildlife 1600/Lake and Stream Alteration Agreement (LSAA) permits.

Other reasons that the segments of Class III gullies proposed for treatment should be permitted without more extensive review is because of the small size of channels and the size of the check dams recommended, which pose minimal erosion risk. The methods are also standard designs that are derived from trusted manuals for practitioners (Kraebel and Pillsbury 1934, CDFW 2010, Wheaton et al. 2019), and implementation will start with low head structures that will be reinforced in subsequent years. Wheaton et al. (2019) point out that this method allows the stream system to dictate design, not hydrologic studies and engineering. Channel response to initial small structures will guide a second wave of activity that will add materials at locations where structures are working to increase sediment catchment and to compensate for settling in the first year.

ERRP has previously done planning and permitting for the sub-set of gullies off Hargus Road in the North Vassar project area (ERRP 2023), and also conducted environmental analysis of the West Tenmile Creek project area and created ecological forest health restoration plan (ERRP 2020).

Figure 1 shows all locations for forest health activity under the Tenmile Creek CALFIRE VTP project and the red dots indicate where Class III water courses will be treated.

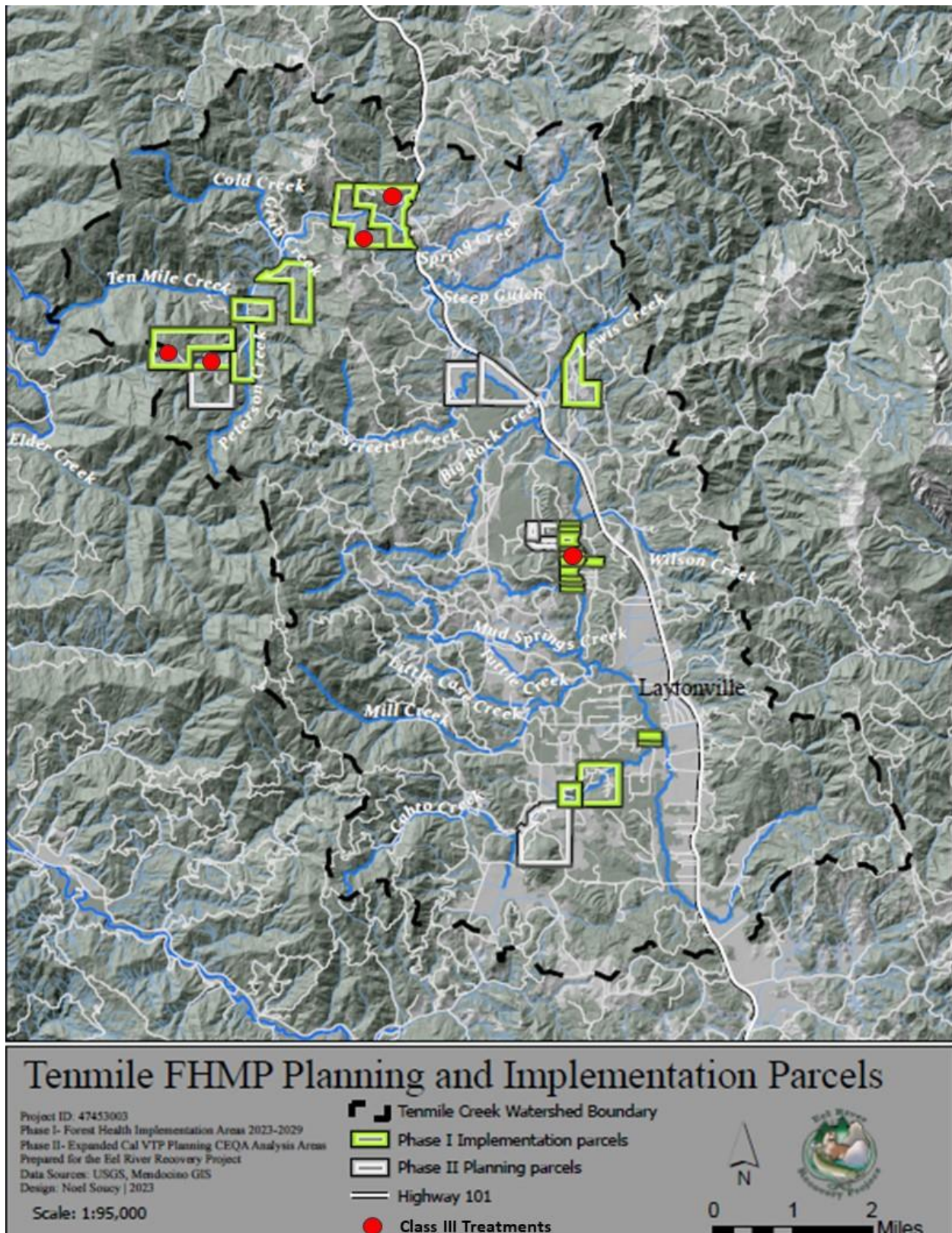


Figure 1. ERRP Tenmile Creek Forest Health Project parcels and location of Class III gullies to be treated.

Methods

To heal gullies, stop sediment delivery to Tenmile Creek, help to raise the water table, and increase soil moisture and fertility, hand-built grade control structures will be constructed using mostly native materials sourced locally and based on recommendations of Kraebel & Pillsbury (1934), Schiectl and Stern (1997), Wheaton et al. (2019), and the *California Salmonid Stream Habitat Restoration Manual* (CDFW 2010). Different sizes and types of structures will be used depending on where the gully is located and the channel gradient (CDFW 2010).

Wheaton et al. (2019) point out that 1) “Numerous low dams along a gully are preferred to a few high dams, 2) it is more economical to reclaim a gully by stages, than to try to do it at one time or with one set of dams, and 3) temporary rather than permanent structures are preferred.” Maximum check dam height should not exceed four feet and serial entry will be planned so that the gully is healed in stages over time. In order to control gullies, Kraebel and Pillsbury (1934) recommend that anthropogenic stressors like grazing or increased flow be abated as a starting point, and that is the case with all properties in the ERRP project.

Specific designs for structures to be implemented by hand, as part of this project are defined in the CDFW (2010) manual: 1) tree check dams, 2) brush check dams, and 3) post-assisted check dams. The Kraebel and Pillsbury (1934) headcut structures will be used as opposed to the CDFW (2010) design for this project that calls for excavation, when all work on these projects will be done by hand. The specific definitions for each of these techniques can be found in Attachment #1. Wheaton et al. (2019) give examples of construction materials that will be utilized by the Project:

1) “Dam and Apron Brush: Chaparral or tree branches can be used to construct dams and sediment traps in smaller headwater swales. Material is easier to use if it is flexible, and brush should be chopped into lengths so that a dense mat 3’-4’ deep is formed. Tree limbs should be green and heavily leafed. Suitable species include pine, fir, cedar, live oak and willow. These same types of materials can also be used as apron material to dissipate flow below dams.

2) Litter: Leaf litter from the forest floor can be used under aprons and against the upstream faces of dams to slow flow and help capture sediment. Pine needles are excellent and weeds can also be used. Straw waddles can be imported, if leaf litter is not available.

3) Whole Trees: When placed properly, whole freshly cut evergreen trees can be used in construction of dams and sediment traps. They should have dense foliage.

4) Logs, Posts and Stakes: Whole logs of appropriate length keyed into the bank can be used for spanning structures. Posts and stakes can be crafted on site and pounded into the ground to create to dams. Using willow stakes is desirable because they will take root and grow.

All work will be done by hand with materials available locally on the forest floor or recruited from the nearby woods as part of forest thinning. Fresh materials, such as green conifer branches are needed for successful check dam construction, and conifers under 8” in diameter will be used and limbs of trees in the same area. See Discussion for justification of activity inside WLPZ. All gullies and or watercourses would be dry at the time of treatment work.

Site Descriptions and Prescriptions

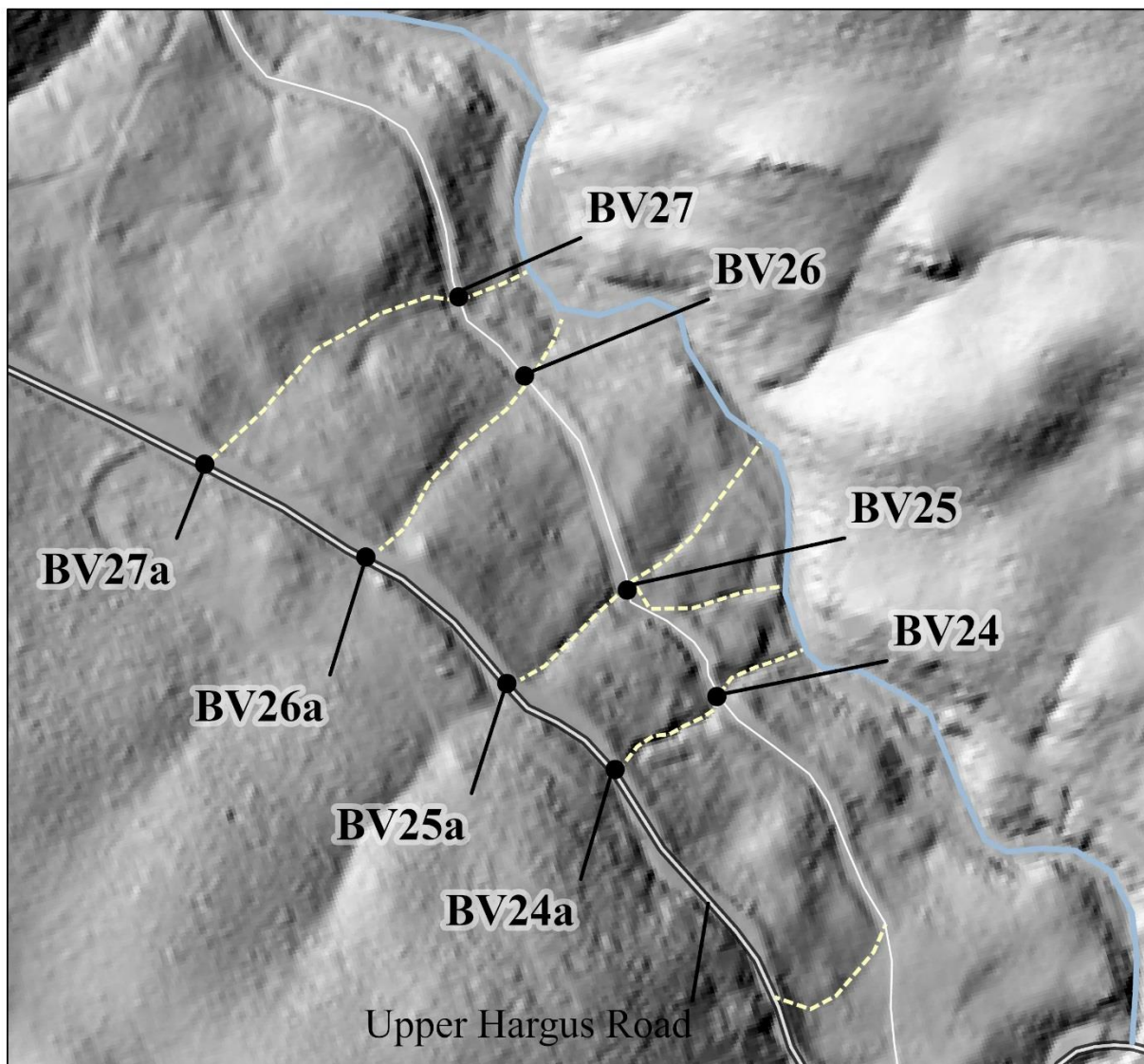
Sites where Class III gullies slated for treatment are located are on the north and south sides of the Vassar property, in Lower Tenmile Creek on the Clarke and Brown parcels, and as part of the West Tenmile project on the DeCarlos, Lassotovich, Gillan and Chappell properties.

Area	Owner	APN #
Vassar North	Vassar Family	01354052
Vassar South	Vassar Family	01354013
Lower Tenmile	Brown	01351049
Lower Tenmile	Clarke	01320045
West Tenmile	Lassotovich	01446003
West Tenmile	9 Mile Properties	01446004
West Tenmile	Chappelle	01379022
West Tenmile	DeCarlos	01379028 & 01379023
West Tenmile	Gillan	01379003 & 013790040 & 01379015
West Tenmile	Greenberg	01379007

North Vassar/Hargus Road

The Vassar property is in the northern Tenmile Creek basin west of Highway 101, approximately 6.75 north of Laytonville in northern Mendocino County. The property spans Tenmile Creek as it turns west towards the South Fork Eel and the north portion of the property is off Hargus Road (APN #01354052), and can be accessed from Highway 101 near the top of the Rattlesnake Grade. The gullies being being treated were previously studied as part of a State Coastal Conservancy (SCC) grant (Agreement # 20-076) and described in the *Tenmile Creek Vassar Habitat Enhancement and Sediment Control Project Basis of Design Report* (ERRP 2023). Hargus Road is more than 100 years old and was formerly the course of an old wagon road. Drainage from the road creates gullies downslope between upper and lower Hargus Road that are a product of road drainage and not natural waterways. The SCC project provided resources for planning and permitting and the Mendocino County Resource Conservation District (MCRCD) is pursuing funding for implementation with the intention of recontouring Hargus Road so that it is out-sloped and road runoff into gullies reduced. Using forest health derived materials to create check dams will allow the hillslope to heal and raise the local water table and create sediment deposits suitable for colonization of native plants.

The project area is all the gullies above and below upper Hargus Road (Figure 2) as it passes through the forest health project area. Figures 3-4 are photos of culverts draining upper Hargus Road where armoring below the outlet prevents erosion, but gully formation occurs down-hill (Figures 5-8). The gullies are discontinuous and vary in depth as they flow through more or less resistant terrain. The treatments to be applied will depend on the depth of the gully reach being treated and the local gradient. In the mildest reaches, tree check dams will be used. Gullies in reaches of slightly greater gradient will be treated with brush check dams. In places where there is a knickpoint, then a head-cut gully structure will be installed and the largest gully incisions will be treated with post-assisted check dams..



Upper and Lower Hargus Road Restoration Sites

LiDAR Hillshade

Prepared for the Eel River Recovery Project

Data Sources: USGS, Mendocino GIS

Design: Noel Soucy 2022

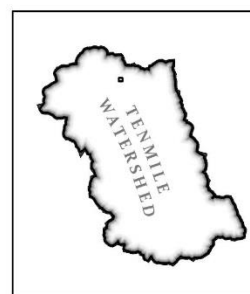
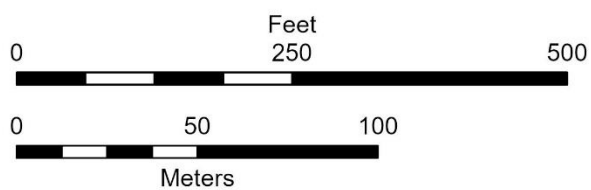


Figure 2. North Vassar gullies to be treated under CEQA VTP.



Figure 3. Culvert under Hargus Road with armoring at the outfall, but gully forming down-hill. 11/30/21.



Figure 4. Another culvert draining upper Hargus Road with gullying down-slope. 11/17/22.



Figure 5. Gully reach to be treated below upper Hargus Road. 11/30/21.



Figure 6. Close up of typical gully reach to be treated below upper Hargus Road. 11/30/21.



Figure 7. Short gully reach down-slope of upper Hargus Road. 11/30/21.



Figure 8. Minor gully up-slope of upper Hargus Road. 11/22/22.

South Vassar Headwater

The south Vassar parcel (APN #01354013) is accessed off Highway 101 and a private ranch road that extends to Lower Tenmile Creek project area. The section of gullies to be treated are near the top of the property (Figure 9).

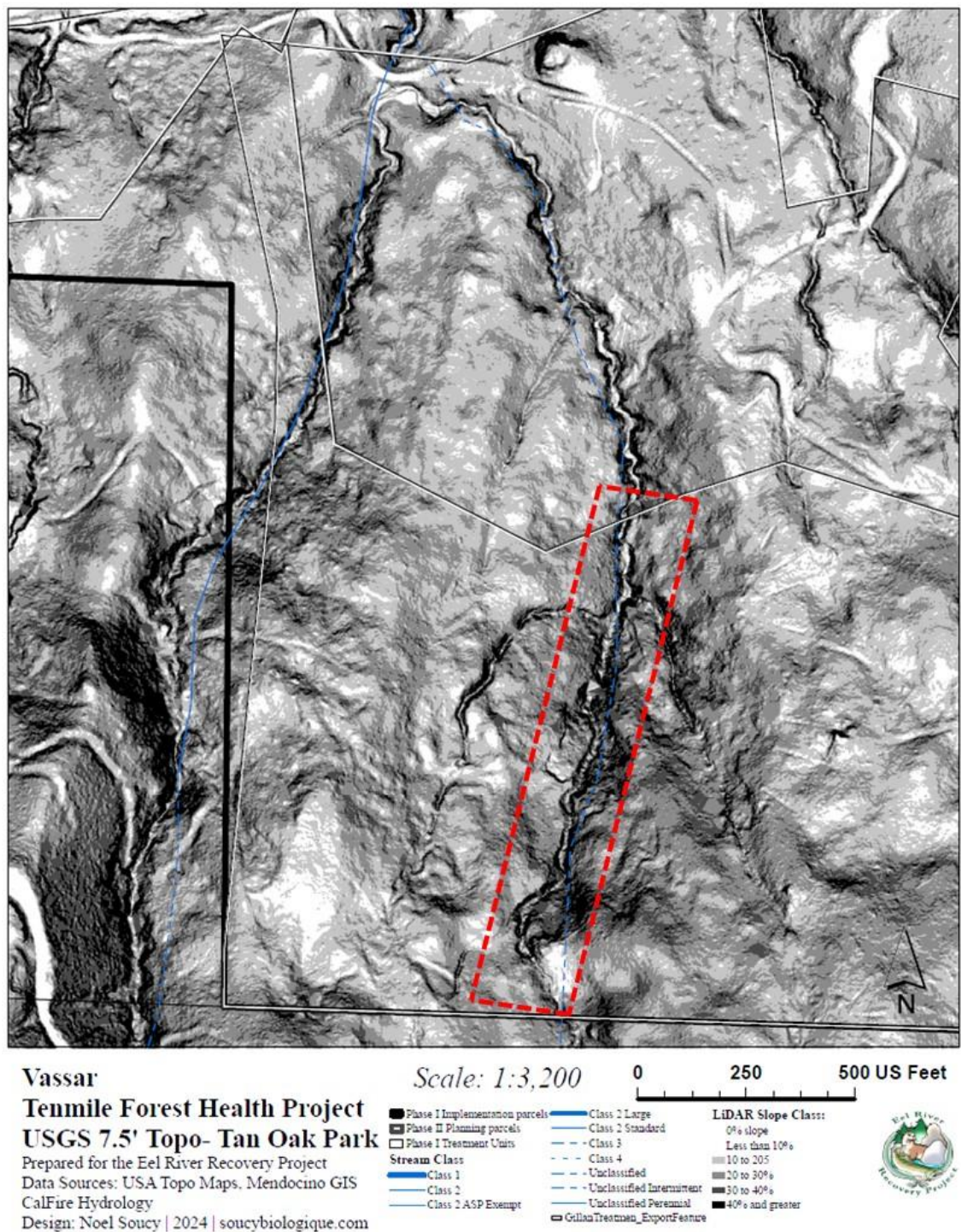


Figure 9. South Vassar LIDAR image with 1000-foot-long gully reach to be treated highlighted in red.

An area that was formerly a log landing at the top, where the hillslope gradient is mild will be treated with closely spaced tree check dams (Figure 10) to slow runoff, promote infiltration and to lessen the force of water in the gully system just down-hill. As the gully develops a bed and banks just downslope, brush check dams will be installed (Figure 11). More incised sections of the south Vassar gully (Figure 12) will be treated with post-assisted check dams and knickpoints (Figure 13) using head-cut structures. Small diameter conifers, such as the one in Figure 13 need to be removed and utilized to supply check dam materials despite the fact that they are in the riparian zone (see Discussion).

Lower Tenmile/Brown and Clarke Properties

Six local landowners are participating in the ERRP CALFIRE Tenmile Creek forest health project and Cheyenne Clarke and Steve Brown have gullies they wish to be permitted under the CEQA VTP process (Figure 14) and healed with wood from forest health projects adjacent.



Figure 10. Colin Gillespie in low gradient zero order channel at the top of the south Vassar gully system where tree check dams will be used. 6/24/24.



Figure 11. South Vassar gully system starting to develop bed and in reach to be treated with brush check dams. 6/24/24.



Figure 12. South Vassar Class III gully to be treated with post assisted check dam. 6/24/24.



Figure 13. Steve Brown (I) and Colin Gillespie at site where a head-cut structure will be installed. 6/24/24.

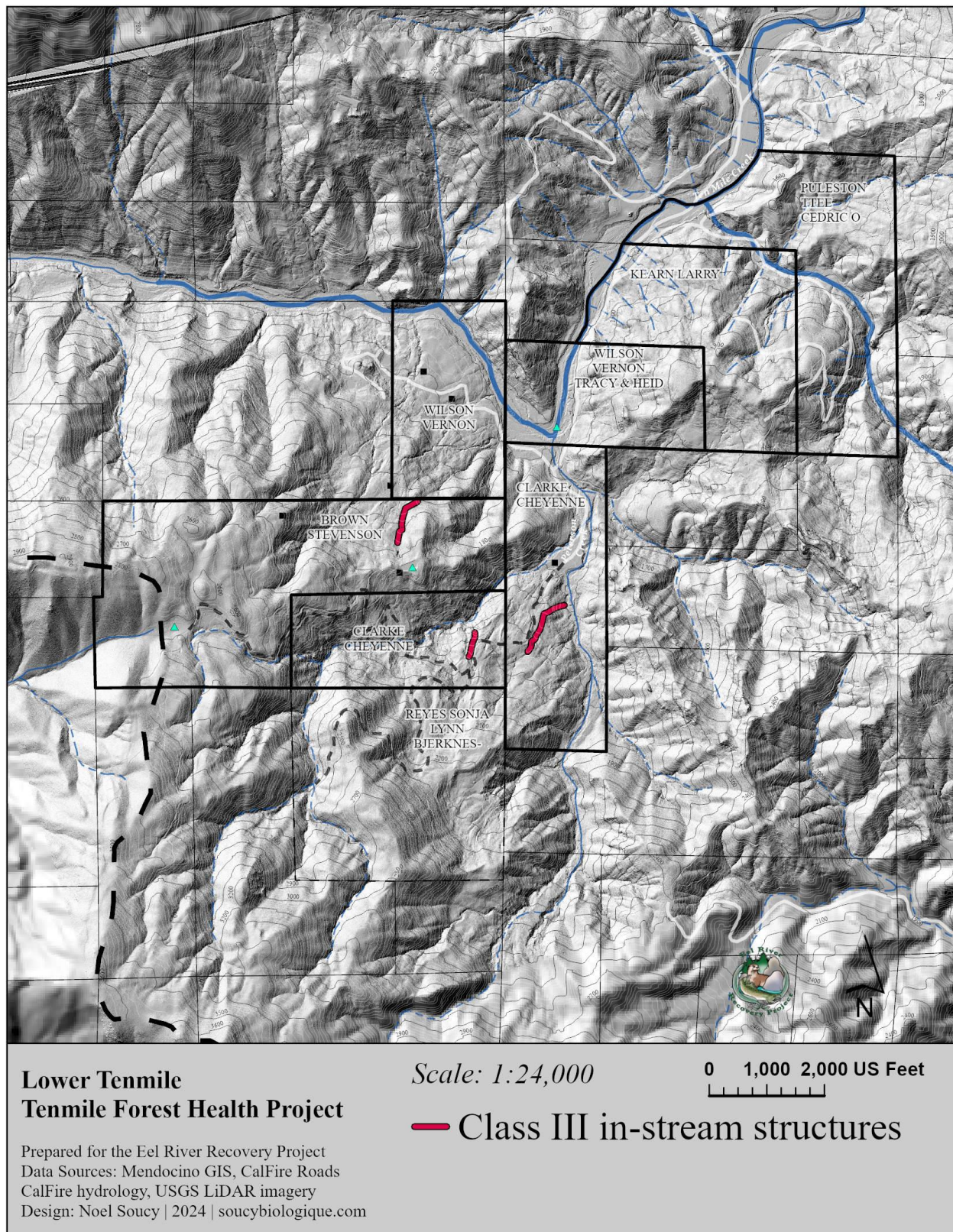


Figure 14. Location of gullies to be treated on Brown and Clarke properties.

The gully on the Clarke parcel starts in a low gradient reach that does not have clearly defined beds and banks and will be treated with tree check dams (Figure 16). Mild incision in the reach immediately below will be treated with brush check dams (Figure 17). Where there are knickpoints causing scour, headcut prevention structures will be installed (Figure 18). This gully steepens further down-slope resulting in some gully segments as deep as five feet and post assisted structures will be needed to keep the check dam in place and trap sediment in slightly higher energy channels (Figure 19).

The gully on the Brown parcel is the result of past hydrologic problems related to Post WW II logging that caused a major gully to be formed it no longer has active flow or erosion (Figure 20). The gully is up to 10 feet deep (Figure 21) and could be considered a Class III, but it only flows during storm events.



Figure 16. Low gradient gully head on Clarke property to be treated with tree check dams. 6/24/24.



Figure 17. More incised gully reach just downstream on Clarke property to be treated with brush check dams.



Figure 18. Colin pointing to local knickpoint to be treated with headcut structure.. 6/24/24.



Figure 19. As the gully on the Clarke property increases in gradient, post assisted check dams will be used.



Figure 20. Steve Brown at top of gully to be treated on his land where brush check dams will be used.. 6/24/24.

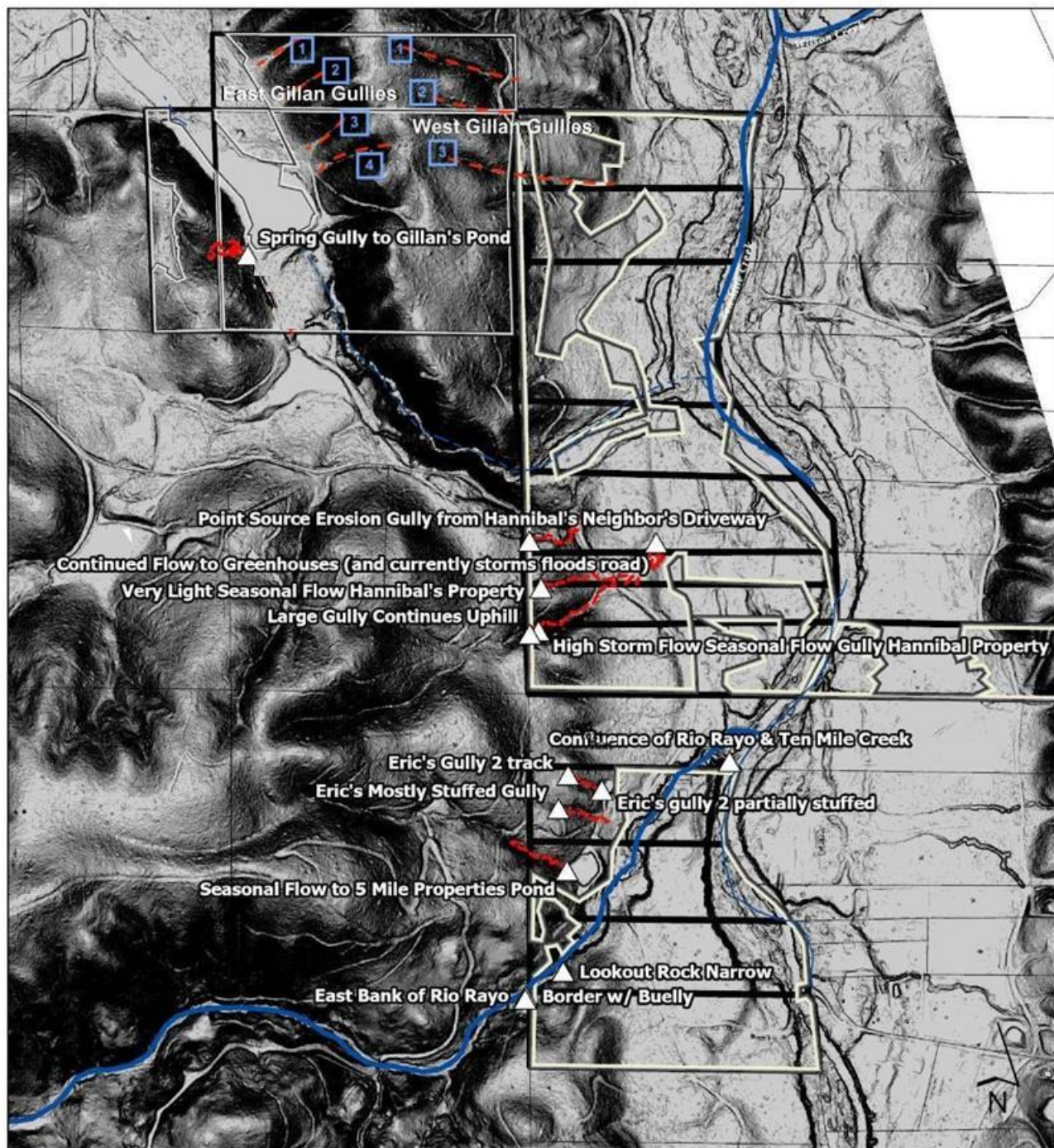


Figure 21. Colin looking at gully on Steve Brown's property where larger (4') post assisted check dams will be constructed.

Brush check dams will be used at the top of this feature but most structures will be four-foot-tall post assisted check dams packed with tree limbs and other forest materials to create permeable structures that trap sediment and rebuild the grade of the gully and the hillslope.

West Tenmile Gullies

ERRP has been working with landowners on the west side of Tenmile Creek off Tenmile Creek Road since 2018, including creating the *West Tenmile Forest Health Management Plan* (ERRP 2020) for ecological forest health restoration. The plan was crafted for three landowners, but there are nine cooperators in the current CALFIRE West Tenmile project and six of those want to have gullies on their land fixed as part of the project. Figure 22 is map of all West Tenmile parcels that has been annotated by Eric Lassotovich who is a participating landowner, but also a contractor to ERRP on the CALFIRE project overseeing use of woody biomass in zero order hillslope depressions and swales. Eric has piloted this technique on his own property (Figure 23) and is helping direct forest health crews where they can deposit wood waste in such features in the West Tenmile project area. Eric conducted a field assessment of these features and slightly larger ones with beds and banks, which are highlighted in red in the maps below. The purpose of including these systems in the CEQA VTP is so that wood waste can be placed in swales, but also in channels just down-slope where they develop beds and banks. Hillslope gradient in the project area is low and the energy in channels generally low, so there is little inherent risk in treating these gully systems. As at other locations, tree check dams will be used in reaches with mildest gradient and brush check dams will be the predominant structure used. One gully on the DeCarlos property of 130 ft in length has a gradient of 15% will require construction of post assisted check dams because of the depth of the feature. Much of the water that caused the feature has been rerouted; therefore, structures would have minimal risk of failure. Some gullies have their origin on the Gillan parcel to the west and pass through the neighboring parcel owned by Greenberg. Similarly, a gully that start on the DeCarlos property passes through the steeper portions of the Chapelle property.



West Tenmile

Tenmile Forest Health Project USGS 7.5' Topo- Tan Oak Park

Prepared for the Eel River Recovery Project

Data Sources: Mendocino GIS,

CalFire hydrology, USGS LiDAR imagery

Design: Noel Soucy | 2024 | soucybiologique.com

Scale: 1:9,000

0 500 1,000 US Feet

LIDAR Slope Class:

0% slope
Less than 10%
10 to 20%
20 to 30%
30 to 40%

40% and greater

Phase I Implementation parcels

Phase II Planning parcels

Phase I Treatment Units

Mendo Parcels 1021

Points of Interest

Gully Stuffing

Eric Lassotovich
field data



Figure 22. West Tenmile CALFIRE cooperating landowner parcels on LIDAR backdrop with Class III gullies to be treated.



Figure 23. Eric Lassotovich with his experimental use of wood waste to fill swales without beds and banks to slow the movement of water, promote infiltration and increase soil moisture and fertility.

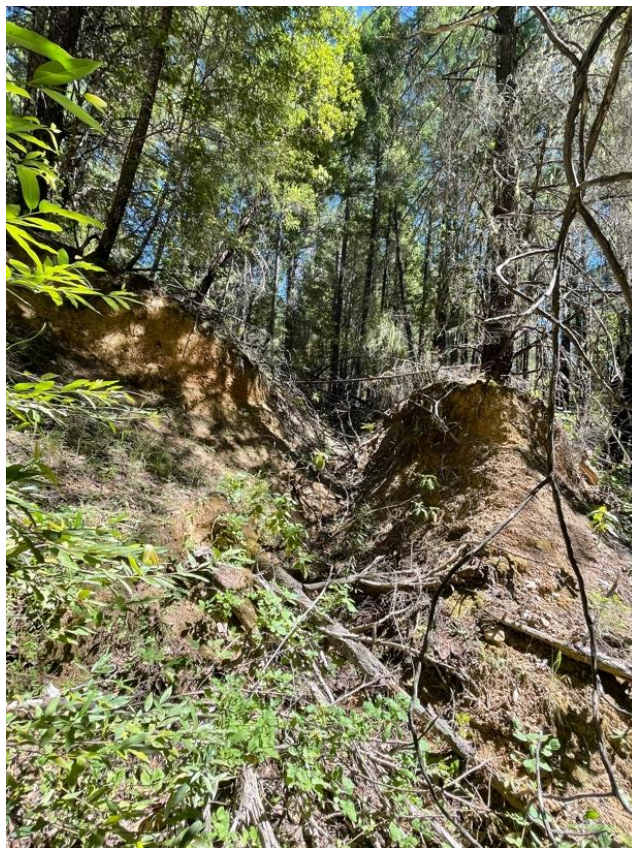


Figure 24. Gully feature on the DeCarlos property that will be treated with post assisted check dams.

Oversight

The team ERRP has assembled to oversee installation of the structures will be an essential element in minimizing risk and ensuring the success of the project.

Colin Gillespie is a contractor to ERRP and will design check dam structures and oversee crews that install them. He has fixed gullies on his steep land near Spy Rock, and worked with bioengineer Goose Nightgoose professionally to heal gullies in the Seely Creek watershed elsewhere in the South Fork Eel River watershed. Colin is well versed in the literature on gully erosion control and Process-Based restoration techniques.



Steve Brown has been an active steward of his land in Lower Tenmile Creek for decades, including healing gullies (photo at left is of healed gully). He is part of the ERRP contract team overseeing quality control on forest health activities and will perform a similar role on gully installations. Steve will also share the design and oversight role on his property and the neighboring Clarke parcel and will make sure the projects are a success in the long term by performing maintenance.

Eric Lassotovich is heavily involved in forest health as a member of the Forest Reciprocity Group, through work on his own property, and organizing neighbors to participate in the ERRP forest health project. His experience with interring wood waste on his property led to his retention as a contractor to ERRP on the CALFIRE project. Like Steve Brown, he is a leader in his neighborhood and will help make sure structures installed in West Tenmile area are a success.



Discussion

The gullies proposed for treatment as part of this CEQA VTP Addendum are transitional channels in many cases, intergrading between zero order and Class III channels. In fact, some reaches transition from zero order to Class III and then back to zero order on benches. These are not natural drain ways, but are a manifestation of altered hydrology related to Post WW II logging and related heavy equipment operation. These scars on the land will remain, if we fail to integrate their restoration into forest health projects.

Logging has long since ceased and watersheds above the gullies have healed, and in some cases sources of excess water that caused the gully is no longer routed through the feature. Ironically, this means that there will only be moderate benefit in terms of sediment abatement, but it also means that there is very little sediment pollution risk from these activities. The principal benefit will be restoring the local hydrology and soil moisture and riparian landscape productivity.

Because of the discontinuous nature of the gully systems being treated here, and the short window for surface flow mostly during storm events, there is limited value for or use by aquatic biota. The benefit of the project to aquatic life will be the retention of water in these upper channels and potential for more sustained water yield. At the Tenmile Creek watershed scale, this could be significant. Also, gullies drop the water table and, thereby lower the ground water table and lessen available moisture for native riparian plants and trees. Therefore, rebuilding the grade of the gullies will increase available moisture and help supply more water to the riparian zone and help it to flourish. At present, the area protected by the Watercourse and Lake Protection Zone (WLPZ) is not distinctly different than the surrounding forest, which is over-stocked, and no less likely than surrounding forest to be consumed in a catastrophic fire (Figure 25).

Check dam construction relies on availability of fresh conifer limbs, and small diameter trees less than 8" dbh are ideal as construction elements in tree check dams and as part of larger headcut and post assisted check dams. Consequently, the Addendum is seeking permitted status for removing trees less than 8" dbh in the WLPZ as necessary for construction. Also, larger conifers in the riparian zone may be limbed up, proximate to the project, which will not affect the health of the trees and will lessen risk of their loss in catastrophic fire.

In some cases (Figure 13), slightly larger conifers up to 12" dbh will be removed, if they threaten the effectiveness of a structure. The very selective removal of such trees will not decrease the riparian function at the site in terms of shade or microclimate in the headwater swale. This type of tree might also provide useful materials for post-check dam construction.

The activity proposed here does not need mitigation, since all effects are positive, including improved forest health, riparian conditions, watershed hydrology and lessened fire risk. Although this permit request is for a very limited area, we would like to establish a precedent for treatment of these altered headwater areas in future CALFIRE grants as part of Best Management Practices. Use of forest health wood to restore watershed hydrology, lessens the amount that needs to be piled and burned and aids with carbon sequestration.



Figure 25. Gully in lower South Vassar project area with significant over-stocking problem in the WLPZ.



Figure 26. Colin Gillespie under 10" conifer that is not contributing significantly to riparian function and that could disrupt check dam and cause erosion if it fell.

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Schiectl, H. M., R. Stern. 1997. Water Bioengineering Techniques for Watercourse, Bank, and Shoreline Protection. Blackwell Science, Oxford-London, GB. 186 p.

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APPENDIX 1.

Tree Checkdam

This technique can be used where small trees are plentiful and need thinning (Figure VII-71).

- 1) Grade the gully banks to the slope of its undisturbed bank slopes. Retain the excavated soil for later use at the completion of the project.
- 2) Place a six inch layer of litter along the gully's bottom and its sides where the first row of trees will be placed to form an apron.
- 3) Lay the first row of small trees (< 8' tall), butts downstream, across the gully and up the sides to form the apron.
- 4) Continue stacking several layers of trees, butts downstream, across the gully bottom and up the sides, staggered in an upstream direction. They should be piled to the desired height in the center of the gully, and several feet higher on the banks depending upon the depth of the gully.
- 5) If available, large rocks placed on the upstream end of the apron will increase the stability of the dam, especially in a gully subject to high flows.
- 6) Finally, place the soil excavated during the earlier grading process against the upstream face of the dam, and cover it with a two to three foot layer of litter. Seed and mulch disturbed areas.

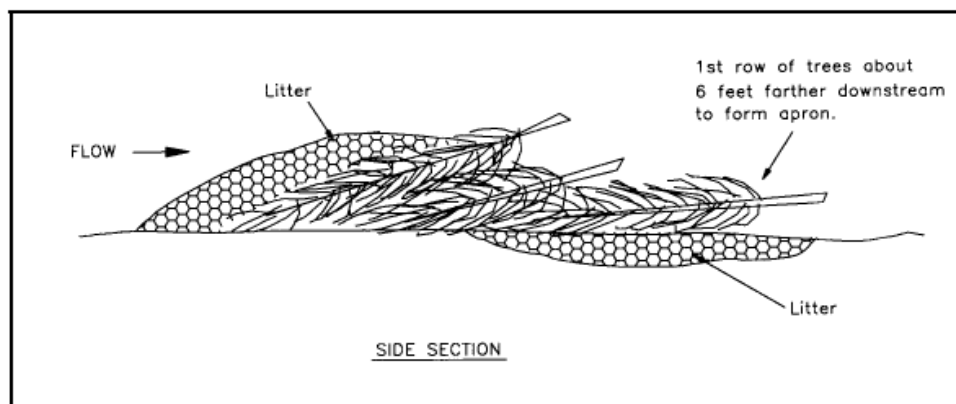


Figure VII-71. Tree Checkdam (Kraebel and Pillsbury, 1934)

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Brush Checkdams

Brush checkdams are very suitable to treat erosion sites in ephemeral gullies and headcuts. Their porous design allows water to pass through the structure and retain sediment. Since they are not hard obstructions, they do not divert water and cause bank scour. Live willow, cottonwood, fir and other types of branches which are usually pruned from the lower eight feet of a tree trunk can be used as "brush" in the construction of these dams. Any fine textured vegetative material raked up from under trees such as forest duff, pine needles, leaf mulch, straw, and rotted log pieces broken down with a hoe or mattock can be used as "litter" for mulch in each project type. These vegetated check dams can be constructed in a series or singularly in the same manner as the other check dams discussed.

Brush and Rock Checkdam

These are suitable for use within small, low activity ephemeral gullies (Figure VII-69).

- 1) Grade the gully banks to the slope angle of existing undisturbed banks. Retain the excavated soil for later use at completion of the project.
- 2) Place a six inch layer of litter along the gully's bottom and along the sides to be treated.
- 2) Beginning at the downstream end of the gully, place an eight inch thick apron layer of brush on top of the litter. Butt ends must point downstream.
- 4) Near the upstream end of the brush apron layer, stack a row of rocks on top of the brush layer about one foot high perpendicular to the gully. When available, flat rocks are the most stable and preferable.
- 5) Place about a four foot layer of brush parallel to the gully, butt ends downstream, and extending just downstream over the rock dam.
- 6) Place another row of rocks at least one foot high across the middle of the brush layer. While adding rocks, walk on the brush to compact it as much as possible.
- 7) Repeat steps 4 - 6 to raise the dam to the desired height.
- 8) Weigh the last layer of brush with a row of rocks to hold it in place.
- 9) Cover the upstream face of the dam with the soil excavated during the initial site grading process. Mulch the soil layer with a four inch layer of litter. Disturbed areas not treated by the brush should be seeded and mulched.

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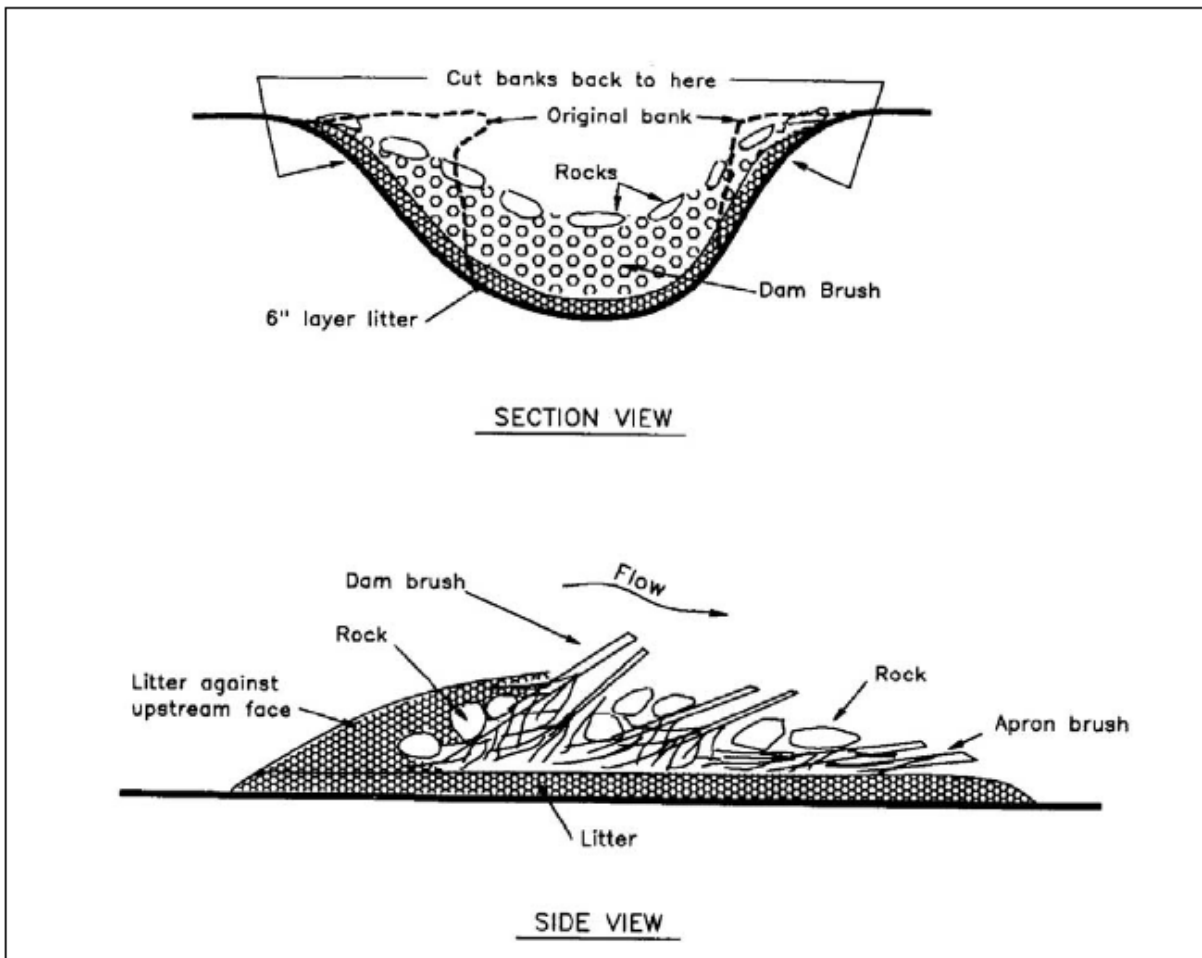


Figure VII-69. Brush and Rock Checkdam (Kraebel and Pillsbury, 1934).

Post Brush Checkdam

These are suitable for use within large, moderate to high activity ephemeral gullies (Figure VII-70).

- 1) Grade the gully banks to the slope angle of existing undisturbed bank. Retain the excavated soil for later use at completion of the project.
- 2) 2) Metal "T" posts, or wooden posts two to four inches in diameter, should be set on two foot centers across the watercourse and be driven a minimum of eighteen inches into the ground. Live willow poles can be used if high ground water is present year round.
- 3) 3) Layer small diameter brush parallel to the gully to act as a filter and soil erosion blanket. Each layer should be approximately six inches thick. The butt ends should extend beyond the posts at least six inches in an upstream direction.
- 4) Weave brush material through the posts at least one foot thick and continue adding material to the top of the posts. Attach branches or boards across the posts using rope or string to

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hold the brush down firmly. Compact each layer of branches to ensure that no large gaps are present in the checkdam. At completion, the brush should be layered to the tops of the banks while leaving the middle section slightly lower to form a channel for flow.

- 5) Seed and mulch any disturbed areas after completion. Erosion cloth may be applied, if desired, behind each checkdam.

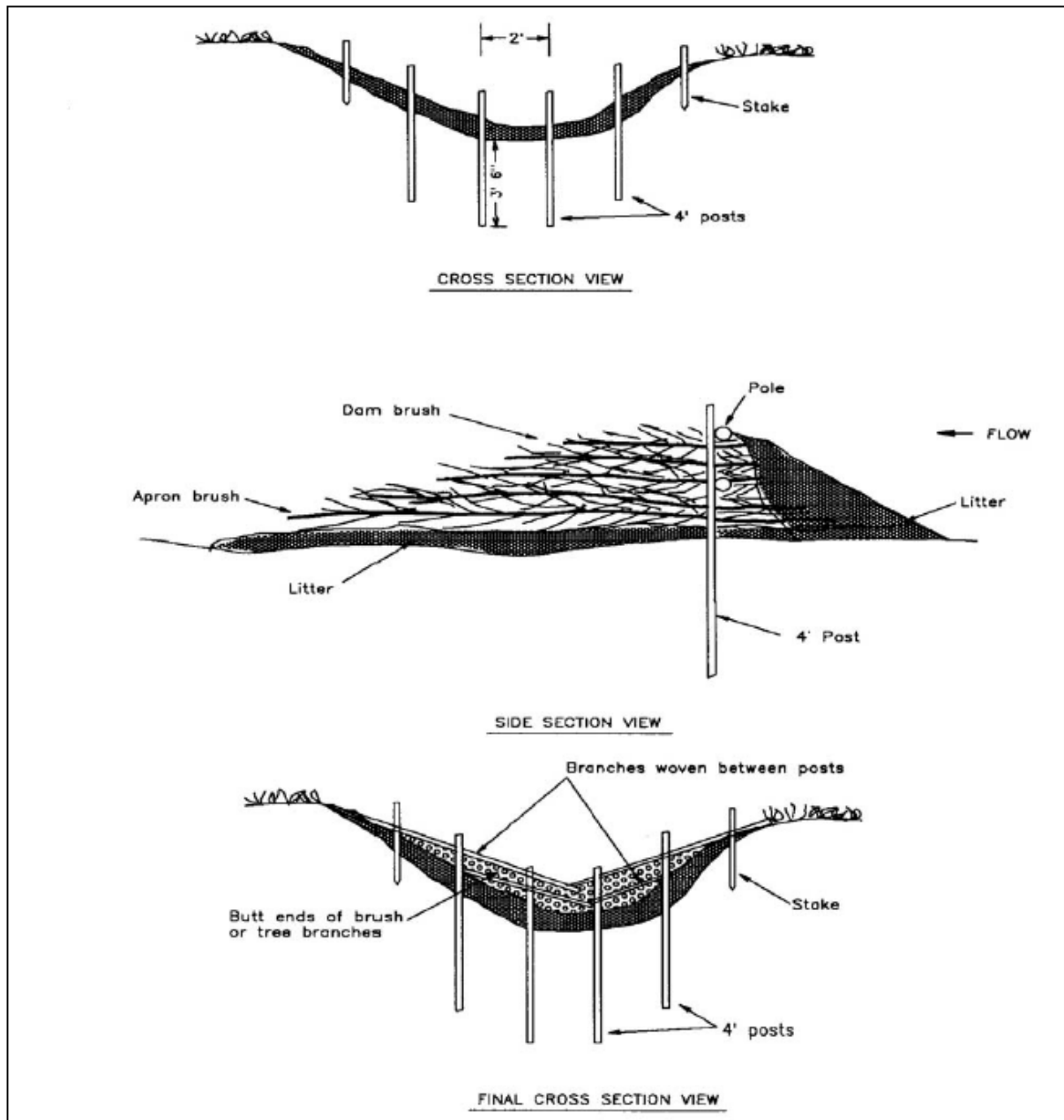


Figure VII-70. Post Checkdam (Kraebel and Pillsbury, 1934)

Headcut Check Dam

The Kraebel and Pillsbury (1934) design was used for this structure because CDFW (2010)-recommends excavation, but all work conducted under this permit will be by hand.

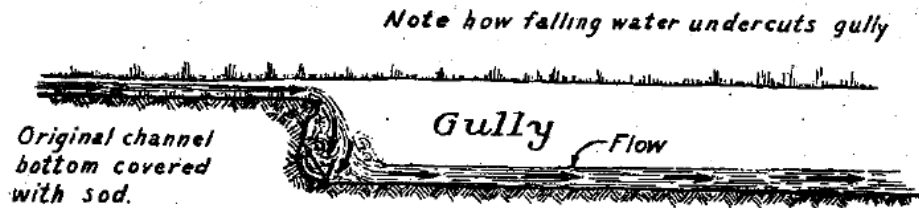


Figure 6.

Side section of a gully-head showing the process of undercutting.

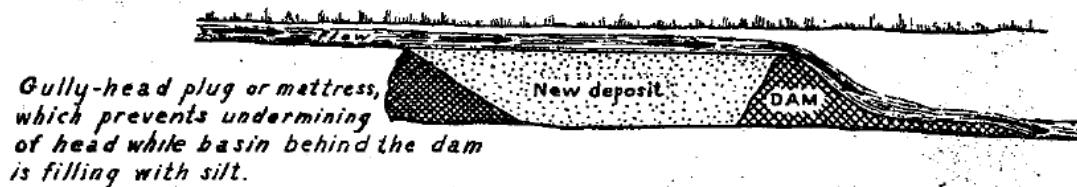


Figure 7.

Side section of a controlled gully-head.

A mattress or plug should be constructed at the gully head or knickpoint of locally available materials, such as sections of small diameter trees, locally available rock, fir boughs or small whole trees, grass straw, leaf litter and rotting logs.